Advanced Combat Section

You're here! The advanced combat section . . . you've explored and understood the intricacies of the basic system—or maybe you just skipped ahead. Are you ready for the full complexity of the JAGS advanced combat system? Here's an easy way to tell—compute the following for your character:

$$\int_0^{STR} \sqrt[3]{1 - \frac{REA^2}{C^2}}$$

Just joking. Really.

This section breaks up the same way the basic one did—but it includes *all* the stuff we came up with. It contains several variations to the rules and some new sections (such as rules for damage to inanimate objects) which would just get in the way of most games.

You can just read the heading and then check each item to see if you want to include it in your game. Feel free to mix and match—if some rule needs others to work correctly, we'll tell you.

Advanced Initiative

The initiative system hasn't changed substantially . . . but there are some new twists that can make battles more interesting. Check them out.

Too Fast To Block

If you make your initiative roll by 5 or more than a target does, that target must make an REA roll to even have a chance to block. If he doesn't make the roll he can't make a block or dodge (or take any defensive action).

At the Beginning of the Turn

Some things are described as happening "at the beginning" of the turn. What if two things happen "at the beginning of the turn?" Generally it is assumed that there is a section of time before *anyone* gets to act where the following things happen:

- Dazed characters roll to become un-dazed (if they've already been dazed for one turn).
- Characters who must expend REA to keep some effect going pay that REA (this is usually a super power that requires some REA be expended each turn).
- Characters in the dark make perception rolls to tell how well they can see what's going on.
- Anything else that will affect the flow of combat must be checked for—if it's out of control of an involved character.

Ready For Advanced Training?

In these rules you'll find the following goodies (plus a whole lot more):

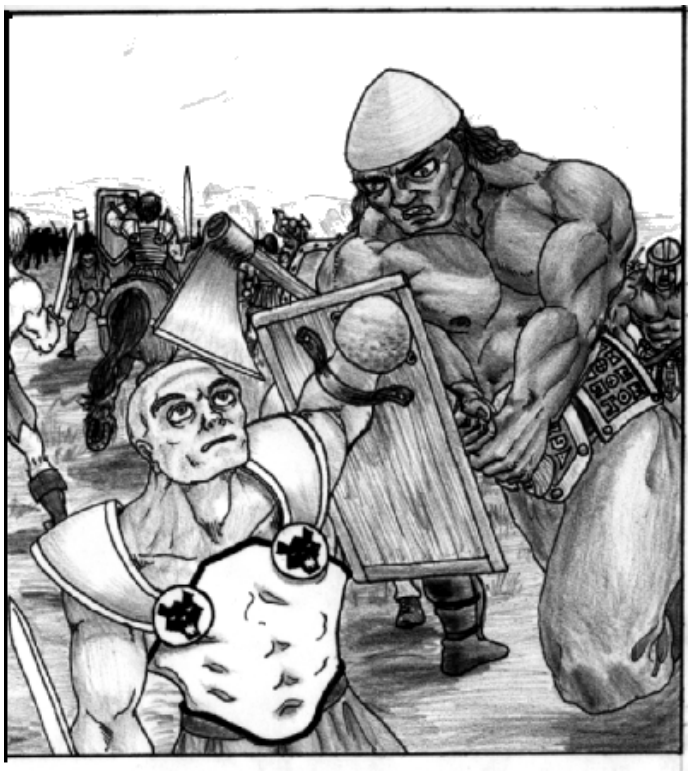
- Waiting—how to delay your action so you can interrupt someone else's.
- Automatic Fire Rules for machine guns—mow crowds down!
- Grappling Rules—Don't settle for mere grabs. Take your opponent to the ground and pound him.
- Armor Saves—sometimes leather armor *can* stop a broadsword from cutting you in half. Give armor a chance to stop penetration even if its penetration value is lower than the weapon's base damage.
- A whole bunch of new moves (like diving for cover and running people over).

Take your game to the *next* level!

High Speed Approaches

Suppose someone charges at you from across the room in the basic system. Unless their initiative roll was 5 better than yours you get to hit them on the way in. But, suppose they're moving at 8x the speed of sound. Doesn't seem so likely then, huh?

Objects moving with a velocity of 20 or more yards / second (40 miles per hour) are treated as having an initiative roll of +1 per 10 yards / second for purposes of charging and not getting hit on the way in. This is relative to how well the person being charged can see—if you're on a galactic battle cruiser with "Faster Than Light Radar" and something comes at you at 5x the speed of light (slow for a space ship . . .) then of course you can shoot it down on the way in. The GM must make the call.



Inanimate Objects

Rolling boulders don't have REA scores but a character may have a chance to get out of the way if he's quick. The easiest way to handle an object with no REA is to give it an Initiative of exactly 0. This is the best way to treat falling objects and other "environmental effects."

For things which move with a high rate of speed, give them an initiative of +1 per 10 yards / second after the first 10. So a car moving at 80 miles per hour (40 yards / second) which is out of control could be assumed to have an initiative of +3. Someone who made their REA roll by 4 or better could act before it collides.

The GM can even extend this to moves made by super hero characters in flight but it tends to interfere with the flow of the game. Usually, if a character is directing the motion, the character moves on his turn to go.

Mounted Combat

Okay, so what if the horse you're riding has its own REA, what then? Simple—for advanced mounted combat the horse moves on its turn and you get to act on your turn. But, you get to take *one* medium action during the horse's move, even if it's faster than you are. In many cases, this would be an attack made as you ride past your target. If the horse has a 5 or better initiative than its rider, its rider must make a riding roll to slow it down. If he doesn't and the horse moves within range of a target, the rider will not be able to strike because the target goes by too fast.

More Mounted Combat Rules:

If characters are using horses, cars, motorcycles, dinosaurs, etc. to fight from, these rules should be used:

- All firing from a moving platform is at –2 to hit.
- A Vehicle Operations skill roll is used to dodge (usually mounted targets are considered to be at a +2 to be hit for being large targets).
- If the mount is an animal it can attack too—and will do so using its own REA. A character with Level 2 Riding skill (Vehicle Operation: riding beast) can direct its actions with no roll so long as it isn't "spooked."

Action Type: Medium
To Hit Roll: None
REA Cost: 2pts if you've taken any non-defensive action that turn. Otherwise 0.
Damage: Waiting does no damage
Common Modifiers: None.
Important Notes: You can only interrupt someone else's turn *after* their declared action happens.

Waiting: This is an important change. It is vital to the advanced rules that you understand waiting.

There is a difference between *ending your turn* and *waiting*. The difference is whether you can decide to strike or move later on in the turn. The breakdown is as follows:

- At any time during your turn you can declare that you *end it*. If you have enough REA left you can still block or dodge or otherwise take a *defensive* action later in the turn. You *cannot strike.* (Note that some defensive actions—such as a Level 3 Karate block—can still cause damage but it's still a defensive action.)
- If you have *not yet attacked or moved (or taken any other non-defensive action)* in a turn you can "delay" or wait. If this is done you can decide to take your turn at any time in the round. Essentially, you can preempt anyone else's turn before they have declared any actions. If someone else declares an action, that action happens and *then* you can take your turn before they do anything else.
- If you have *already taken some non-defensive action (moving or striking)* then you may choose to pay 2 REA and "wait." A character who has paid 2 REA may use whatever REA he has left to strike or move as above.
- If you spend an entire round waiting and take no actions whatsoever, you get +2 to your Initiative Roll on the next turn. This only applies to characters in combat—not to characters who are in an ambush situation or otherwise "waiting outside of combat."

What's the reason for this? Well, it stops characters from striking, waiting, striking, and waiting. If you want to move and then reserve the option to strike it costs 2 extra REA. It stops a lot of "permission" combat where someone takes an action and then everyone else who was faster decides to take their turns.

If two or more characters are waiting, they may preempt each other as above with the faster character getting to take his entire turn as he wishes before the slower character(s) may interfere.

> Ex1: Three characters with REA's of 12, 14, and 17 are in a mutual combat. Each character has rolled a 10 for initiative so the initiative scores are +2, +4 and +7. The +7 character goes first and wants to see what happens—so he waits. This costs him nothing since he has taken no offensive action.
>
> The +4 character goes and runs up and strikes the +2 character. At the beginning of the turn the +4 character was already moving so the move costs him 5 REA and the strike costs 5 REA. He has 4 left and he *ends his turn*. This costs him no REA but he can still block once. What he can't do is decide to attack later in the turn—even if he had enough REA.
>
> The +7 character is in range to strike the +4 character so he does. The +4 character blocks. The +7 character *waits* so now he's paid 7 REA (5 to strike and 2 to wait after taking a non-defensive action).

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"Hold your fire," I hissed, peering through the jungle. The men were jumpy . . . they looked warily into the darkness. "Don't fire until you see them."

"What exactly are we look'in for Sarge?" my radio man, Corporal Hill, asked.

I shook my head. The radio report had been on the proper channel—but I still wasn't sure I believed it. It had been clipped and broken through the static. They had said to expect a wave of "victims" of the air strike heading towards us at a steady 4 miles per hour jog.

"Survivors," I said, "from the nuclear strike."

The young man looked at me, his face pale in the thin light from the moon above the trees. "But didn't Tac say they were all . . . you know, killed?"

"They reported 100% mortality," I nodded. "Still, something's coming." Up in the dark, jungle night, I saw the first one—a still fleshy skeleton with greenish, glowing bones—appear above the rise.

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Legal Actions From A Wait:

A character who is "Waiting" may interrupt another's actions with his own. There are, however, limits on what a waiting person may do in reaction to someone else's declaration.

- If a character declares a medium action, a waiting character may take *one* medium action before the slower character's move takes palace.
- Between other character's turns, a waiting character may take his entire turn whenever he feels like it.
- If two characters are waiting, at the end of the round, they may both choose to do nothing—ending the round or the situation may be resolved with *one* new set of REA rolls to determine who goes first and second. At this point no character may choose to wait (they must either take their turn or end it).

The +2 character (who was also moving) runs up to the +7 character. The +7 character hits him on the way in (it's a long action to move) and then, before the +2 character can declare another action (a strike action, probably) the +7 guy takes the rest of his turn and uses his last 5 REA strike to gut the +2 person.

Who Can Respond To a Slow Action?

The basic answer is "the *one* person who's most directly affected by it." That's a good basis for the GM to make decisions—but in the advanced rules some more things may be taken into consideration. This is a key rule because it can drastically change play—but this degree of examination will rarely be needed to determine who can respond.

Characters can respond to a *long* action on someone else's part if:

- The acting character passes within with in HTH striking distance of the character taking the response.
- The acting character does something that will result in direct and immediate harm to the acting character (like typing in a destruct sequence on a large bomb).
- The reacting character declared in the last round (or before the battle begin) that 'If character A does this, I'll do that.' and hasn't taken any action other than a short action since.
- Any character with a ranged weapon may engage an enemy who takes a *long* action *if* that character isn't "engaged" with someone else.

Ex1: A character is running down an alley and a sniper on a building wants to shoot the target. If, when positioned on the roof the sniper said "If the target runs down this alley, I will shoot" then a shot as a reaction would be legal. On the other hand if the sniper was just watching for targets in a wide variety of areas or was surprised by the sudden appearance of the character (GM's discretion) then the shot would not be an 'instinctive response.'

Ex2: A character enters a room and runs towards a person. That person can take a reaction if the character passes within striking distance but if the action occurs on the other side of the room and has no direct relation to the person then no reaction is legal.

Ex3: Character A enters a room and runs across the floor 100 feet away from character B. There is a hidden pressure plate in the floor which will drop a 16 ton weight on character B but character B does not know about it. It is entirely a GM call as to whether the GM says "You have the option to take a shot at the person—do you take it?" In this case, probably everyone who wanted to shoot could as the GM has effectively declared open season.

Ex4: A woman being hunted by two assassins gets to go first in the order of initiative and takes a slow move to try to run for cover. Both assassins may shoot at her as she begins accelerating during her turn. If they both miss and she gets to go first again and she still has not reached cover, they may still be able to shoot (provided they haven't shot at anyone else) as they may be assumed to be declared to fire on her. This, again, is a GM call (but a pretty cut and dried one since she's their target).

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"I don't believe it," the social worker from the Bureau of Vocational Reassignment said, apparently, in disbelief. "You actually enjoy this."

Hammerhead McLear gunned the ATV over a field of bio-degradable plastic so worn down by the ultra-violet that it had the consistency of fine white sand.

"You got that right, sister," he said. The sky was a pale shade of blue. The wind was brisk from the north. The vehicle's massive gas engine screamed at a pedal-to-the-metal 85 miles per hour.

She yelled to be heard over the noise of the wind and the engine. "This is supposed to be therapeutic—it's supposed to make you want to become a productive citizen! You aren't supposed to enjoy it."

"There's the bastard," McLear said, swinging the vehicle around and decelerating it. The waste reprocessing node stuck out of the white sand like a blue spike. About once a week one would stop functioning . . . someone out here was stealing parts. McLear couldn't blame them. He stopped the ATV and got out.

"Aren't you going to use the diagnostics computer?" the woman asked. Her hair was a mess from the drive and she was seething. McLear found the combination compellingly attractive. She didn't feel comfortable out under the sky—and it showed.

"Nope," he said, with just the right degree of flippancy to make her eyes squint. "Gotta take a look under the hood."

"I'm marking you down for testosterone reduction treatment," she said, working furiously on personal mini-computer. "And maybe some theraputic agoraphobia."

Buying Actions

There are a bunch of new actions you can buy. This is the greatest change (along with Armor saves) in the advanced system. The addition of several new options can slow combat sessions down like nothing else—make sure you understand the basic system before playing with all of these.

A Level 3+ Skill Allows One Attack for 4 REA Per Turn

Yep, it's true. If you have a Level 3+ weapon (HTH *or* ranged) skill or martial art you can make one attack per turn (*one only—not one per skill)* which would normally cost you 5 REA for 4 REA.

There is one exception to this rule: *a character performing a full swing with a weapon* or *a character using a special maneuver with a martial art which costs extra REA may have it's REA cost reduced by one.*

This means that a character generally *cannot* kick for 5 REA instead of 6, can't make a flying tackle attack for 7 REA instead of 8, and can't swing a weapon which normally costs him 6 REA for 5.

A character *can* swing a weapon whose strike would have cost him 5 REA for 4 REA; make a full swing with that weapon for 7 REA instead of 8 REA; and do things like grab (if the character's martial art is one which affects grapple skills) for 4 REA instead of the normal 5.

This is an important rule because it allows characters with 12 REA's to make a move and strike combination in a second and because it, in general, allows skilled characters to get by with lower statistics.

Unarmed Strikes

The only new addition to the unarmed strikes list is the cross (also known as the "right cross," "left hook," or "haymaker.") This is a power punch that leaves the attacker open.

The punch hits for +1 damage and the character throwing it is at –1 to block *and* +1 to be hit until he gets to go on his *next* turn. Also: you can only throw one cross per turn.

Strike Chart

Move	REA Cost	Notes
Punch	5	Hits with AGI/Skill for Base HTH Damage
Kick	6	Hits with (AGI/Skill) - 1 for Base HTH Damage+2
Cross	5	Hits with AGI/Skill for Base HTH Damage +1. Attacker is at +1 to be hit until his turn, next turn. He is also at -1 to block.

McLear opened the hatches. It was a clean job—whoever was living out here—away from the city—stealing parts--wasn't a vandal. He scanned the interior, weary of the odd poisonous snakes that he'd sometimes found in the machinery.

"They've taken the pump articulator," he said. He looked back at her. "Get the kit out of the back," he said. "I want the whole thing—and bring the diag-computer over here too. I'm gonna run a full systems check after all."

She ignored him, typing rapidly. He shook his head and wandered to the back of the ATV. Then he stopped.

*"Uh, Shelly," he said calling her by her first name. She ignored him. "*Girl!" *he snapped. "Look alert!"*

That got a reaction. "Improper use of language—that's a fine McLear. You've—" she stopped. "Uh-oh," she said softy.

Around them, in a circle, were about twelve men wearing slick desert camouflage suits and carrying old fashioned 20th century assault rifles.

"Wha-what do they want," she said, her voice fluttering with panic.

"I think we're about to find out," McLear said, through his teeth. "You better hope it's just the vehicle."

"You're an unusual one," the lead man said from under a gas mask like filtration device. "But it's the two of you we want. Get back in the machine."

Damn, *though Hammerhead, it's one of* those *days.*

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HTH To-Hit Modifiers

You already know that you're at –1 to hit a target for each point of AGI the target has above 10—but what about really small or really fast targets? Well, things like darkness and target size can make a difference in the advanced game. Here's a list of modifiers and how to use them:

Strike Modifiers Chart

Modifier	Effect	Notes
Target's AGI	Minus Target's (AGI - 10)	This applies to aware, mobile targets. If a target is unaware or held, he gets no AGI modifier. If he is held immobile attacks are at +5 to hit. Character's with AGI's below 10 are at pluses to be hit. Blindsided characters get half (round down) AGI from the rear sides and no AGI modifier from the rear.
Target's Size	Varies	A target is at +1 to be hit for every 10 points of SIZ above 10 (round down). For every half human size a target which is capable of moving 4+ yards/second is at -1 to be hit. Slower targets are at no negative ("Stomping insects" is at no mod.)
Visibility	-1 to -6	In low light conditions combatants must make perception rolls each turn (at the start) at a negative (-1 for dim, -6 for total darkness). If the roll is blown, the character is at that negative for his turn for any strikes (or shots, or blocks).

Ex1: Surrounded by gangsters, Treasury agent Sam "Eagle Eyes" Darkly turns off the light plunging the room into almost total darkness. The GM rules that the room is a -5 perception modifier area (if it was total darkness, Sam wouldn't be able to see either and would be in real trouble). Sam has an 18- perception roll with Keen Senses, a high Intellect, and special training. The gangsters have a 10 or 11. Each turn that Sam makes his roll at –5, he is at no negative to hit in HTH combat. If the gangsters—or Sam—blow heir -5 roll (unlikely for Sam, almost always for the gangsters) they will be at -5 to hit in HTH combat. "Now you know why they named me Darkly," Sam says to the last conscious gangster before putting his lights out.

What about target speed? There's no negative in JAGS for a fast moving target close to the character. This is the "baseball" rule wherein a batter can hit a baseball-sized object moving at about 90 mph. The GM can assign negatives for *highly mobile* fast objects as he sees fit, but, in general, fast targets aren't any harder to hit at HTH range than slow ones.

Large Weapons

When you're trying to hit that super-fast super hero, something big—like a car—can come in handy. When a character is using something which the GM rules counts as a "large weapon" it is assigned a "large weapon bonus" of +1 to +3 to hit the target.

This bonus *does not* add to the attacker's damage modification roll—it doesn't make the shot more accurate, just more likely to hit. This means that if a character has a 9- chance to hit a target and gets a +1 large weapon bonus for using a chair if he rolls a 9 it acts as a hit by zero. If he rolls a 10, he still hits, but again, it's a hit by 0.

Heavy Objects:

In the case of improvised weapons of great weight, the GM may rule that the damage done is Base HTH damage + Mass of the object. This means that if a super hero picks up a car (5 REA medium action) and slams a target with it, the damage is Base HTH damage + about 26 (the mass of a car).

Improvised weapons take any damage done with them (so they tend to break). The GM may make an exception to this rule in the case of very simple objects (a super hero swinging a telephone pole). The GM may simplify things by making a Structure roll (see inanimate objects) at -5 per hit and declaring a missed roll to be a breakage—this will speed play and help keep balance by requiring characters to get new weapons frequently.

Also, unless you have a shield (or something like a shield) large weapons are hard to block. Each +1 *large weapon bonus* a weapon gets puts the defender at a –1 to his block roll.

Strength Minimums for HTH Weapons

If you've looked at the weapon charts you've noticed a STR MIN column. This is the STR the character must have to use the weapon efficiently. For each point that a character is *below* the STR MIN of a weapon the swing costs +1 REA.

If the extra REA cost moves the weapon swing above 8 REA, then swinging the weapon is a *long* action (and time to get another weapon).

Weapon Reach

Anyone who has ever whacked an unarmed bud with a pillow knows the joy of reach. If these rules aren't being used then everyone can attack everyone from "normal HTH Combat Range" and there's no real difference between long weapons and short weapons—this is balanced, fair, and workable. But reach is a real-life fact of combat.

If the Reach rules are in play there are four categories of Reach:

- Short, Medium, Long, and Very Long. Short is the distance at which punches, kicks (except for Level 3 Martial Arts kicks), knife strikes, and baton blows take place at.
- Medium range is for most swords, Level 3+ Martial Arts kicks, axes, flails, hammers, etc.
- Long is for long swords, staves, spears, and really big axes and hammers.
- Very Long is reserved for polearms.

Each level of reach represents approximately +1 yard striking distance. A character with no weapon can strike roughly 1.5 yards away with a normal blow (and a *very* little footwork). The .5 represents the outer edge of his striking range (which is why when someone takes a retreating step they're harder to hit). A character with a Medium range weapon can strike up to 2.5 yards away. A character with a Long weapon can strike up to 3.5 yards away and a character with Very Long reach can hit 4.5 or more yards (depending on the weapon).

These values, while seemingly concrete, are subject to change, though. A Very Long weapon isn't necessarily thirteen feet long. It just means that targets can be hit at that distance.

The Reach rules affect combat as follows:

- If combat begins at "Normal" range—that is, the opponents are squared off with about 1 yard between the tips of the weapons, someone with a shorter range must make a 5 REA medium step action to get to striking distance. If two characters begin combat at "step" range and one has medium reach and the other has short, the medium reach character may attack without stepping.
- If a target who has made the step action to get "inside" a longer reach character's striking range takes a Retreat, it doesn't help unless the step is 2 yards or longer (a Super Step). The retreating character just moves back a bit.

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Leyland let the sword wander through the air as he waved it back and forth, feeling the weight shift. It had a classical blade and an ornate, round pommel. The grip was wrapped in some kind of reptilian leather he thought was supposed to be dragon-skin.

"It's magic," he said, finally.

"Perceptive," said the shopkeeper, "for one who clearly does not possess the sight. It was, lost, from a shipment by a very *rich merchant . . .. fully insured. The authorities are not looking for it."*

"What does it do?" Leyland asked. He sighted down the blade and marveled at its perfection. The metal was dry—but appeared to be covered with a faint oil that crept along the surface. From this angle he could see arcane designs.

"When you swing it with a fully committed blow it will not miss," the shopkeeper said, his tone low—almost reverent.

"Never?" Leyland asked.

"Rarely—if ever," the man said.

"You've tried it?"

"I have the papers," he said flatly. Leyland nodded.

"I'll have an offer tonight." Leyland said.

The man nodded. "After sundown," he said, "the bidding will be closed."

"Right," Leyland said.

Outside, two blocks away, she fell in behind him.

"They stopped following when they realized you didn't buy it," she informed him. He nodded.

"We're going after it tonight?" She asked.

"Not that junk he showed me," Leyland replied. "The real one."

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- If a character moves from some long distance away to "striking" distanc," this is considered moving "inside" a longer character's reach or moving to "outside" a shorter one.

  Ex1: Travan De'Blac, wielding a long sword, squares off against a ruffian armed with a knife on the streets of medieval Paris. Travan's blade has Long range and the knife has Short range so they begin the combat roughly 3 yards apart. Travan's blade (which is absolutely the longest that can be used single-handedly and the shortest that qualifies as *Long Reach*) gives him a measure of security—unless the knife man is 5 REA faster, he will have to waste 2 medium step actions (10 REA) or one 8 REA *long* move action before he can strike.

  On the other hand, unless the knife wielder takes *two* retreating steps, Travan can hit him every time! The thug with the knife examines Travan's steel and then slips his knife back into his boot. "And a lovely evening to you, Monsieur," the thug says, leaving.

NOTE: It should be apparent (but should be stated) that a character making a long Move action may end up at any range he wishes. If a character moves into combat with an opponent with a longer range weapon he will very likely wish to move to whatever range suits him—except Close Combat range (unless the character is capable of making an attack which brings him to Close Range at the end of a long move—like a flying tackle).

Action Type: Medium
To Hit Roll: Normal
REA Cost: Weapon swing +3 REA.
Damage: Normal Weapon damage +2.
Common Modifiers: None.
Important Notes: You must have a weapon longer than a dagger to use a Full Strike.

Full Strike: Any character with a weapon bigger than a dagger can perform a *full strike*. The full strike acts just like a normal attack but costs +3 REA and hits for +2 *base damage*. This represents something like using your whole body to hit with, swinging with both hands, or just using a technique to get off a more powerful hit. If a normal blow with the weapon would cost 5 REA *and* the swinging character has Level 3+ weapon skill, he can make a full strike for a total of 7 REA instead of 8.

Action Type: Medium
To Hit Roll: Normal
REA Cost: 3, 5, or 8 (*long*)
Damage: Normal.
Common Modifiers: None.
Important Notes: Your opponent is at negatives to block.

Feints: A Feint is a false attack intended to create an opening in an opponent's guard. In the advanced rules, spending a bit of REA *prior* to making an attack will make the blow harder to block.

- For 3 REA medium action your opponent blocks your next strike at –2.
- For 5 REA medium your opponent blocks your next strike at –3.
- For an 8 REA *long* action, your next strike will be blocked at –5.

Some weapon skills may give better feints because they teach deception and finesse.

Ex1: Travan De'Blanc fights a swords master with a 17- block. Trevan decides to make only one attack during his turn—he performs a 5 REA *Feint* and a normal strike. The defender's block against the strike is at 14-.

Close Range

If two opponents are squared off at Short range, a single Closing Step (5 REA *long* action) will place them in Close Combat. So will grabbing or grappling. At this extremely close range, weapons don't work well and the advantage goes to the man with the knife.

In Close Range (Close Combat) weapons with a Reach of Short may be used normally (except short swords and knives that do +3 damage—those weapons get a -1 to hit and -1 to damage modification rolls.

Medium Reach weapons get -2 to hit and -2 damage modification rolls (kicks are at -1 to hit and -1 damage modification).

Weapons with Long Reach get -4 to hit and -4 to damage modification rolls. Weapons with Very Long Range are impossible to use.

Exception: Staves

Staves are very versatile weapons and can be used in Close Combat, Short Range, Medium Range, and Long Range. All that changes is the user's grip on the staff.

In Close Combat the staff is a lever arm and adds to grappling roll—it's at -4 to hit and -4 damage modifier like a long weapon—but it isn't a liability if the characters are actually wrestling.

It is treated as having Medium range normally but at the beginning of a turn a character may declare it to be wielded as a Long Reach weapon by changing his grip. In this event the staff is at -1 to hit due to using it at full extension but forces characters with shorter weapons to make a medium move to get to striking range.

More Dodges

There are a couple of additional twists on the dodge maneuver. Mainly these exist to save characters from overwhelming firepower or explosives. The GM can limit these moves to characters with the background Combat Experience or Heroic ones.

Action Type: Short
Dodge Roll: +2
REA Cost: 5
Important Notes: Extra protection vs. Automatic fire.

Hitting the Deck: A character may spend 5 REA to dodge and "hit the deck." This is a short action and cannot be taken if the character is grabbed or grappled unless the other party agrees (if the other party doesn't agree, the character must use the grappling rules to achieve a "Take Down.") A character who hits the deck gets +2 to his attempt to dodge ranged attacks (bringing the negative to -2). Once a character hits the ground, he is prone. The advantages of this are that prone characters will never be hit by automatic fire which is being used to spray the area unless the attacker is specifically firing down and explosions will get -4 damage modifiers against prone characters.

Action Type: Short
Dodge Roll: +2
REA Cost: 8
Important Notes: Moves character Walking distance, must make REA roll.

Diving For Cover: A dive for cover is a last ditch dodge often taken against an explosive attack. While "Hitting the Deck" will provide some defense against bombs and grenades, there's nothing like getting out of the blast area. A Dive for Cover is an 8 REA short action (one of the very few) and it moves the character his Walking distance and leaves him prone. If a Dive for Cover action is taken in response to a medium action (or a bomb exploding) the character must make a successful REA roll against and attacker's REA to get the dive off before the event happens. If the roll is failed by 0 to 3, assume the character gets halfway (half his Walking move). Against ranged attacks it acts just like Hitting the Deck.

Dodge Action Chart

Action	REA Cost	Notes
Dodge	5 or 3 with Acrobatics	Allows an AGI roll against an attack roll. All Block modifiers apply. A dodge is -4 against missile attacks.
Hitting the Deck	5 REA	As a normal dodge, but only -2 to dodge missile attacks. After hitting the deck, the character is prone.
Diving for Cover	8 REA	An REA roll is needed to get this move off as a reaction. The character moves a Walking move and is prone.

Prone Characters

Characters subject to a knockdown or take down effect (or who "hit the deck," etc.) are considered prone.

Prone characters take the following modifiers:

- They are at -2 to be hit by weapons fire unless the attacker is within 4 yards of the prone character.
- Prone characters take a -2 damage modifier from explosives on the ground next to the character.
- Prone characters get no AGI bonus against being hit and -2 to block. They cannot dodge.
- Prone characters are at -2 to hit standing characters in HTH combat. They are at no negatives to grab characters within range.
- Prone characters may effect a grappling "Flying Tackle"-like take down attempt by grabbing an opponent's feet. Treat this as a "Flying Tackle" except that it occurs from "normal" range (but has a lower chance of success than a basic take down attempt)
- Getting up is either a Long 8 REA action or two medium 5 REA actions. After the first action the character is considered to be kneeling.
- Ranged attacks are at -2 unless the character aims (in which case the -2 is removed *and* the character gets full benefit for the aim maneuver).

Kneeling

A character who is knocked down as a result of a blow (usually failing a CON roll when Dazed) may only be knocked to their knees. If the roll is failed by -1 to -3 the character is Kneeling. Kneeling applies as above except that:

- It is only a 5 REA medium action to stand.
- Ranged attacks are at no negative.
- Kneeling characters get ½ of their AGI bonus (round down). That's ¼ vs. ranged attacks.

Action Type: Short
Block Roll: +1 or +2
REA Cost: Normal
Important Notes: You are at –3x amount added for the rest of the turn and –2x the amount added for the entire next turn.

Desperation Block: In the heat of battle, when you're desperate to defend yourself, you may attempt the Desperation Block. When you fail a block or dodge roll by one or two points you may (if this rule is in use) declare that you're desperation blocking and make the parry.

When someone desperation blocks they're being driven back, off balance, into a bad position. Thus, a Desperation Block may *never* be used with an "attack-block" as some high level martial arts allow (Level 3 Karate, for example).

A character who uses a Desperation Block is at –3 times the amount he missed the block or dodge roll by to *all action rolls* (e.g. any combat roll except CON rolls) for the remainder of the round and –2 times the amount he missed the roll by for his entire next round. A character may Desperation block several times during a given round—but the negative modifiers stack up.

Ex1: An Outland Barbarian takes a swing at Geregh. The Barbarian makes his to-hit roll by 6. Geregh tries to block the strike: he makes his block roll by 5—*failure!*

Because the Outland Barbarian is swinging a giant axe and Geregh doesn't want to try to absorb the blow, he declares a Desperation Block.

Since he missed his block roll by 1, he is at –3 to all actions (blocks, strikes, Grapple rolls, perception rolls, etc.) for the rest of the round.

Next turn he suffers a –2 to all rolls: he is being beaten back . . . he needs help.

DN1: The make-it-or-miss-it nature of block rolls leads to faster play and more decisive combats. On the other hand, two Level 3 sword masters (with blocks equal to skill) will have extremely short fights with each other: one strikes twice—the other blocks twice . . . but misses one of the blocks and dies.

This rule can create lengthier, more exciting combats where the fighters don't have to rely on armor so much. The optional rules below (and the Desperation Block itself should be considered optional) will help further balance the combats.

Skill Limit: The Desperation Block is most useful for certain types of games: martial arts games where you want the battles to take a while, swashbuckler games where people wear little armor and there's a bunch of swordplay, etc. In these cases the GM may wish to use the rule only with characters that have a Level 3+ weapon skill.

This will prevent battles with "average guys" from taking a long time due to inflated block rolls. Another rule would be to limit the action to Heroic characters only.

Recovering Balance: Characters with a lot of REA—or those who seriously need their block rolls for the rest of the attacks may take an 8 REA Medium action to Recover their Balance. This action negates all the negative modifiers of a Desperation block.

Your Back's Against A Wall:

Sometimes character's may be up against a wall (literally) or back-to-back surrounded by enemies.

The optional game effects of this are as follows:

- Obviously, no one can sneak up behind such a character and the character can't be "blind-sided."
- Because of limited mobility the character is at –1 to block all attacks.
- The character, obviously, can't use the retreat move.

Dynamic Blocking

In the movies characters fight across entire dining rooms, jump up on tables, and otherwise move around a lot more than they tend to in roleplaying. These rules are highly optional and considered potentially unbalancing: use with caution.

- If a character hits by 4+ and is blocked the attacker moves forward a half step and the defender moves back a half step. If the attacker hits by 6+ and is blocked: a full step.
- If for some reason the defender can't move (or doesn't want to) give the block a –1 and recalculate if the blow hit.
- A character who jumps up onto a higher surface (a chair or table) gets +1 to block unless the opponent is also up there. This is usually a medium action to take the step.
- A character may "roll-out-sideways" with a step-and-keep moving action. This acts like a retreat.

New Movement Rules

Combat is best when it's *dynamic*—that is, when characters are swinging from the chandeliers, dashing across courtyards, and circling their opponents in "force sword" duels. The basic rules cover the *long move,* the *step*, and the *continued move.* These rules add some more clarification and some new wrinkles on moving around in combat.

Action Type: Medium
Movement: ½ Step
REA Cost: 5 REA
Important Notes: It takes two steps to get outside of striking range.

Stepping Away ("Retreating"):

Characters may attempt to strike for normal REA and then "Step back." A retreating step does not move the character outside of normal HTH range (it is assumed to cover less distance than a full step forwards). Rather, it gives the character a -2 to be hit on his opponent's for the next strike (after the next strike the opponent is assumed to have closed the gap) and makes him at -1 to his next strike if the opponent does *not* close the gap with another strike. If this "Step back" is done as a response action to a long attack, it is called a "Retreat" and is considerably more effective (-2 to be hit).

If a character spends 10 REA for 2 steps back, he is outside of combat range and the attacker must spend 5 REA, taking a Step action to close the distance for a normal strike.

> **NOTE:** These rules do not apply if the combatants are moving in the same direction—if a character is facing away from an attacker and takes a step move, the attacker must step forward to be able hit him at all (unless the attacker has a weapon with 3+ Reach).

Action Type: Medium
Movement: Step distance
REA Cost: 5 REA
Important Notes: If you make your REA roll by 5+ you can step or turn for free with a strike

Step-and-Strike:

With this rule in effect, when you make your initiative roll by 5 or more you may, once per turn, perform a step-and-strike action. This is an action that has the same cost as a normal strike but *also* includes a step. This is how fast characters get into striking range without "paying the price" for stepping in.

"Just outside of Step Range."

In some cases, combat will begin with the combatants "Just outside of Step Range." When this happens, the fighters are facing off but either must take a Step action to bridge the gap and get into striking range. This is often done between two evenly matched opponents who are looking for an edge.

The potential edge is that if a character makes his Initiative roll by +5 or better, he may, for that turn only, perform 1 Step-and-Strike move which incorporates a full step and a strike allowing him to bridge the gap and hit for the same 5 (or so) REA! It is legal for a character who makes a Long Move action to declare that it stops "Just outside of Step Range."

Falling, Flying, and Velocity (gravity is a harsh mistress)

The nature of breaking combat down into rounds and turns means that the laws of physics get trampled in some situations. The rules here cover *some* possible problems but the GM will have to make his own call if realism is required.

Falling: A falling character accelerates 10 yards/second at the start of each turn and falls with an initiative of 0. If he falls towards someone, this is treated as though the character himself had taken a long action and that person gets to react (if within 5 initiative). Falling costs the character no REA.

If a character "steps off a roof" in combat, the same applies (he immediately drops 10 yards but it counts as a long action so people may hit him on the way down).

For purposes of range, the attacker may choose to strike/fire at any point along the character's trajectory (so if the character is falling towards people they can strike him just before he gets there—if he's falling away from attackers they can hit him before he goes anywhere unless he made his Initiative roll by 5 or more than they made theirs).

Acceleration & Velocity: At the end of a Step, the character is assumed to have a Velocity of 0. At the end of a Move the player should state whether or not he is continuing the move. If he does not stop, he should, if at all possible, keep moving the next turn.

Acceleration and deceleration happens at the beginning of an individual character's turn, and for game purposes, happens instantly.

Remember: A character can usually decelerate by twice what he can accelerate by (important for super heroes who can fly and such).

Super Steps

Paranormally fast characters who have a Step distance of 2 yards or greater have some huge advantages over slower opponents. They can strike and then "Step back" putting themselves *outside* of normal HTH range.

If a super fast character has a Step distance of less than 3 yards, an attacker must take a 5 REA step to catch the character. If the super fast character has a step of 3 yards or more, a normal attacker must take a Move action to run down the target.

> **Remember:** A character's step distance is 1/9th of his sprinting move or 1 yard. In the case of characters with a sprinting move that is less than 18, they are assumed to have exactly *one yard* of step distance. You have to be really fast to take advantage of the super step rule.

Action Type: Medium
Movement: Step distance
REA Cost: 5 REA
Important Notes: Next turn you *must* pay 5 REA—either for a long Move action, another step, or it's just wasted.

Step—and Keep Moving: For those times when you need to split fast but can't seem to get started the "step—and keep moving" action may be right for you. You pay 5 REA to take a step on one turn and on the second turn, as the first thing you do, you will "continue" running for 5 REA (it's still a long action, though).

In order to do this you must declare that you are continuing to run on the next turn—and, when that turn begins, you automatically pay the REA to run at the beginning (even if you don't get to run because you decide to abort the action or get taken down or something).

> Ex1: Almost at the end of his turn, Karg the barbarian sees the ancient door in the vast underground tunnels break open and a goblin horde pours out. Karg has 5 REA left.
>
> Wasting no time he declares that he is stepping away from the goblin scout he's in combat with and will continue moving next turn.
>
> On the next turn, before anything happens, Karg pays the 5 REA. When the initiative rolls are made, the goblin scout goes first. Because Karg took a "retreating" step, the scout's first attack is at a –1 to hit—and the scout, as an average fighter, only gets one shot. The scout misses.
>
> Karg dearly wants to smite the goblin before leaving—but he declared intent to keep running so his character bolts across the floor and he uses 5 REA to slam the door behind him, all the while yelling for his friends.

Optional Move: Charge.

If the GM and the players want to add even more complexity to the long list of possible movement options, a technique called the Charge may be useful.

To Charge, you add up the cost of a Strike and a Move and you pay all the REA at once to rush your target.

This is a Long action but your opponent has the choice of either Blocking or Dodging the strike *or* Striking you on the way in.

This is a preferred way to move into combat if you have the REA to Move, Strike, and Block because it may tempt the target to block instead of striking on the way in.

Action Type: Long
Movement: Into Close Range with a given opponent.
REA Cost: 5 REA
Important Notes: This is another way (other than Grabbing or Grappling someone) to get into Close Combat

Stepping Into Close Range:

Close Range is a special term for what happens when characters are so close together that their chests are almost touching. Close Combat is where wrestling (called grappling in JAGS) happens. It's also the closest two characters (who don't like each other) can get—weapons become a lot less useful if someone steps into close combat.

To step into close combat you must already be at short range—this means that either both combatants are unarmed—or one has already taken some action (either a step or a move action) to get to short range.

Then, when it's your turn to go, you can declare that you're moving to close combat range. The step itself is a 5 REA *long action*. That is to say, the person whose personal space you're invading can hit you on the way in. This has the following effects:

- Weapons with a short reach function normally, except for short swords and knives long enough to do +3 damagethat are at –1 to hit and –1 damage modifier.
- Weapons with a medium reach are at –2 to hit and –2 to their damage modifier
- Weapons with a long reach tat a –4 to hit and –4 to damage mod.
- Weapons with a long reach can't be used until the user takes a retreating step to open the range (grab him before he steps back and whacks you!)

Also note that animals using the *pounce* maneuver (see animal combat in the grappling section) windup in close combat but a normal person cannot make a normal move action and end it in close combat—they must end it at long range and *then* step into close combat with another move.

If you just want to tackle someone and bring them down, however, that's covered in the grappling rules.

Action Type: Long
Movement: Up to Full Move
REA Cost: 8 REA
Important Notes: This is how you charge someone.

Overruns:

Overruns are what happen when your barbarian warrior decides to wade through the skeleton army because he's so much bigger and heavier than they are. The damage for an overrun is:
(STR –10) + [(Mass x Velocity) / 6]

Complicated, huh? Well, the STR portion is what you get for throwing an elbow in as you hit someone. The (Mass x Velocity) / 6 number is the standard damage you do with a collision (see the rules in the general rules section).

The attacker suffers half the collision damage he inflicts on the target unless the target is 3x or more the Mass of the attacker—then he suffers all of it! (So charging people much heavier than you is not a good idea) If the attacker's Mass + (STR -10) is more than 4x the target's Mass then the attacker takes no damage, knocking the target out of the way.

Karg raised his fist and the man stopped. "It's true—it is," the man finished.

"How come you let them take you?" Karg asked.

"Too cowardly to kill m'self," the prisoner replied as though he were proud of the fact. Karg frowned.

The keep ahead had several towers—it was quite beautiful. The wall around it was high and strong . . . the doors were thick. On the raised drawbridge was the unmistakable symbol of the spider.

As the bridge lowered and they rode in to the courtyard he saw pale children in expensive looking clothing gathered at the balconies watching silent—but excited as they were drawn in. The man in the other cage giggled.

The commander's pavilion was set down and the door opened. The commander was obese. He waddled to the cage and inspected them. Karg glared at him. The other prisoner recoiled.

"This one," he said, pointing at Karg, "he is a warrior?" The armored guard nodded. "Then he will fight in the pit tonight at the banquet. What is his weapon?"

One of the armored men held out Karg's massive, brutal axe. The fat man nodded. "He will have it—but warrior," the man said smiling back, "you die for our sport. Your legs will be chained and your arms will be weighted. The spiders will be slow with you—but it shall be a spectacle to watch."

Karg looked back at the commander as he turned to address the cluster of children in the balcony telling them to prepare for the night's coming entertainment.

Karg felt himself smile. That was your first mistake, Karg thought. Giving me my axe back. That was your first mistake.

***

A1: Advanced Overruns. If the GM wishes, it is permissible to work out the collision damage separately for both the attacker and the target. If a light character runs into a heavy one, treat the damage to the heavy character as though the light character hit him and treat the damage to the light character as though the heavy character hit him (with a half damage modifier). This will make it unpleasant to run into heavy opponents.

Continued Moving: If the attacker hits by 4+, he may continue moving, otherwise, unless the knock-back rules are being used—and the attacker causes knock-back—the charger will come to a halt. If a character has more than 2x the Mass of his target, the GM may waive this rule and allow any hit to continue.

Reactions: As overruns are a long action, the target may strike the character on the way in unless the charging person has beaten the target's initiative roll by 5 or more. However, a character who is a hit by an overrun attack, may strike the character *after* the attack is resolved as well (if he's still standing and not knocked out of range). The overrunning character may block this attack as normal (which he may *not* do if he's hit on the way in).

Retreating: A target of an overrun may choose to dodge but may not block or retreat unless the target's step move puts him outside the maximum range of the attacker (unlikely).

Ex1: Karg, a 18 BLD (Mass of 4) STR 13 barbarian is running at 9 yards per second through an underground chamber when a skeleton (Mass of 1) steps out in front of him, its scimitar (skeletons always have scimitars) gleaming.

He's being chased by a goblin army and isn't about to stop for a skeleton. When he makes his initiative roll by 5 more than the skeleton, it's a sign from above (because the skeleton won't get a chance to skewer him on the way in).

He declares an overrun attack and makes an AGI roll to hit. He hits—barely. Because he's so much heavier than the Mass 1 skeleton (4 times it's mass) the GM allows him to keep going.

His damage is 3 for STR + (4 x 9) / 6 = 6! He slams into the skeleton for 9 points of impact damage and modifies it by what he hit by. The skeleton goes sprawling. Because Karg is so much bigger and stronger than the hapless skeleton (can the undead be "hapless"?) he takes no damage. If he'd hit a person that hard he'd have taken half the damage he did, though!

Casual Overruns:

A casual overrun is a description for a Move action which hits either several characters along the way or hits characters by virtue of some sort of "area of effect" the moving character has.

An example is a super hero with a 5 yard radius "ball of fire" around him who flies through a crowded room—he isn't specifically attacking everyone (even if he wants to, each specific overrun attack is an 8 REA action and he doesn't have the REA) but they all may get hit anyway. The rules are as follows:

- If the character's traced line of movement simply goes over multiple targets (and he doesn't spend 8 REA to hit each one) he may make an attack roll at a cumulative -2 per target after the first (who is hit normally). These characters get the dodge bonus as listed below. If the character stops at any time (doesn't do knockback) then the character's move stops there.
- Characters either in the area of effect of a casual overrun or approached by a moving character who is "casually" hitting multiple targets get +4 to attempts to dodge or, if the target is within 5 initiative of the attacker may declare a "Step" action to get out of the way (no roll).
- *If the moving character is not responsible for his movement* he may block attacks at -2. This restriction goes away after the run stops.
- Damage from a Casual Overrun is at -2 to damage mod rolls since they are not well-targeted.

Action Type: Long
Movement: Up to Full Move
REA Cost: Move + Strke(s)
Important Notes: -2 to hit, -2 Damage Modifier if you do hit, and +2 to be blocked or dodged.

Striking During a Move: This action is touched on in the basic section and the rules aren't any different here. You can strike-as-you-move but you've got to declare it all at once (pay the REA to move *and* the REA to strike in a single long action) and your strikes are at –2 to hit, -2 damage modification, and +2 to be blocked or dodged (not a really good strike).

If you are the target of such an attack, your options are:

- Hit them on the way in—you must be within 5 of their initiative.
- Run them down (or shoot them) when it's your turn.

Ex1: A Trevan L'Blanc dashes down an alley and sees the shadow of a dark man at the end. Behind him is the Parisian guard and Trevan has no intention of stopping. He beats the man's Initiative roll by 5 and makes a weapon skill to fast-draw his sword. His roll is at –2 to hit, -2 DM, and +2 to be blocked. At the end of the turn, Trevan is past the man and heading off down the alley. The man gets no chance to strike back (but can declare a Move action to turn and chase Trevan . . . then, if the man has the REA left, the man can strike him).

The entire move cost him 13 REA (which he has). It could cost him 12 if the GM is using the "1 attack for 4 REA if your Level 3+" rule (Trevan is).

Striking and Moving vs. Striking During a Move:

There's a subtle difference. If you declare an 8 REA action to move up to an opponent, then you declare a 5 REA medium action to strike him, and *then* on your *next turn* you declare a move action (5 REA at this point) to keep on moving, you don't take the –2 penalties.

Why? Because you aren't ending your striking turn out of range. So long as you split up moving in, striking, and moving away over two rounds you're fine. This gives your target a fair chance to strike back and preserves game balance.

If, in the example, Trevan had move to the man and struck, and ended his turn, the man could have hit him back. The question is: Would Trevan have stopped.

The answer is 'sort of.' For all game mechanics purposes, Trevan would be stopped (his velocity would be 0, he'd be at no negative to hit for speed). The difference is that, on his next turn he can still continue moving as a 5 REA *long* action (as though he never stopped).

Moves Chart

Action	Type	Notes
Retreat	Medium (5 REA)	In a response to a Long action a character may retreat. This is a reverse step which makes the character at -2 to be hit. This is different from a "Step Back" move which is NOT a response and places the character at -1 to be hit.
Move	Long (5 or 8 REA)	A Move action goes all or part (character's decision) of a running or sprinting move. The first turn the character moves the cost is 8. It costs 5 REA thereafter. A move cannot place a character in "Close Combat."
Step	Medium (5 REA)	A forward step moves the character 1 yard or 1/9th of his full (sprinting) move, whichever is more. A Step to put a character in "Close Combat" is a 5 REA *long* action (see the section on Reach).
Step and Strike	Medium (cost of strike)	A character who has made his Initiative roll by 5 or more may elect to step and strike for the cost of the attack (he steps for free).
Overrun	Long (5 or 8 REA)	An Overrun is treated as a normal move which at some point hits a target the attacker does STR - 10 + Collision Damage (based on speed and Mass of the attacker). He takes half the collision damage himself. It costs REA like a normal move and can't be blocked (but it can be dodged)
Casual Overrun	Long (Move +5 REA)	A casual overrun is a Move which "inadvertently" hits one or more target. Targets in the way of a casual overrun may (if within 5 Initiative of the attacker) step out of the way. They get +4 to dodge and any damage done is at a -2 damage modifier.
Clothes-Line	Long (Move +5 REA)	A character who is running by multiple targets may choose to extend an arm to strike them on the way by. The REA cost is for a Move (5 or 8) and a punch (5). The character does +1 BASE HTH damage per 4 yds/ second of velocity after the first 4 (8 yds/sec is +1 damage). This hits exactly as a normal HTH punch (average cost is 13 or 10 REA).

Shooting (Non-Automatic Fire)

Guns, laser weapons, and even bows follow the shooting rules. In the advanced section some concepts like *fast* and *slow* missiles are covered as well as rules for range, recoil, and high winds.

What the rules in this section *don't* cover are things like machine guns or "fully automatic fire." They also don't cover scatterguns. Those are covered at the end of this section with all the "non-standard" weapons and the "Advanced Weapon Rules."

Fast and Slow Missiles

JAGS distinguishes between fast missile attacks (which you can't see coming) and Slow missile attacks (which you can).

Fast Missiles can never be blocked (unless the character has some paranormal ability). The always strike "instantly" when fired and can only be dodged at -4 if the character is aware of the shot (he dives out of the way of the barrel—*not* the incoming missile).

Slow Missiles can be blocked with shields (it's not that hard to get a shield between you and an arrow) and may have a travel time to reach a very distant target. Generally any projectile moving less that 250 yards per second is considered a Slow Missile.

A subset of Slow Missiles, Very Slow Missiles applies to non-aerodynamic thrown objects (chairs, hurled axes, etc.). These may be blocked the same way a HTH attack is blocked (with a normal weapon or martial art skill). Very Slow Missiles are generally blocked at -2 to the defender's Block roll if the weapon is small (an axe) and no negative if the weapon is large (a thrown chair). If the thrown object is large enough, the attacker may even get "Large Weapon Bonuses" (see Strike) to hit (i.e. a thrown table).

Firearm Types (Readying and Base Range)

Firearms are divided into three basic types based on how they're constructed. These are:

- Pistol – small, easy to use.
- Sub-Machine Gun (SMG) – larger, sometimes needs two hands.
- Rifle – Large, fired properly from the shoulder. Takes two hands. Slow to get ready. This also applies to portable machine guns.

Each weapon takes time to "ready," that is, to bring to bear on a target and each weapon type has a "base range" which determines how accurate it is at a given distance. (Yes, we know this is a simplification of "reality." Forgive us.)

> **Readying Weapons:** A weapon (firearm or not) takes 5 REA to draw unless you're Level 3+. Then you can "fast draw" the weapon with a successful roll for 0 REA.

Fast and Slow Missiles

***Fast*:**

- Lasers
- Bullets
- Super hero power blasts

***Slow*:**

- Arrows
- Thrown Knives
- Shoulder launched grenades or rockets
- Baseballs from a good professional pitcher.

***Very Slow*:**

- Thrown axes
- Thrown chairs
- Softballs

If the GM isn't sure if something should be considered a Fast or Slow missile a good question to ask yourself is "Can the character see it coming?"

And if he can: "Could he possibly hit it back like a baseball?"

Take, for example, the crossbow bolt. It travels less than 250 yards per second (generally) but it's way too small to see coming. As a result it should probably be considered a Fast missile as opposed to the larger arrow which a shield user could possibly see.

* * *

"It's a dwarven personal cannon."

*"A **what**!?"*

"A personal cannon—like a cannon . . . but . . . personal. The tube has small cannon balls—some kind of powder goes in the horn. "

"Yeah?"

"Yeah. Then you turn the crank. BOOM."

"Like a cannon?"

"Like a cannon."

"Do, uh, do they know you have this?"

"I'm still breathing, aren't I?"

"I guess they don't."

* * *

Once a firearm is out, it must be "readied" or any shot with it will be at –4. Pistols may be readied instantly (0 REA). Submachine Guns are readied with a 5 REA Short action. Rifles require an 8 REA Long action. Generally, a gun only needs to be readied once when it is drawn. After that, so long as you don't holster it or sling it, you're assumed to be walking around with your hands on it, prepared to fire.

The purpose of readying in the game is because small weapons like pistols have an advantage over large ones (rifles) when they're holstered.

Thrown weapons are usually readied when they're drawn (0 REA). Crossbows and long bows ready like rifles. Tangle weapons (bolas and nets) have even more complicated readying rules and can't just be "readied once they're drawn and then used for the rest of the fight." (See the Tangle Attacks section).

Ex1: Wendy, 12 REA, hears a noise in the alley ahead of her and draws her pistol. It is a medium action to draw a weapon and the pistol requires no additional action to ready.

Ex2: Wendy with a SMG, instead, spends the 5 REA to draw and 5 REA (a Short action) to bring the weapon to bear (or else fire at –4). As the alley is close and Wendy isn't much of a hand-to- hand fighter, she elects to fire from the hip if necessary and declares a Wait as above (costing 2 REA). She has 5 REA left to use. If the end of the round comes and nothing happens, she may use her remaining REA to ready the gun.

Ex3: If Wendy (with a rifle now), wanted to shoot someone without a penalty, she would have spend 5 REA to draw the rifle (unsling it from her shoulder), and then 8 to sight it. She wouldn't be able to fire it that round (as she spent 10 REA and only had 12) but next round and every round thereafter, she would be able to fire it without re-readying (as the rifle is already sighted).

Ex4: Three soldiers walk into a rough looking bar (they have their rifles). They might decide that, before trouble starts, they want to ready their weapons. They could do this but . . . when a rifle is readied, the character has shouldered the gun and is looking down the barrel. Even for a rough bar that's pretty damn aggressive. Also, it takes two hands so they can't eat or drink while keeping the weapon readied.

If they had to open a door or something while walking around with the weapon ready, the GM would probably rule that the second hand could be removed for short periods of time without messing up base aim but it's hard to eat that way.

All in all, it might be better if one of them had something a little handier like a pistol or a SMG . . .

Base Range: Each gun type has a Base Range beyond which the user begins to take negatives to hit. Pistols have a Base Range of 5 yards, Submachine Guns of 15 yards, and rifles at 50 yards.

Advanced Range Calculation

Remember, Level 3 gun skill allows the character to ignore up to –3 points of range modifier *before* multiplication.

If a character is shooting at a target with a –2 Size modifier and a –3 Range modifier, Shot is at –6.

But if the shooter has a Level 3 weapon skill, he can ignore the –3 range modifier *before* it is multiplied.

Or, if you want to get really advanced, the player can decide to divide up his Level 3 bonus. The Range modifier can be reduce to –1 (using 2 of his three "ignore points") and the size modifier can be reduced to –1 (using the last "ignore" point). Since the size modifier is –1 and the range modifier is –1, the total to-hit modifier is only –1.

Multiplying a Negative by a Negative and a Certain Misreading of the Range Rules

Um, just because the easiest way for us to describe the range rules multiplying by other to-hit modifiers seems to indicate (to math majors) that a negative for size multiplied by a negative for range yields a positive to-hit "bonus," that isn't the case.

.

Individual makes of gun have a Range Statistic that alters the Base Range. It is usually a positive number but occasionally is negative. The Range Stat is applied to the Base Range and the resulting amount is the Range of the gun.

> Ex1: A powerful, accurate pistol (5 yards Base Range) has a Range Stat of +3. This increases its Range statistic to 8 (so the user takes to-hit negatives every 8 yards instead of every 5 yards.

How exactly did that work? The rule is this:

A target at [Range] yards away is at no negative to be hit. Every [Range] yards after the target is at an additional –1 to be hit due to range.

If no other modifiers besides Range affect a roll, apply the Range modifiers normally. If other modifiers apply and the Range modifier is no more than –1, then add the modifiers normally.
If the Range modifier is –2 or more then the other modifiers are *multiplied* by the Range modifier. Level 3+ skills with ranged combat (Firearms or Bow skill) deduct *before the multiplication*.

Firearm Types Chart

Type	Hands	Readying	Base Range
Pistol	One	none (0 REA)	5 yards
Sub-Machine Gun	One	short (5 REA)	15 yards
Rifle	Two	long (8 REA)	50 yards

Bows and Crossbows

Medieval bows have a Range score of 15 yards. Modern day crossbows, though are like rifles and have a Range score of 50.

To-Hit Modifiers for Range

Size and speed are the two major modifiers for ranged combat. Things like visibility and high winds can also factor in if the GM rules that the situation calls for it.

The important thing to remember is that you add up all the size, visibility, high wind, and AGI modifiers and then multiply the total by the range modifier to get the final modifier. This makes hitting small targets at long range almost impossible.

> Ex1: A character is using a pistol with a Range of +0 (giving it a –1 to-hit modifier for each 5 yards after the first 5). He is firing at a small target with a -2 size modifier that's 20 yards away. The range modifier is –3. These are *multiplied* together giving it a –6 to be hit.

Speed Modifiers:

Use the chart below to assign to-hit modifiers against moving targets.

Speed Chart

Speed	To-Hit Mods
0 - 7 yards / sec	-0
8 - 12 yards / sec	-1
13 - 20 yards / sec	-2
21 - 36 yards / sec	-3
37 - 68 yards / sec	-4
69 - 132 yards / sec	-5
133 -260 yards / sec	-6

Shooting (Ranged Attack) Modifier Chart

Modifier	Effect	Notes
AGI Bonus	-½ target's AGI above 10	Round down. This is similar to the HTH combat modifier but agility is less useful for dodging missile attacks.
Aim	+1, +2, or +3	Aim actions are either short (3 REA), Medium (5 REA), or Long (8 REA). The effects are not cumulative—take the highest.
High Winds	-1 to -10	The GM must determine how "high" the winds are. Generally a Wind Storm is -4 to -6 and a "storm" is -1 to -3"
Point Blank	As per HTH attacks.	A pistol can be used as a HTH weapon by placing the barrel against the target and pulling the trigger. Use AGI to hit (or street fighting).
Range	-1 per "RNG" of weapon.	An attacker takes no negative for the first "Base Range" yards and -1 for each additional "Base Range" yards after that (round down).
Speed	See above chart	What matters is the aggregate speed. It the target is standing still and the attacker is moving the shot is still at a negative.
Target Size	As per HTH Combat	Each half human size of a target gives a cumulative -1. Each double human size gives a cumulative +1.
Visibility	As per HTH Combat	The perception roll rules apply to ranged combat as well. If the misses the perception roll, multiply the negative by any range mods.

Ex1: Johan, one of the CIA's best shots (Lvl 3), attempts a night attack on a sentry. The rifle has a +133 Range score so it loses accuracy in 50 + 133 = 183 yard increments. The man is 1000 yards away. That's a –4 Range modifier. The shot is at night in –3 visibility. Johan makes a perception roll at –3 to "acquire the target." That means he takes no negative for the darkness. There are high winds for a –4. The resulting shot is a –16! Johan has a 19- Rifle skill (the gun has no scopes for this example). He'd hit on a miserable 3 or less. But he's Level 3. He reduces the –4 Range modifier to a mere –1. This adds to the high-wind modifier giving a –5 total negative mod. Johan has a 14- chance to hit and kill the sentry. He takes aim for +3 to hit . . .

Ex2: Hammerhead McLear, laying low in a sleazy hotel, throws a knife at a rat running across the floor. The rat is 1/16th the size of a man (the GM just decides this). That's a –4 for size. It's moving at 4 yards per second (no modifier) and it's within 5 yards (so there's no range modifier). Hammerhead has Thrown Weapon on a 13- so he has a 9- chance to spear the rat. His player rolls a 15 and sends the knife sailing out the window.

Ex3: Captain Carnage, super hero at large, flies above a crowd at 16 yards per second (approx. 32 miles per hour). He looks down and spies a purse-snatcher—he lets loose with the power beam. The thief is not yet moving so he gets no speed modifier and Captain Carnage is about 15 yards up (with a range modifier of -1 per 5 yards after the first 5) so he's at -2 for range. He is moving at 16 yards per second so the speed modifier is -2. Multiplying the speed and distance mods, the GM determines he is at -4 to hit! Captain Carnage, of course, fires anyway. He has a 15- skill roll and rolls an 11: a miss by 1. The blast roars into the concrete at the thug's feet.

Sights

Most weapons have some kind of sighting mechanism and may have very sophisticated scopes and stabilizers. These devices serve to make a weapon more accurate when aimed with.

Sights and Scopes will reduce negative modifiers after a medium 5 REA action is taken to aim. The aiming character gets the reduction of modifiers in addition to the to-hit bonus for aiming. Note: Unlike L3 and L4 marksmen, sights and scopes reduce Range modifiers *after* multiplication by other to-hit negatives.

Very good sights and stabilization gear will add actual pluses to the character's to-hit roll after the character takes an 8 REA long action to aim. This plus to hit is used *instead* of the +3 long aim bonus (the excpetion are high tech laser sights which add +1 to any to hit roll)

Ex1: Jose, a bodyguard, carries a 9mm Glock with a laser sight. When a known hitman crashes through the crowd towards the movie star he's guarding, he draws the weapon, takes a short action to aim, and fires (he has a 13 REA). His skill is 14- and it goes to a 16- because of the short aiming action and the laser scope. He drops the man with a shot to the leg and steps between him and his client, noticing only then a 'Press' badge in the man's hat . . .

Ex2: A Marine anti-sniper rifleman looks down the scope at a darkly dressed man with an AK-47 soviet assault rifle. The man is drawing a bead on the American convoy and the Marine squeezes the trigger.

The scope subtracts 4 from negative modifiers and the target is at -4 to be hit because of range—a perfect match. The Marine's long aiming action gives him +3 to his normal skill roll of a 15-. At long distance he has an 18- chance to hit!

Sights Chart

Sight	Modifier Reduction	To-Hit Bonus
Basic Sights	None	+0
Match Weapon	-1 to -2	+0
Basic Scope	-2	+0
Advanced Scope	-3	+0
High tech scope	-4	+0
Laser Scope	None	+1
Stabilizers	None	+4
Adv. Stabilizers	None	+5

Covering (an Optional Advanced Rule)

A character with a 14 or 15 REA can step-fire-step back if he has cover (as in a doorway). Since each part of the move is a Medium action, a target can take no response unless he's beaten the shooter's Initiative and is *waiting*.

To prevent this situation, use the optional Covering move. Covering is an 8 REA *Long* action. When declared, either a target or an area no bigger than an average doorway must be specified.

If the target—or anyone in that area—makes a Medium action you may respond to it by shooting (in the same way that you can respond to a Long action). As with responding to a Long action you must be no less than 5 Initiative below the target.

At the end of making the Covering action you get +2 Aim and, if you choose you can use the Covering shot to fire (as part of the initial 8 REA action).

Covering lasts until you take any action (including a defensive action) or are distracted (a WIL roll can be made to prevent things from startling you—NPC's can sometimes be distracted using the Psychology rules).

If you're being covered you can decide to go for it: make an REA roll. The covering character makes one too—if your Initiative 5+ above the coverer you can act normally. Otherwise he can shoot when you declare anything but a Medium action. The GM shouldn't tell you what he rolled and force you to act anyway.

Ex1: Officer Bob sees a shadowy figure exiting a museum. He shouts "Freeze" and spends 8 REA. The figure doesn't respond to the long action and is covered.

Next turn if the figure draws, throws a punch, or takes a step, Bob can decide to shoot first.

A New Grab Rule

Dragging Around Grabbed Targets

Often you want to haul someone you've grabbed somewhere they don't want to go. Whether it's that perp you've gotta bring back to the squad car or your buddy who's gone berserker again, you need to move them around.

Sometimes it works the other way—someone's got you and you'd rather drag them along tham break them off. Either way, this is how you do it:

- Compare Offensive Grapple vs. Offensive Grapple and make a roll on the resistance chart. A "attempt to drag" costs 8 REA (or 5 if you moved last turn) and is a long move action (despite the fact that you may not actually move).
- If the roll is missed you go nowhere.
- If the roll is made by 0 or 1 you may take a single step.
- If the roll is made by 2 – 4 you may take a *walking* move.
- If the roll is made by 5+ you may take a running move.
- If your STR – 10 is 30% higher than your opponent's Mass + (STR-10) you may simply lift him as encumbrance and he may not resist being dragged (this represents a great difference in physical attributes and allows super heroes to drag around normal guys without resistance).

Another note: If you can *fly* (super power!) then you may add your Flight abilities' Acceleration to your STR for these purposes (either resisting or dragging).

Getting Into Close Combat:

As stated above, you can get into close combat three ways:

- From short range (unarmed combat distance) take a 5 REA *long* action to "step in close."
- From short range grab your opponent.
- From any range *Grapple* your opponent.

Why bother? Well the Street Fighting martial art works better at close range . . . and the longer a weapon is the *less* useful it is in close.

Knives, on the other hand, work great in close—an experienced knife fighter in JAGS will want to be as close to his opponent as possible if he wants to do mortal damage.

Close Combat

The Basic Combat section introduces the Grab maneuver—but if you want to really "get inside" and fight you'll need to use the Close Combat rules outlined here. Simply put, Close Combat is what takes place when opponents are at extremely close range—or even wrestling.

Getting Into Close Combat

Since most HTH combat takes place at "Normal Range" (a yard from the tips of the fighter's weapons) to get into Close Combat, you have to do one of three things:

- Grapple (wrestle) with your opponent. This is described in the next section.
- Grab your opponent. Even thought the fighter's feet may be some distance apart, you grab him or he grabs you, it's Close Combat. *Note:* The situation where one person grabs *another *doesn't* make long weapons useless—but it does confer all other advantages of Close Combat.
- Perform a "Step Into Close Combat" move. This is a 5 REA Long action that you take from normal unarmed striking range. Once the move is completed, you're in Close Combat

Why Close Combat?

Why would anyone want to get so close to your opponent? Here are some advantages:

- Weapons longer than a knife are almost useless. Weapons with Long Reach can't be used. Weapons with Medium Reach are at –3 to hit and –3 Damage modifier.
- Characters inclined to "fight dirty" can take advantage of Close Combat and Grappling combat using special moves like the Headbutt or Grapple.

Control and Close Combat (Wrestling)

Close Combat introduces the concept of *control*. A character who has *control* in a wrestling situation is the person dictating the action. Simply put, a character with *control* can decide to end the Grappling combat at any time during his turn by letting go. This must be done at the very start or very end of the character's turn.

Take, for instance, a man pinning another man on a mat. The character underneath can strike back, try to break out, and otherwise try to get free but he can't just decide to get up. Any Close Combat move that puts one character in a Hold or Lock gives *control*.

Furthermore, a character in control will often find it easier to move to a better position. For example, you have to get a *really* good roll to Slam someone (pick them up and smash them on the ground) but if you do a Pick-Up move first and *then* try to Slam it's a lot easier.

Attacking Someone Outside Of A Grapple:

If you're wrestling with someone and you want to attack someone else, it's harder. Attacking someone other than the person you're grappling with causes a –2 to hit and a –2 Damage Modifier.

Super Grapples:

Some non-human characters (especially super heroes) are able to grab opponents with telekinesis or deform their bodies to stretch and engulf targets.

Collectively, these are known as Super Grapples. Although the exact effect may be different for every ability, some generalities apply. These are:

- Super Grapples are usually 5 REA medium actions (just like a grab) which hit at the range of the ability.
- Super Grapples place the *target* at a various negative Damage Modifiers to hurt the *attacker* but don't place the attacker at any negative Damage Modifiers to hurt the target.
- Targets held by stretching characters are able to attack the holding character at a –4 Damage Modifier (but, like a normal Grapple, the stretcher gets no AGI bonus).
- Characters held by Telekinesis are at –1 to hit and –1 Damage Modifier to attack "other people." But, because TK doesn't hinder the user, the attacker *doesn't* lose his AGI bonus a

Teleporting out of Grapples:

A grappler gets the standard response against a long move used to teleport out. If the teleporting character uses his ability to exit and re-enter the grapple, he may: the grapple on the teleporter is reduced to a Level 1 Grapple when a teleport action is taken.

Grapple Rolls

When you're trying to decide who wins in a Takedown attempt—or rolling to see if you can break a barbarian's grip, you make a Grapple Roll the same way that you do with a Grab.

Attempting a Move Requiring a Grapple Roll

Grappling, Grabbing, putting someone in a Hold or Lock, performing a Takedown, a Judo Throw, or a Wrestling Arm-Bar requires a Grapple roll (so do other moves like the Pick-Up and the Slam). When you're asked to make one, subtract your Offensive Grapple Score from their Defensive Grapple score, and subtract the result from 10. That's your roll.

The amount you make your roll by determines your Success or failure. Easy to apply moves (the basic Grab or Grapple, for example) require only a Minor Success or better. Really hard moves (the fight-ending Slam, for example) require a Major Success. Other moves (Hold and Lock for example) are in between. Check the chart under the specific move to see what you need to roll to make it happen. Greater risks yield greater rewards.

GRAPPLE SUCCESS TABLE

Failure	Minor Success	Success	Major Success	Critical Success
Missed	+0 to +3	+4 to +6	+7 to +9	+10 or better

What does this all mean? Well the exact meanings of things like Total Failure and Major Success are explained in the next section, but to be sure you've got it, let's do a quick example.

> Ex1: Geregh, the barbarian, has a Grapple Score (offensive) of 11 and defensive of 9. He goes after a gladiator in the area who has a grapple score of 7 (offensive) and 5 defensive. The man, while strong and tough, is much smaller than the massive Geregh.
>
> The attack Geregh declares is a "Takedown" This is an 8 REA long action and Geregh's to-hit roll is made against the gladiator's AGI bonus. Geregh hits by 6 but that isn't important for grappling combat.
>
> Their statistics are compared. Geregh has an 11 offensive score against the man's 5 defensive score. That's 2 to 1 edge: Geregh has a 15-. He rolls a 10 and makes it by +5—a success—the man goes down, taking 4 points of damage!
>
> Ex2: Two really expert martial arts experts are fighting. One has a Grapple of 18/16 the other has a Grapple of 16/14. The slightly better grappler (18/16) hits with a Grapple (basically a better Grab). Comparing the attacker's *Offensive* score of 18 to the defender's *Defensive* score of 14 we find that the ratio is 1.28 to 1 this gives the attacker a 12- roll according to the chart. The *Grapple* move requires only a Minor Success and the attacker rolls an 11—keeping hold of his target.

Computing a Grapple:

Take your Offensive Grapple Score, subtract their Defensive Grapple score. Subtract the result from 10 and that's your roll.

Ex1: If Karg, the Barbarian has an Offensive Grapple of 8, and his opponent has a Defensive Grapple of 6, Karg has a 12- roll with any Grappling maneuver.

Ex2: If Karg (Offensive Grapple of 8) goes up against a truly huge opponent with a Defensive Grapple of 12, Karg has a 6- chance of making his moves work!

Dazed Characters:

Dazed characters suffer a -50% modifier to their grapple scores (and, of course, have lower REA's to fight with).

Using Weapons In A Grapple:

Most hand weapons are more of a hindrance than a help in a grapple. Any weapon with a Reach of Medium or higher is at double the negative Damage Modifier of an unarmed attack (usually -2 but may be higher). Furthermore, they are at -2 to hit per point of Reach.

Handguns and knives which do +1 or +2 damage may be used like a normal punch (taking the listed negative damage modifiers). Knives that do +3 damage are at -2 to hit with (as though they had a Reach of Medium).

Holding Items:

If a character in a grapple is holding something (probably a weapon—but it might be his wallet) he suffers a -1 (or -10%) to his grapple roll. An exception to this is a staff or other weapon using the staff skill. These can be used as levers for +1 at Level 2 or +2 at Level 3.

Special Moves in Close Combat

These moves are allowed only in Close Combat. Unless otherwise noted, anyone can perform them.

Move: Headbutt
REA Cost: 5 REA Medium
Damage: Base Damage + Street Fighter damage bonus (if any). Other Martial Arts Damage bonuses *do not* apply.
Notes: The target of a Headbutt makes any required CON roll at –2 if the attacker hits by 4 or more. A hit by only 0 to 2 means that the attacker takes half damage himself.
Defenses: The Headbutt can be blocked normally—but not dodged.

Headbutt: The attacker smashes his forehead into the target's face. While not a civilized move it can be very effective.

If the attacker uses the Street Fighting combat skill, in this case, the +1 to hit applies both for damage modification purposes and against being blocked.

If the Headbutt hits by 4 or more, any required CON roll the target must make is at –2. The Headbutt is risky maneuver: if the attacker only hits by 0 to 2, he takes half damage!

Move: Bite
REA Cost: 5 REA Medium
Damage: 1 point Penetrating damage
Notes: A Bite doubles only on a hit by 6 or better.
Defenses: A Bite may be blocked but it is blocked at –2. It may not be dodged.

Bite: The Bite is often the technique of last resort. The biter takes no negative Damage Modifiers due to position or grappling but a Bite only doubles on a hit by 6 or better (instead of a hit by 4) thereby making higher damages difficult to achieve.

The Bite does 1 point of Penetrating damage.

Move: Immobilize Limb
REA Cost: 5 REA Medium
Damage: None
Notes: You must have the target in a Grapple, Hold, Lock, Pin, or Arm-Bar.
Defenses: This move can't be blocked or dodged.

Limb Immobilize: Often you'll enter Close Combat because your enemy has a weapon and you don't. The Immobilize Limb move is the Close Combat equivalent of using a Grab attack to Grab an arm.

In Close Combat, you can make an Immobilize Limb move without rolling to hit. Just make a Grapple Roll and if you get a Minor Success or better, a specific weapon-wielding limb is useless until the opponent successfully makes a Break Hold move.

Animal Combat:

Animals fight similarly to humans but they have a few different moves (if you want to build a character with those moves check out the Animal Combat skill in the paranormal abilities section).

Animal attacks may include:

Bite and Hold: A *bite and hold* is like a grab that does damage. When an animal bites and locks itself onto a target, for each 5 REA (medium action) the animal spends the character takes damage. The initial roll to hit remains constant but a new damage modification roll is made each time.

Pounce: Some animals can "pounce" onto a target. A pounce attack is an 8 REA long action which terminates in a bite or bite and hold. If the character strikes the animal on the way in, he cannot block the bite (and vice versa).

If an animal knocks a character down with a pounce, he may automatically begin grappling combat.

Bite / Claw: These are basic attack forms and function just like strikes. They may be blocked or dodged as normal. Grapple Damage Modifiers are 1 less against "in built" teeth and claws.

Gore: If an animal with tusks or horns initiates a collision the collision damage is treated as penetration damage (plus the damage for the horns). Huge animals can do massive damage this way. If the gore is successful and the target is half the animal's weight or less, the goring animal will take no damage from the rush.

Grapples: When an animal grapples with a human, usually only a level 1 grapple can be achieved by the animal (sitting on the human).

Blocks: Most animals can't block—they can, however dodge. Often they are skilled enough to dodge at their AGI for 3 REA cost (like a block).

Move: Pick-Up
REA Cost: 5 REA Medium
Damage: none immediately.
Notes: Target must be grabbed or grappled first.
Defenses: You can break the grab—but you can't block or dodge a pick-up.

Pick-Up: The attacker lifts the target into the air. This isn't so bad—but what happens next might be.

To lift a target you must have Grabbed or Grappled them and then declare a Pick-Up move and get a *Success* on the Grapple Chart against your target.

If your STR above 10 is 2x your target's *Mass* or higher you can lift the character with one hand *and* you can perform this move if your opponent is merely *Grabbed*. If your STR –10 is *less than* your opponent's Mass x2 you need both hands (and must *Grapple* first).

A lifted opponent is vulnerable and all attacks against him get a +2 to-hit for however long he is lifted. The time starts the round *after* the target is lifted (Ex. If the first thing you do on your turn is lift someone and you've got them up for 1 round, they are vulnerable for the rest of your current turn and until the end of your *next* turn, next round).

Additionally, once lifted, it is easier to Slam the person.

PICK-UP EFFECTS

Failed Roll	Minor Success	Success	Major Success	Critical Success
No Effect	+1 Round if *already* lifted	1 turn	2 turns	Forever

Move: Takedown (Flying Tackle)
REA Cost: 8 REA Long
Damage: Varies
Notes: None.
Defenses: If you're already Grabbed or Grappled there's no defense—but you can dodge the Takedown or Flying Tackle.

Takedown: The attacker dives in and takes the target's legs out from under him, dumping him on his back. This is a classic Wrestling or Judo move or just a standard football tackle.

You and your target must be standing and, if this works, you both go down.

When this is done, the characters are Grappling (see the Grappling Section). When a Takedown hits, the attacker must score a Success or better on a Grappling roll.

The Takedown can be attempted in one of three ways:

- If you already have a Grab or Grapple you can attempt a Takedown as a 5 REA Medium action.
- From normal striking distance you can attempt a Takedown as an 8 REA Long action
- From across the room you can charge your target and attempt a "Flying Tackle" as an 8 REA Long action. Your Grapple Score takes a –2 modifier when trying this. You must be able to reach your target with a full move.

Sample Animals:

Although animals will be detailed in other books (JAGS Fantasy, JAGS Bestiary, etc.) the short listing here will give the GM a feel for what beast will be like.

Wolf
PHY 11 / 9 DP REF 12 INT 5
Bite 12 STR, 4 damage.
Perception roll of 14-
Attacks: Bite and hold, Pounce

Lion
PHY (*see below*) REF 13 INT 5
STR 14 BLD 26 DP 26
Bite: 14 STR 13 Pen damage
Claw 5 damage
Stealth L2 13-

Elephant
PHY (*see below*) REF 11 INT 6
STR 116 BLD 530 DP 530
Stomp: 106 Impact damage
Trunk Grab 11 STR

Eagle
PHY (*see below*) REF 12 INT 4
STR 12 BLD 5 DP 8
Claw: 14 STR, 2 Pen Damage
Flies at 10 yards / sec

Polar Bear
PHY (*see below*) REF 12 INT 7
STR 14 BLD 70 DP 70
Claw: 8 Pen damage
Bite: 12 damage

T-Rex
PHY (*see below*) REF 12 INT 7
STR 50 BLD 300 DP 300
Tail Lash 52 damage
Bite 46 Pen damage

TAKEDOWN EFFECTS

Failed Roll	Minor Success	Success	Major Success	Critical Success
Attacker Thrown off	Attacker has a Grab/Grapple	Target Falls, Grapple	Target Falls, Attacker has Hold	Target Falls, Attacker has Hold
No Damage	*No Damage*	*Target's Mass in damage (+2 DM)*	*Target's Mass +1 in damage (+4 DM)*	*Target's Mass +2 in damage (+6 DM)*

Move: Grapple
REA Cost: 8 REA Long—or, if you had the target Grabbed last round moving to a Grapple is only 5 REA.
Damage: None.
Notes: None.
Defenses: You can dodge a Grapple, but you can't block it.

GRAPPLING: Grappling is just like Grabbing except that you're physically much closer to the target. Grappling is like a boxer's clinch or a wrestler's grip.

When you hit with a Grapple you must win a Grapple roll to hang on. If you are the target of a grapple a Break Grab move will free you.

When you Grapple someone you have *control* until they get to act on their next turn. Then, if they desire, for 0 REA they can Grapple you. This means that you no longer have *control* and you must successfully make a Break Grab move to break *their* grip. To regain control you simply take a 5 REA Medium action and make a Grapple Roll. If the result is a Minor Success or better you have *control* until the end of your turn.

When you Grapple someone, the effects are identical to a Grab with the following additions: either party striking at each other takes a –4 Damage Modifier. Because characters on the ground (*prone*) get a –2 DM, Grappling characters who are down take a –6 to hurt each other.

Move: Slam
REA Cost: 5 REA
Damage: Varies
Notes: Target must be Grabbed or Grappled to perform a Slam. If the target was Picked-Up, then a Success will result in a +6 DM Slam.
Defenses: There is no defense against a Slam attack.

Slam: Slamming someone means taking them, picking them up, and dashing them on the ground. It's one of the most damaging things that can happen in Close Combat.

When you declare a Slam move you must win a Grapple Roll. The result determines what happens. To perform a Slam, the attacker (but not the defender) must be standing.

The Base Damage of a Slam depends on whether the attacker decides to drop/throw the target or keeps control of him (doing less damage).

Miscellaneous Grapple Effects:

Some other effects of Grapples are:

- No party in a grapple can kick another party in a grapple—but they can cross.
- Once grappled, like a grab, you can't dodge or move around and you get no AGI bonus against *anyone*.
- Trying to attack someone who's *not* grappling with you is hard. You get a –1 to hit for each –1 point of Damage Modifier you're at. . . . but you can kick them.
- Holding a weapon gives you a –1 Grapple Score Modifier because one of your hands is tied up—drop it!

Base Slam Damage:

- Release target: [Attacker's STR – 10 Min: 4] + Target's Mass x3
- Grab Target: [Attacker's STR – 10 Min: 2] + Target's Mass x2
- Grapple Target [Attacker's STR – 10 Min: 1] + Target's Mass

The Base Slam Damage is modified by a Damage Modification Roll with a bonus determined by the amount the Slam roll was made by (*not* the amount you hit by).

SLAM EFFECTS

Failed Roll	Minor Success	Success	Major Success	Critical Success
No Effect	No Effect	No Effect unless Target was Picked Up (+6 DM)	Slam +8 DM	Slam +10 DM

Move: Hold
REA Cost: 5 REA
Damage: None
Notes: A target must be Grappled before you can Hold them (or you can do a Takedown). Achieving a Hold gives you *control*.
Defenses: Only Grappling defenses are allowed against a Hold. Using a Resist move is very useful against a Hold.

Hold: A Hold means you have your opponent nearly helpless. If you and he are standing this could be a full nelson or "hammer lock." If you're on the ground this is a standard Judo or Wrestling hold.

When you're in a Hold, you and your opponent can still hit each other (and, since you're Grappling them there's no AGI bonuses to avoid being hit) but you're so tied up it's almost worthless.

The degree of Hold you have gives *both* of you negative Damage Modifiers because you are so tied up around each other and you are holding each other so close. If you want to pummel the guy you've got held, move to the "Mount" position and cream him.

If you're in a Hold, you've got to use a Break Hold move to try to get out.

This Hold modifier supercedes the Grapple modifier. A Held character can try *no* grappling moves other than a Break Hold move.

If you have a Grapple already, you can establish a Hold that is one column better (so a Minor Success is a –4 DM Hold but a Critical Success is a -

> Ex1: El Chupacabra, (a Mexican Wrestler) has a vampire in a –4 DM hold. Because the vampire is so strong, even at –4 DM he's still capable of hurting the wrestler—so the wrestler, on his turn, declares Hold. He gets a Success and moves the Hold up to a –6 DM. Then he performs a Takedown and puts the vampire at a whopping –8 DM!

Two on One in Close Combat:

When more than one person piles on in a wrestling match, it may be done one of two ways:

- If no one is cooperating with anyone else, roll all the attacks separately. The GM is responsible for making sure that the results make sense.
- If two or more people gang up on one they wait until the last person gets to go and then declare a group grapple. Everyone rolls to hit (or if the grapple is underway they all hit) and the Grapple score is: Highest of the group + 1/3 per person (minimum of Mass).

Ex1: Super heroine Wild Wind is surrounded by zombies. She has a 30 STR and 9 BLD (Grapple score of 22) and is rushed by 12 zombies.

The zombies have 10 STR, 10 BLD (*offensive Grapple of 4*, *defensive grapple* of 2). All 12 hit her and she faces an awesome 26 Grapple Score(4 + 2x11).

The Zombies roll on a 12-!

The reason it's 4 + 2 + 2 . . . +2 is that 4 is the highest *offensive* grapple score and each adds 1/3 of it's score *or* it's Mass (2) whichever is more.

Note: if you and your opponent are on the ground (if a Hold is applied after a successful Takedown) then the *prone* modifier is added as well so a –4 DM hold becomes a –6 DM hold (and a –8 DM hold is a –10!)

HOLD EFFECTS

Failed Roll	Minor Success	Success	Major Success	Critical Success
No Effect	No Effect	Hold –4 DM	Hold –6 DM	Hold –8 DM

Move: Lock
REA Cost: 5 REA
Damage: ½(STR –10) to STR-8
Notes: Your opponent can't have *control* if you want to apply a Lock. You must have a Grab or Grapple to perform a Lock. A lock gives you *control*.
Defenses: In a Lock, the only Grappling move you can perform is Break Hold.

Lock: A Lock could represent a headlock, a bearhug, a leglock, or other situation where you can apply a lot of pressure to your target.

When you attempt a Lock, you must win a Grappling roll. The amount by which you win determines how effective the Lock is (what Damage Modifier is used).

Immediately when a Lock is applied and for a 5 REA Medium action thereafter, you can *squeeze*. Squeezing does ½ (STR – 10) (round up) damage (minimum of 0 damage). This damage increases by 1 point each turn or squeeze until reaching a maximum of STR –8. Roll on the Impact chart for damage modification using the Damage Modifier listed below.

The Damage Modifiers from a Lock are *not* affected by other grappling modifiers (being on the ground, or in a Grapple) has no effect on a Locks.

If a target is in a Hold, a Minor Success counts as a Success for purposes of moving to a Lock.

Both parties in a Lock are considered Grappled (they have a –4 DM, -6 if on the ground, to hurt each other).

LOCK EFFECTS

Failed Roll	Minor Success	Success	Major Success	Critical Success
No Effect	No Effect	Lock +4 DM	Lock +6 DM	Lock +8 DM

Tentacles and Bear Hugs (Constriction):

Tentacles (or characters with stretching) can Lock for full damage (Base Damage +2, or +20% if Base Damage is 20 or better) on the first turn.

Squeezing With One Hand:

Any time you have someone Grabbed or Grappled you can Squeeze for a 5 REA Medium action. This does 2/5ths of your STR-10 damage (round *down* with a minimum of 0). For Damage Modification purposes assume a +2 Damage Modifier in a Grappling situation or use the amount you hit by to establish the Grab.

It isn't likely to hurt someone unless you're really strong.

Move: Mount
REA Cost: 5 REA
Damage: As per punch or Cross
Notes: Your target must be Grappled or Grabbed and you must have *control* to move to a Mount position
Defenses: You can block the strikes your opponent will rain down on you from the Mount position. To prevent yourself from getting into this state, only Grappling defenses apply.

Mount: A Hold doesn't do damage (in fact, it makes it hard to do damage!) so what if you want to wreck someone?

The mount position can vary from situation to situation—but it's akin to having the target on his back and you having a knee in his chest while you pummel him.

After achieving a Mount position, all negative grappling modifiers due to grappling moves go away for both fighters. He takes *prone position negatives* if he's on the ground and doesn't have a skill that gives him Ground Fighting (Jujitsu or Acrobatics). You suffer no negatives to hit and no damage modifiers against him. Because of his vulnerable position you get plusses to hit. These pluses to hit apply exactly as though your skill roll was higher!

If you're on the receiving end your options are blocking or making a Break Hold move. If a Break Hold is successful, your opponent's damage modifiers immediately go away and you are considered Grabbed (so you can start getting up with your next move).

If you have a Hold or a Lock you can move to a Mount with a Minor Success (treat as a Success)

Example Mount: A big wrestler who does 4 points Base Damage with a punch and hits on a 12- takes a Kung-Fu fighter down. The Kung-Fu fighter has a low Grapple score but a 16- Block roll (on the ground that drops to a 14- because he doesn't have Ground Fighting)—the wrestler wants to pound the Kung-Fu expert but is having a hard time getting past the block.

He tries for a Mount and gets a Major Success! Now his fairly poor 12- roll goes to a spectacular 15- . . . even odds with the block.

Since the Kung-Fu fighter doesn't have Ground Fighting skill, he takes a –2 to-hit modifier to strike back! The wrestler can now rain blows on the Kung-Fu master—but a Break Hold move will allow him to free himself!

MOUNT EFFECTS

Failed Roll	Minor Success	Success	Major Success	Critical Success
No Effect	No Effect	Mount +2 to-hit	Mount +3 to-hit	Mount +4 to-hit

Move: Pin
REA Cost: 5 REA
Damage: None
Notes: Your target must have been in a –8 DM Hold for you to Pin.
Defenses: None.

Pin: A character on his back, on the Ground, in a –8 DM hold (total of -10 Damage Modifier) can still strike back. A character in a Pin *can't*.

Even if you fire electrical bolts out of your eyes, even if your tiniest scratch is laced with Shellfish toxin, no matter what, in a Pin you *can't* attack. In fact, all you can do is hope for a Critical Success with a Break Hold move.

If you have someone Pinned you have a –6 DM to hurt them (-8 if you're both on the Ground). You can, however, *exchange* the Pin for a Mount or Lock at Critical Success level.

PIN EFFECTS

Failed Roll	Minor Success	Success	Major Success	Critical Success
No Effect	No Effect	Pin	Pin	Pin

Move: Arm-Bar
REA Cost: 5 REA
Damage: Varies
Notes: You must have Jujitsu (Level 2+) or Tai-Chi (Level 3+) to do this
Defenses: None. A Break-Hold maneuver will break an Arm-Bar.

Arm-Bar: These rules replace those for the basic Arm-Bar that all Jujitsu and Tai Chi practitioners get. It is designed to be more balanced (and a little more complicated).

If you and your opponent are grappling (and no one has a Hold, a Pin, or a Lock), a Success will reduce the Grapple to a Grab for the both of you (the –4 Grapple Damage Modifier goes away and is *replaced* by the Arm-Bar modifier for him and *no* modifier for you). If you or your opponent has a Lock or Hold then that damage modifier is applied against your opponent (or you) for purposes of *striking* but not against the Arm-Bar.

In order to apply an Arm-Bar you must do one of the following:

- Grab the arm (then, for 5 REA you can attempt the Bar).
- Grapple your opponent (after a Grapple has been established you can, for 5 REA, attempt the Bar).
- If you have a Hold, Lock, or Pin on your opponent, you may (for 5 REA) attempt a Bar normally but . . .
- If *you* are in a Hold or Lock, you may still attempt a Bar but your degree of success is shifted one column to the left (so a Major Success is a Success).

While holding someone in an Arm-Bar, you are at –4 to block them (both of your arms are involved in breaking their limb) but they are at –4 to hit you, in addition to the listed negative Damage Modifiers. As stated above, for *you*, it's like you have them in a Grab (they get no AGI bonus and you have no negative Damage Modifier to hit them).

Immediately when the Arm-Bar attempt succeeds, and for a 5 REA Medium action thereafter, you may apply pressure. This has the following effect:

- Do the listed damage as either a fraction of your *Offensive* Grapple or the Minimum listed—whichever is *higher*.
- The damage is Impact damage and the Damage Modifier is the *reverse* of the listed damage Negative (Ex. A Major Success with an Arm-Bar does 6 Base Damage and gets a +4 Damage Modifier on the Impact damage chart).

Arm Bar Example: Shubei-Sensei (a Level 4 Jujitsu Master with 16 / 14 Offensive / Defensive Grapple Scores) has a massive street fighter in an Arm-Bar. Both are in the standing position.

He rolls for success and gets a Major Success. The effects are as follows:

- Neither has any AGI Bonus against the other.
- The street fighter rolls at –4 to hit Shubei and Shubei blocks at –4 against the street fighter.
- The street fighter's blows have a –4 Damage Modifier if they do connect.
- Shubei can "crank the Arm-Bar" for 5 REA (twice per turn) for 6 points of damage with a +4 Damage Modifier.

ARM-BAR EFFECTS

Failed Roll	Minor Success	Success	Major Success	Critical Success
Failure	Failure	[1/4th Grapple]	[1/3 Grapple]	[1/2 Grapple]
Damage Mod:	No Damage	+/- 2 DM	+/- 4 DM	+/- 6 DM
Minimum Dmg:	None	Min 4	Min: 6	Min: 8

Move: Throw
REA Cost: 5 REA
Damage: Varies
Notes: You must have Jujitsu (Level 2+) or Tai-Chi (Level 3+) to do this
Defenses: None.

Throw: These rules modify the listed Throw move. Essentially a Throw is an easier form of the Slam that does less damage.

You cannot Throw when you are Held or Pinned (and you both must be standing) but a Throw attempt which gets a Success or better will break a Grapple but be treated as one column less effective (so a Critical Success is treated as a Major Success).

A character who is Thrown suffers the following effects:

- He is *prone*.
- He is Grabbed (and the thrower is Grabbed).
- He suffers the listed damage + [Thrower's STR-10] at the listed Damage Modifier.

THROW EFFECTS

Failed Roll	Minor Success	Success	Major Success	Critical Success
No Damage	Target's Mass +1 DM +2	Target's Mass +2 DM +4	Target's Mass +4 DM +6	Target's Mass +6 DM +8

Grappling Defenses

There are two Grappling Defenses: Resist and Break Hold. The Resist move is a desperate attempt to keep someone from putting you in a Hold, Lock, Pin, or Arm-Bar. The Break Hold is an all purpose attempt to break out of one.

Move: Resist
REA Cost: 5 REA Short Action
Damage: None
Notes: You may Resist when someone attempts a Lock, Pin, Hold, or Arm-Bar.
Defenses: None.

Resist: When you Resist you substitute your *Offensive Grapple* for your *Defensive* Grapple score (or your Defensive Grapple score +2 if that's better).

This applies only against one move.

Move: Break Hold
REA Cost: 5 REA Medium
Damage: None
Notes: None.
Defenses: None.

Break Hold: A Break-Hold move is an attempt to throw an opponent off by force or finesse. The degree of success determines what positions it will break out of. A Success from in a Hold will leave the character with a Grapple.

BREAK HOLD Effects

Failed Roll	Minor Success	Success	Major Success	Critical Success
No Effect	Break Grab, Grapple, Lock, Mount, or Arm-Bar	Break Hold (Grapple)	Break Hold (completely)	Break Pin

Advanced Armor

The real change in the advanced rules over the basic rules is the concept of the *armor save*. In the basic rules, if a weapon's penetrating damage is lower than the armor's penetration resistance the weapon does impact damage. If it's damage is higher than the armor's penetration resistance, it does penetration damage.

This is great for people in plate mail (12 Penetration Resistance) but screws people in light leather (4 Penetration Resistance). The solution is, if you're wearing armor and get hit, you make a roll called an "armor save" to see if your armor held up.

This is a resistance roll: Take the weapons Penetration Damage and subtract the armor's Penetration Resistance. Subtract the result from 10 and this is your Armor Save roll.

> Ex1: Leyland is wearing light leather armor (2 / 4 Damage Reduction / Pen. Resistance) when he's hit by a broadsword with a base damage of 6 (the guy holding it has a 10 STR and BLD).
>
> The armor has a 4 Penetration Defense and the Base Damage of the attack is 6—that means the Armor Save is an 8 or less ([6 – 4] – 10). Leyland's player rolls a 7 and the armor saves: the damage is done as impact damage.
>
> Leyland exhales in relief.
>
> Ex2: A Tank has 1500 points of armor with a 3000 Penetration Defense. It is hit by an Anti-Tank rocket that does 2000 damage with a 2500 Penetration value (shaped charge!). The GM rules to break the damage up into 100 point increments. The armor save is as follows:
>
> [3000 – 2500] / 100 = 5. The armor has a 15- Armor Save against the shell. If the roll is failed, the GM rules the tanks outer shell will be ruptured and the crew inside will be killed. If the save is made, the tank will still probably take damage—but it won't be an "instant kill."
>
> Ex3: A knight in pate mail (6/12 armor) is struck by a great sword with a Penetration damage value of 14. The armor save is an 8-.
>
> Ex4: A man has special Armor Piercing bullets for his 6 Penetration Damage 9mm gun. The bullets only do 6 damage (having a Penetration value of 6) but because they are specially enhanced, their Penetration Value is 12.
>
> His target is wearing a 4 / 14 bulletproof vest. The normal bullet would give the vest an 18- Armor Save (6 damage vs. 14 Resistance) but the special bullets give it only a 12-.

Armor Penetration Rolls for Really High Damage and Armor Values:

If your space battlecruiser gets hit by an atomic powered laser beam, you'll be using numbers like 12000 Penetration Defense vs. 14000 Penetration Damage.

In cases like these, to make the roll make sense, the GM should apply a dividing factor (in the case above treat it like 12 vs. 14).

That's pretty simple. It isn't always that easy.

If two Super Heroes are battling and one has 50 points of Penetration Defense against 60 points of Penetration Damage is it treated like 5 vs. 6 or 10 vs. 12 (dividing by 5).

The answer is that it's up to the GM. Dividing both numbers by 5 makes smaller advantages more of an edge. It gives the character with a 55 Damage a little more of a bonus than the character only doing 50 (even above the bonus for 5 extra points of damage!).

In general, we suggest you use the *largest* number you can easy divide by. This helps insure a level playing field for all characters.

How about 17 Damage vs. 50 Penetration Defense? Treat it as 2 vs. 5 to get numbers that still make sense on a dice roll.

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Make a Chart

Computing the difference between base damage and your armor can be a pain during combat—so do it ahead of time (your armor probably doesn't change all that often). Do it like this:

Ex1: Evans the knight wears chain mail with 5 / 10 defense. This means that against an attack with a base damage of 10 he has a 50% chance of making an armor save (10- chance). He writes the following down on his character sheet:

The player writes down the amount of damage against which he has a particular armor save. In this case, he can check the chart at any time during play to see that a wizard's bolt which does 16 points of penetrating damage (ouch!) gives him a 6- save.

We highly recommend making charts for *anything* you regularly roll on the resistance table. That means your grapple scores too.

Amount of Damage	Armor Resistance Roll
2	20-
3	19-
4	17-
5	15-
6	14-
7	13-
8	12-
9	11-
10	10-
11	9-
12	8-
13	7-
14	6-
15	5-
16	4-
17	1-
18	0-

Other Armor Statistics

There are some new statistics for armor as well (mainly medieval armor). These are the *stealth modifier* and the *strength requirement*. The govern what type of armor characters will want (or be able) to wear.

Armor	Defense	STR	Stealth
Light Leather	2 / 4	9	-0
Heavy Leather	3 / 6	10	-1
Chain Mail	3 / 10	12	-4
Padded Chain	5 / 10	12	-4
Plate Mail	6 / 12	13	-6
Fine Plate	6 / 14	13	-6
Heavy Plate	7 / 14	15	-8

Stealth Modifier: Full mail makes a lot of noise—even things like chain mail and heavy boiled leather can make it hard to be quiet. If a piece of armor has a listed *stealth modifier,* that is the plus to a character's perception roll to hear someone in that armor. Since a stealth roll works directly against perception, heavy armor can often negate the efforts of someone trying to be quiet. That's why scouts and other characters who tend to go ahead of a group may wish to be lightly armored.

Strength Requirement: If you're wearing armor that's too heavy for you, you're easier to hit in combat. For each point a character is *below* the strength requirement of the armor he's wearing, he's at +1 to be hit in combat. If the armor's Strength Requirement is *higher* than the character's AGI bonus then the character is actually at *pluses* for an attacker to hit.

Partial Armor (Advanced)

Not all armor covers the entire body and a character may have different armor factors on different parts of the body. In this case, armor is assigned a *Coverage* number and either covers a *Vital* or *Non-Vital* area.

Vital Coverage: When a character with partial armor is hit, if the amount the attacker hits by is less than the defender's Vital Coverage number, the attack is resolved normally.

When the amount the attacker hits by is more than the vital coverage number, the attacker has a choice: he may attack normally, using the amount hit by, or he may reduce the amount he hit by by the Coverage Number of the armor and thereby completely ignore the armor.

Ex1: Lorad the barbarian wears nothing but a breastplate (vital Coverage number 4) and a loincloth (no armor). He is struck by a Legionnaire who hits him by 5. The Legionnaire decides to strike "around" the breastplate. The amount he hit by is reduced to 1 but the blow strikes Lorad as though he was unarmored. It should be noted that where the blow would have "fully penetrated" (see the penetration section) striking vital organs, it now will not get the full-penetration damage bonus and the blow is likely to be far less damaging. Lorad is cut on the arm.

Non-Vital Coverage: In the case of armor with coverage that is *Non-Vital,* the *Coverage* number must be 3 or less. In these cases any shot which hits by 4 or more (the amount needed to strike vital organs) will completely ignore the armor. This armor type is reserved for things like gauntlets and bracers and boots (areas where hits are rarely aimed). Non-Vital partial armor is either used on a hit by 0-3 or completely ignored.

If a character has more than one type of partial armor, the bonuses for Vital coverage will stack with the largest number being taken into account first. If a character has a breastplate (4) and a helmet (2) then he has a coverage of 6. If he is hit by 1 - 4 the blow will be against the breastplate. If he is hit by 5-6 then the blow will be against the helmet or breastplate (attacker's choice). If he is hit by 7+ then the blow may be against either of them (attacker's choice) or none (at a -6 to the damage modifier).

A1: Total Vital Coverage. If a character wears armor so as to cover all truly vital areas (head, neck, torso, and groin) then only shots which hit by 3 or less (non-vital shots) will hit unarmored areas. If a character's coverage is 7+ then this is assumed to be the case (the attacker cannot hit by 12 and choose to strike "around" the armor and still score a fully penetrating hit). This is essentially being fully armored.

O1: Chinks. Any armor (natural or otherwise) is assumed to have weaknesses unless stated otherwise. Chinks are Coverage 4, Vital but instead of ignoring the armor, a strike which takes advantage of a chink merely halves the armor.

Usually aiming for a chink incurs a -4 to hit which does *not* apply against the to-hit modifier. Thus if an attacker with a 16- skill aims for a chink in an opponent's armor, he hits on a 12- but if he rolls a 12 he is assumed to hit by 4 rather than by 0 (he is not further penalized for going after a chink).

O2: Exposed Head. For cinematic reasons, many characters will wish to have their heads exposed (and often, nothing else). A way to simulate this is to assume that no attack will strike the head unless specifically directed there by the attacker (an advanced rule) and that at range the head has a -4 size modifier to be hit (if it is hit, though the damage modifier is an additional +6). In hand to hand combat, the head is at -1 to be hit and specifically called shots to the head are at +2 to be blocked. This gives characters in full plate mail, some leeway with exposed heads and leads to more movie-like roleplaying adventures. It also negates any perception roll negatives due to wearing a full helm . . .

Armor Coverage Table

Armor	Coverage Number	Notes
Breast Plate	4	Vital
Helm	2	Vital
Leggings and Arms	3	Non-Vital
Groin Cup	4	Vital
Gauntlets, boots, bracers	1 - 3	Non-Vital
Vest	4	Vital
Long Jacket	5	Vital

Shields

Shields are a handy thing to carry when you have to block a sword. They come in four sizes: small, medium, large, and huge. A huge shield is anything approximately man sized and costs an additional point of endurance each turn it is used in combat.

Shield Size	Negative To Be Hit	Combat Negative	STR MIN
Small Shield	-1	-0	9
Medium Shield	-2	-0	10
Large Shield	-3	-1	12
Huge Shield	-4	-2	13

Material	Armor	Sm.	Md.	Lg.	Hg.	STC
Wood	4 / 8	20	40	60	80	12-
Metal Reinforced	6 / 12	30	60	90	120	14-
Lexan (modern)	8 / 16	40	80	120	160	13-

Combat Negative: At the larger sizes, the character's attacks are inhibited by the size of the shield (the character must strike around it). The large and huge shields give a negative to strikes. This is applied to all attacks with a HTH weapon. No actions may be performed with the shield hand unless it is a small shield (then any action takes a –1 modifier).

Negative To Be Hit: The Negative To Be Hit can be used *instead* of the character's AGI modifier but *not* in addition to it (the character may choose). Any attack which would have hit the character but for the shield is applied to the shield. The full negative to be hit is applied to ranged attacks as well as HTH ones.

O1: Blocking Slow Missiles. A normal character can try to block a slow missile with a shield. The character rolls at -3 to his block skill (AGI - 7 for an untrained character). Thrown weapons are blocked at no negative.

Strength Minimum: Shields also have a STR min. For each point a character is below the STR Min., subtract one from the character's initiative roll (making the character go slower in combat).

O1: Deflecting Rolls Against Shields. Normally an attack which hits a shield is considered a miss--the GM can work out damage against the shield if wanted (usually to keep track of when the character must buy another shield) but generally the attack is a miss. In space, paranormal, or high powered fantasy campaigns, attacks may be launched which could go straight through a shield (also, for realism purposes, a close range shot with a metal tipped long bow arrow could go straight through). In this case the optional rule may be applied. It should be noted that these rules are generalized under the section on attacking inanimate objects.

The GM uses the following formula to determine if an attack penetrated a shield (it should be noted that even more realistic formulas could be used—most shields had a reinforced metal rim which would protect against swings but not thrusts or arrows—but these rules are not even listed as optional).

Shield's Penetration resistance x (Damage Points / 10)

If the attack is a bullet or arrow, divide damage points by 50.

This value is treated as the penetration resistance to completely penetrate the shield. A roll is made on the penetration table and if successful, the blow penetrates and the shield counts as normal armor against the attack.

Ex1: Sir Antar Stormberg, a knight, blocks a 20 Base Damage Penetrating "Death Ray" with his large metal shield. The GM decides to check for "blow-through." Antar's player gulps. The Resistance is 12 x (90 / 50) = 22 Penetration Resistance. It has an 11- Resistance roll.

O2: Failed Deflection. If the shield save is missed by 3 or more, the shield counts as half armor against attacks.

O3: Shield Degradation In Combat. Against a foe which may destroy a shield in a single hit or in a game where heavy record keeping is enjoyed by the participants, the GM may wish to keep track of shield degradation. In this case, each hit which does damage will require a Structure (STC) roll. The rules covering attacks on inanimate objects discuss how damage lowers the STC roll. The effects of failures are listed below.

Optional Shield Failure Chart

STC Roll Failed By	Effect
-1 to -3 (Minor Failure)	-1 STC
-4 to -9 (Major Failure)	Blow strikes target, shield's armor value adds to target's armor. STC-2
-10 or worse (Critical Failure)	Shield destroyed. One fourth of the shield's armor value is added to target's armor. Shield is gone.

Damage and Damage Effects

The basic combat section covers the effects of damage in sufficient detail. There are a few additions in the advanced game but most of the section remains the same.

Random Damage Modification Rolls

Sometimes attacks don't have a base accuracy (like falls) or an attacker is firing blind and can't attack vital targets (so a really good hit isn't necessarily better than a poor one—it's all luck).

In such situations the damage modifier is a random roll. To perform a random roll, the player or GM rolls the dice and the two which land further away from the player (or two dice of a different color can be used in every roll) are totaled. If they total an 11 or a 12, then they are rolled again and their sum minus 2 is added to that of the original roll. If, again, they total 11 or 12 the process is repeated.

If an attack does penetration damage (armor save is failed or the target wasn't armored) and the two furthermost dice total a 9 or more then the dice are rolled again and the sum minus 2 is doubled and added (if the attack fully penetrated) or simply added (if the attack did not fully penetrate.) After the first roll, the sum of the dice must total an 11 or 12 for them to be rolled again and added.

> Ex1: Justin falls from the ledge of a low building for a base damage of 16. The damage modification dice are a 2, 1, 5, and 6 with the last two landing furthest away from the player. The roll has a total of 10 but as the furthermost two dice have a total of 11, they are rolled again. This time they are a 4 and a 3 for a total of 7. The total, seven, minus 2 is added to the original roll for a final total of 15. On the impact damage chart that yields a +1 damage so Justin hits for 16 points of damage.
>
> Ex2: Mary fires into the darkness at an advancing werewolf. The bullet is electroplated in a silver alloy that is not removed by firing stress so it will strike for full damage. She is firing randomly and the GM assigns a 9- chance of hitting as she is firing into a doorway the werewolf will come through. She rolls a 3 hitting by 6. If she could see this would add 6 to the damage multiplier but she can't so the shot is a luck shot. She makes a damage modification and does not add 6--she doesn't add anything. The werewolf has no armor against the silver bullet so it automatically penetrates. The dice roll 5, 4, 4, and 5--a total of 14. Furthermore, the last two dice total a 9 so she rolls them again and subtracts 2 from the total. They roll a 5 and a 5. She adds 7 x 2 =14 to the roll. As the dice did not total an 11 or 12 and it was the second roll she stops rolling and simply sums the damage. The damage mod is a 14 + 14 = 28 for a total of 3x damage. The bullet is a .357 magnum and strikes for 13 points of damage so tripled it does 39 points! There is a fine spray of werewolf blood on the back wall and Mary backs towards the light behind her, scanning the darkness for movement and listening for wolf sounds.

Advanced Effects of Condition

The most important effect of cumulative damage is how it increases the effects of even minor wounds. However, wounds slow you down—and make certain actions harder. In the advanced game, your all-important CON roll drops too—making severe wounds that much worse!

This is the table that details the effects of condition:

Condition Effects Table

Condition	Con Roll	Movement	Roll Negative	Initiative Modifier
Normal	-0	-0	-0	-0
Hurt	-0	-1 yard	-0	-1
Injured	-1	-1/3 total	-1	-2
Serious	-2	-1/2 total	-2	-3

NOTE: The reduction on movement is applied to the character's *Sprinting* move and factored downward to all other speeds. If a character has a Sprinting move of 9 yards per second then his normal Walk is 3 yards and his Running move is 6 yards per second. If he is at Injured Condition, his Sprinting move becomes 6 yards per second and his Walk and Run moves become 2 and 4 yards per second respectively.

NOTE: The CON roll negative applies to all CON rolls *after* the condition is achieved. If a character having taken no previous damage suffers a Major Wound, he is automatically at Injured Condition. He does not suffer the -1 to his CON roll for the purposes of *that wound*. Any other wounds sustained until he has healed, however will be rolled against at -1.

Knock-Back Effects of Damage

In combat, especially super powered combat, it can be dramatic for a character to get smashed through a wall or knocked back across a floor. To simulate knock-back, use the following rules:

- For an attack to do knock-back the attacker must hit the target by 4+. When this happens (even if the attacker doesn't want it to happen) the blow is "sound enough" to have potential to do knock-back.
- Compute the total damage done by the attack and divide by 4x the target's Mass. This is the number of yards the target goes back.
- If the target strikes something, he takes (*yards of knock-back* x *Mass*) / 2 points of damage.
- For each yard he went back, he must make an AGI or Acrobatics roll at a cumulative –1 to remain standing (maximum of –6). Level 3 Acrobatics ignores 3 points of this modifier. Level 4 Acrobatics ignores all of it.
- The damage is modified by the same to-hit roll that the attacker got (so a hit by 6 which does knock-back effectively hits by 6).
- Knock-back which the GM determines causes one character to strike another is treated as a casual overrun for purposes of the target getting out of the way. Attempts to aim one character into another are at –2 to hit.

Attacks Against Non-Living Targets

Characters will often wish to attack things like doors, walls, animate statues, automobiles, etc. The rules for working out damage against such targets are covered here.

> NOTE: Almost no non-living target will take damage on the penetration damage table. Although objects may be penetrated by attacks, they will never suffer the ultra-high multipliers living things can. If a non-living target is hit, use the Impact Damage table.

Damage Points

Like living targets, all objects have a total of damage points. These are the points of damage a target can take before being destroyed. How damage points are handled varies from situation to situation (a single skyscraper has millions of damage points but any given window in it only has a few--the GM must make sure damage point calculations make sense for the situation). When an object loses all its damage points it is considered destroyed (it may not actually be disintegrated--the exact extent of the damage is up to the GM).

Structure Rolls

All objects have a Structure or STC rating. This is analogous to a living being's CON. When an object is hit, in addition to taking damage against its damage points, it must make an STC roll. This roll will determine if the object maintains integrity (a wall can collapse long before it is chopped into pieces or a machine can stop working and still be basically in one piece--both are examples of failed STC rolls).

> **Calculating STC Rolls**: An object's STC roll is the STC roll for its "healthy" state. As objects take more and more damage, they become more and more error. Objects lose 1 point of STC per [Full DP] / Healthy STC. Round up. The GM should keep track of this as objects degrade. This reduction is done *before* the STC roll is made.
>
> Damage equal to or less than this number won't cause a roll but will reduce STC. Once an object's STC is reduced by 2 in this fashion (small amounts of damage) it must make a roll whenever it takes damage.
>
> Ex1: An object with 60 Damage Points and an STC of 15- loses one STC point per 4 points of damage taken (60 / 15 = 4). It is hit for 20 points of damage and loses 5 STC points. It makes an STC roll of a 10-
>
> Ex2: Someone manages to do 3 points of damage to a vault (impressive anyway). The vault which has some 5000 DP and, perhaps, 200 points of armor doesn't need to make an STC roll as this is much less than its DP / STC.
>
> **Failure**: When an object fails an STC roll it fails in some way. If it fails by -1 to –4, it is considered to be a minor failure. If it fails by -5 to -9 it is considered a major failure and if it fails by 10+ it is considered a critical failure.

Animate Objects:

Animate objects are things like wizard's golems, robots, and other such characters. The effects if damage against animate objects are not listed here (the tables are in the Paranormal Abilities Book) but you should understand that simple objects (animate masses of clay or rock) suffer damage by losing REA (similar to being stunned or dazed) and having limbs blown off (it's much less severe when you can simply reattach the body part).

More complex characters (powered armor, robots) suffer the same way but may also lose function (weapon systems, sensory, etc.)

Finally it should be noted that Cyborgs will behave as objects, animate objects, or biological targets depending on what part of their anatomy was hit.

Characters with almost completely cybernetic bodies are treated as animate objects and behave as above with the Condition Level system.

Cyborgs with subtle alterations or those who are mainly biological are treated as normal characters when the fleshy parts are hit.

Large Machines

A more complicated method of handling inanimate objects like vehicles (which have some parts—like the engine—which are much more vital) is to have them suffer penetration damage—but only have it double if the attacker hits a vital part.

Alternatively the GM can break the object or machine up into separate pieces and recalculate each attack separately.

Minor Failure: Some secondary function of the object or machine will fail. Objects which the operator uses to make rolls may force the rolls at -1 per point the STC roll was missed by (the readout is now at -2 to be read). Objects will *crack* losing no real function but dropping an STC point in addition to whatever was lost. Ex: car headlights fail, computer screen cracks, gun sights become useless.

Major Failure: The object loses function. In the case of a wall, a human sized hole will be blown in it. In the case of a machine, it will begin to fail. The difference between this and a critical failure is that the object is still basically in one piece. Ex: a car begins decelerating or stops, guns become hopelessly jammed, tec.

Some very complicate machines may just be out of commission for awhile (power armor is treated as dazed). The GM must decide whether or not a give device falls into this category. A character with a Level 3 or 4 skill may be able to repair such a machine. Rolls in combat are usually not allowed except for Level 4 characters.

Critical Failure: The object is totally broken. It collapses/falls apart. All functionality stops. Ex: whatever it was, it's in pieces.

Ex1: A car has an STC of 8- and is considered to have about 800 DP. When a character rips into it with an AK-47, any individual shot has a chance of causing a major failure (roll of a 13+) but most shots will just go through it.

Effects of Damage

There are three basic effects of damage--the loss of damage points and STC, the loss of function, and penetration of the target.

Loss of Damage Points and STC: When an object is hit, deduct is armor (if any) from the damage done, and subtract the remainder from the target's damage points. Then reduce STC. To determine how much the target's STC goes down by, divide the target's total damage points (undamaged total) by its normal STC (full undamaged DP/total normal STC). Each time this amount of damage is taken, reduce the target's STC by 1.

Ex1: A target object has 64 damage points and a 16- STC roll. As 64 / 16 = 4, each time the target takes 4 points of damage the STC roll will drop by 1 until the damage is repaired. If the target is hit once for 23 points of damage its STC will be reduced by 5 to an 11-.

Loss of Function: A machine has major and minor functions. In a car a minor function could be the radio, the ability to steer well (the ability to steer at all is a major function), or the ability for an electric window to open. A major function would be the ability of the engine to run, the car to start, etc. When a machine takes damage it can lose a minor or major function (see minor and major failures in the next section).

Sample Objects

Here are some objects we've worked out for you.

***Melee Weapons*:**
Melee weapons, in general, have STC's of 14- and 10 DP per point of Base Damage.

***Firearms*:**
Average guns:

- Pistol: 20 DP, 11- STC
- SMG: 30 DP, 11- STC
- Rifle: 40 DP, 11- STC

NOTE: better made weapons usually get 1.5x DP and +2 STC. Simpler guns (revolvers, bolt action rifles, etc.) get a similar bonus.

Therefore, a Colt Python .357 (a very well made Match quality revolver) would have 60 DP and a 15- STC.

Guns and Melee weapons usually have 6 points of armor.

***Vehicles*:**
Cars usually have hundreds of DP but don't take that much to disable. A shot designed to disable a car (hitting the wheels or firing directly into the engine block) usually acts against a 90 DP, 15- STC target. If it suffers a Major or Critical Failure the car will usually stop.

Motorcycles usually have 60 DP, 15- STC targets that can disable them.

In either case, hitting a tire (-3 size modifier) will be considered a 20 DP, 10- STC target (that takes penetrating damage—it deflates). If it suffers a Major Failure the car starts decelerating. If it suffers a Critical Failure, make a driving roll at –3 or crash.

Penetration

Often the only thing the GM and players will care about is whether an attack went through an interposing object. In this case the below rules apply.

Inanimate objects have a penetration resistance of:

[DP / 50] x Material's Penetration resistance

NOTE: If the DP is less than 50, assume that DP / 50 can never be less than 1.

When the GM is trying to determine what happens to someone behind an object, have the object make an "armor save." Use the results below to determine what the effect is.

Successful Armor Save: The object takes all the damage—if any goes through, that is applied to the target on the other side.

Failed Save: If the armor save is failed by 4+ then the target on the other side takes the damage minus the basic defense divided by 2 or DP/5 + Armor - Damage, whichever is more.

Ex1: A killer is hiding behind a wooden interior door (defense 2/4, DP 8). Police Detective O'Hare fires his city-ordinance-violating .44 Magnum (base damage 15) at him. The GM rules that even though O'Hare isn't sure the guy is there, he can aim like he is (and if the guy isn't there, too bad). O'Hare hits by 8. If the killer was behind a sturdy wall, the GM would probably make O'Hare roll on the impact damage chart but as the door has significantly less than 50 DP, he just treats it like armor—if the save fails! The armor save is 5- and the GM rolls for the killer and rolls a 13 . . . total failure. The door acts like 2 (for basic defense) + 2 (for DP/5) = 4 points of armor but with doubling of his to-hit modifier O'Hare does 30 points of damage. The killer takes 26 and O'Hare watches the door bleed.

Material Chart

Material	Armor	DP per Inch	STC
Hardened Metal	8 / 16 or more	200 or more	18-
Metal	6 / 12	150	14-
Light Metal	5 / 10	120	14-
Concrete	4 / 8	90	14-
Cinderblock	4 / 8	60	12-
Stone	5 / 10	70	13-
Brick	3 / 6	40	12-
Heavy Wood (front door)	2 / 4	30	14-
Light Wood (interior door)	2 / 4	20	12-
Heavy Glass	1 / 2	20	8-
Light interior wall	1 / 2	5	12-

Advanced Weaponry Rules

There are three sections under "Advanced" weaponry. The first (and simplest) concerns how bows are "constructed." The second deals with tangle attacks—nets, bolas, whips, and the like. The third, and most complicated section, deals with fully automatic fire (machinegun fire.)

Bow Construction

The stronger you are the "heavier" a bow you can carry. In this case, the "weight" of a bow refers to how many pounds it takes to pull it. A strong character with a weak bow won't do any more damage than a weak character with the bow—but the strong guy has the option to get a heavier one.

A bow has a *pull*, which is the STR a character needs to draw the string as a normal action for his skill level. For each point of STR a character is *weaker* than the bow he's using, drawing the string takes +1 REA. Note that higher skill level characters gain extra STR for purposes of drawing bows. If a bow has a pull more than 2 points higher than his STR, he may not draw it.

Bows are divided into two classes: crossbows and bows (regular long bow type weapons). Crossbows mainly use firearm rules for rifles (with the exception of load times) but bows use different types of rules.

The bow types are further divided into Ancient Crossbows (which were wooden, and used pulleys to cock), Modern crossbows (which cock with a lever action), bows (which is the basic bow type), recurve bows (which are an improvement over the basic bow type), composite bows (in which two types of materials are used to make the bow easier to draw), and compound bows (with modern pulleys, stabilizers, etc.)

Reload: Bows take longer to fire than guns. The arrow must be taken from the quiver, drawn in the string, and then fired. Firing is a 5 REA medium shooting action and takes all listed modifiers. The time necessary to take the arrow and draw the string depends on the experience of the character (skill level).

For crossbows, the firing time depends on whether the character is strong enough to pull it back quickly. Very powerful crossbows often had cranks attached or foot braces to allow the user to pull a very tight cord. If a crank is used (it means the Pull of the bow is well below the STR of the user) then the time is 1 medium action per 3 damage.

Goat's Feet:

Medieval crossbows are commonly too hard for the average person to draw—that's why they come with metal hooks for the feet.

A character bends down and places his shoe through the metal loop and then draws the string with his whole body.

Using a "Goat's Foot" is an 8 REA long action and increases the user's STR by +2 for purposes of drawing the bow.

After the bow is drawn, it is another 8 REA long action to disengage from the foot and bring the weapon to bear.

While using the Goat's Foot the character gets no AGI bonus against being hit. If he dodges or blocks he loses all drawing he'd done previously unless the bow is also outfitted with a wench and crank.

Bow Loading Chart

Bow String	Skill Level	Get Arrow	Draw
Crossbow (ancient)	L1	5 REA	[(Pull - STR) + 1] 5 REA (min 1)
	L2	5 REA	[(Pull - STR) + 1] 5 REA (min 1)
	L3	0 REA	[(Pull - STR) + 1] 5 REA (min 1)
	L4	0 REA	[(Pull - STR) + 1] 3 REA (min 1)
Crossbow Modern	L1	5 REA	one 5 REA medium action
	L2	5 REA	one 5 REA medium action
	L3	0 REA	one 3 REA medium action
	L4	0 REA	no REA once per turn, 3 REA medium after
Long Bow	L1	5 REA	5 REA medium
	L2	5 REA	5 REA medium
	L3	0 REA	5 REA medium
	L4	0 REA	[(Pull - STR) + 1] 3 REA medium actions

Ready: Bows have a Readying time—just like firearms. Usually it's a long action with the possible exception of very small (modern) crossbows that might function like a pistol.

Pull: The damage a bow does is based on the tension on the string. Bows can come in different "pulls" or "Strengths." The damage a given bow does is its Base Damage plus Pull bonus. If a bow has a base damage of 8 +1 damage for 3 pull then that type of bow with a STR min of 13 would do 9 damage.

Bow Damage Table

Bow Type	Base Damage (Pull of 10)	+1 per Pull
Crossbow (ancient)	9	+1 per 2 Pull
Crossbow (modern)	11	+2 per 1 Pull
Bow (primitive long bow)	6	+1 per 2 Pull
Recurve Bow (normal medieval)	7	+1 per 1 Pull
Compound Bow (modern bow)	10	+2 per 1 Pull

Ex1: A STR 13 character wants a recurve bow to match his STR. The pull is 13 so the damage is 7 + 3 = 10 damage per arrow. If he wants a bow heavier than that, he can go up to a 15 pull for 12 damage—but it takes him longer to draw the string in combat.

Automatic Weapon Rules (Advanced Shooting)

Most modern weapons are capable of semi-automatic fire (that is, a single bullet is fired and another is re-chambered when the trigger is pulled). Some are capable of fully automatic fire (they fire a continuous stream of rounds so long as the trigger is depressed).

When a target is hit with a burst of automatic fire, it is treated as a single hit by a larger bullet. This means that the player, although his attack hit with several rounds, will only have to make one penetration and damage roll.

DN1: Auto-fire and grouping fire (as seen in shotguns, shrapnel from grenades, and automatic weapons) can get very complicated. A MAC11 fires 16 rounds a second and if each roll were made the player could be faced with 1 roll to hit, 16 rolls to penetrate, 16 damage rolls and 16 CON rolls on the part of the player. This would make games where all the characters have automatic weapons (any military or special operatives game) crawl.

If a character is using a fully automatic weapon, the following rules apply.

Double-Tapping: Double tapping is the term for taking two shots with a pistol. This is covered under the normal Rate Of Fire rules and is only listed here for completeness.

Control Roll: A control is made against the character's weapon skill to keep an automatic weapon on target while firing. This roll is [the character's skill roll – Recoil]. Even very controllable weapons (like the US Army's M16) can be inaccurate when fired in full automatic mode.

The general method for resolving auto-fire attacks is for the player to make a normal to-hit roll with the weapon and then to make a control roll modified by circumstances (like the number of bullets fired, whether the character is trying to sweep an area or group the shots, etc.) If the roll is failed, many of the bullets will miss their target.

Level 3 and 4 Firearms skill can use their ability to "ignore" modifiers to ignore Control Roll negatives if they have not already been used to negate to-hit modifiers.

Automatic Fire Maneuvers

A character in control of an automatic weapon can try to do several things. He may choose to fire a short burst of fire (which slightly improves his chances of hitting and may strike the target with more than one round). He may fire a tightly controlled salvo of rounds to insure that a single target is hit as often as possible. He may sweep an area to hit multiple targets. He may simply fire into an area to "suppress" it, possibly hitting anyone within it and making movement into or through that area very hazardous.

Weapon Charts

The combat tables in the back of the book contain all kinds of handy firearm statistics. Check them out so your character can use exactly the right mix for the right job.

Of course that's usually a Shotgun, an Uzi, and a .45 Automatic with a laser scope.

Hey, These are Complicated

The full force of the Autofire rules are pretty Byzantine, but you don't need to play with all of them at once.

Unless you're running a Special Forces game, you can safely ignore most of these until it becomes imperative.

Beam Weapons

The Space Book will cover beam weapons in greater detail—but the Autofire rules work pretty well for something that fires a constant beam of energy. Just treat the weapon like it had a ROF of 16 and let the character "sweep areas" with the laser.

The GM should determine which of these the character is doing and apply the below rules.

Automatic Weapons Fire Maneuvers List

Maneuver	Notes
Grouping Fire	Many rounds are used to hit one target.
Three Round Burst	Small, controlled volley of rounds at one or more targets.
Sweeping Fire	Fire is spread across an arc at multiple targets.
Grazing Fire	Suppression fire directed at an area.

Generic Autofire Rules

Auto-fire Bonus: The auto-fire bonus is a plus to hit based on the number of bullets fired. It does *not* add to the damage modifier—it merely increases the chance of a round striking, not the accuracy of the shot. Any autofire attack (3 or more rounds) has, at least, a +1 bonus.

Ex1: Sally fires a burst of automatic fire at an approaching cycle gang member. She gets a +1 Auto-fire bonus bringing her 17- weapons skill up to an effective 18-. There is no negative or positive modifier in this situation. She rolls a 10. The shot is treated as though it hit by 7 instead of 8 but if she'd rolled an 18- it would have counted as a hit by 0 instead of a miss.

Control Roll Modifiers: Unless otherwise specified, the Control roll is the character's skill roll minus *Recoil* for every shot fired. For weapons with a listed Recoil of 0, the negative is -1 for every two shots fired. The action type declared determines the effects of a made or missed recoil roll.

Ex1: An AK-47 has Recoil of -1 and fires 8 rounds a second. A control roll for the weapon fired at maximum rate would be at -8. An M16 has a Recoil of 0 and fires 8 rounds a second. It's Recoil modifier would be a -4.

Aim and Auto-fire: An aimed shot is more controllable. A short action will give +1 to the control roll. A medium action will give +2 to the control roll and a long action taken to brace the weapon will give +4 to the control roll (and +3 to hit with the shot!). Only Grouping Fire or 3-Round Bursts can be "aimed."

Novice Gunmen: A novice using the gun will, very probably hit a lot of times with little effect. If the novice aims, however, the amount hit by will still be added to the damage modification roll.

O1: Smart Bullets. The name for this rule comes from the concept that even a random or poorly fired bullet can inflict vital wounds and is not relegated to "partial penetration." Overuse of this rule will make it easy for unskilled characters to kill people with guns. This isn't good for game balance but it's sadly realistic.

The smart bullet rule assumes that no bullet which finds a human in its path will hit with a skill lower than 9-. That is, if a character with no skill at all and a lot of minuses, actually rolls a hit (say, his chances were 1 or less and he rolls a 0) damage will be calculated as though he had a 9- chance to hit (he'd hit by 9). This makes stray bullets much more dangerous.

This can be further applied to randomly flying bullets (they get a -9 chance to hit minus any speed/size/AGI modifiers). This tends encourage characters with low chances to hit to try to fire "randomly." Remember: A random bullet is not one fired with the intent of hitting a specific target (you can't "randomly" fire at someone--maybe you can open a door and randomly fire into a room without looking--use the rules for sweeping areas with fire). The GM should be careful if using this rule.

Grouping Fire

Grouping fire is the term used for a situation where many rounds strike the target at once. It is treated as a hit by a single, larger round. In the case of auto-fire (as opposed to shrapnel from grenades or pellets from a shotgun blast) the formula is as follows:

(1x damage) + 1/3 damage per bullet after the first

This means that if a 9mm UZI does 6 points of damage per shot and hits with 4 rounds it is treated as one shot that does 6 + 2 + 2 + 2 = 12 points of damage. If all 8 rounds that it fires hits the target it is treated as a shot that does 6 + (2 x 7) = 20 points of damage.

When a character declares a Grouping attack (or declares a full automatic fire attempt against a single target—which is the same thing) the effects are worked out in this order:

- Determine the character's Auto-fire Bonus (if any) for using a large number of rounds to hit one target.
- The character rolls to hit.
- The character makes a Control Roll and checks the Grouping Chart to see how many shots hit his target.
- The total damage for the attack is figured using the above formula.
- One roll for armor save is made—the following section includes some optional rules for "more realistic" penetration.
- One roll for damage is made and it is applied normally.

Auto-fire Bonus For Grouping: Any character using grouping fire with 3 or more shots gets a +1 Auto-fire Bonus. A gunman may wish to spread his burst out a little to have a better chance of hitting the target, though. In this case, the number of shots the attacker "wastes" give the auto-fire bonus for the attack.

Grouping Chart Wasted Rounds	Auto-fire Bonus
4	+1
8	+2
16	+3
32	+5
64	+6

Use the chart and add the Auto-fire bonus to the automatic +1 if any shots are "spread" to hit the attacker. If the attacker is inexperienced, the GM may rule that he wastes ¼ of his shots, receiving the bonus but attacking less effectively (this rule should be in effect for Level 1 and 0. A roll may be optionally required at Level 2 to squeeze off a consistent, on-target burst).

If an entire firing action is "wasted" on one turn, and the character's next firing action is spent trying to hit the same target, bonuses of up to +4 can be achieved by carrying over the number of rounds fired. If a character does decide to waste an entire round's worth of fire, a Firearms skill roll must still be made to get the plus. Range modifiers (but not size or speed) are taken into account.

Ex1: Mike's character is trying to hit the paranormally fast "Arachnid Dude" with an M16. The weapon has an ROF of 8 and the "Dude" is at -6 to be hit by ranged attacks due to his speed and agility. Swearing, Mike's character tracks Arachnid Dude with the deadly salvo: he declares a full turn of fire to try to get a bearing on his target (8 rounds wasted). Mike's character (14- skill) is raised to +2 for wasting the ammo and gets a native +1 for firing on auto-fire.

Mike's character makes his unmodified Firearms skill roll (there's no negative for range—Arachnid Dude is close), and the next turn begins with Mike's guy having a +3 for a 17- (of course if he hits by 3 or less, the hit will count as by 0 but the character wants to tag the Dude with a bullet and doesn't care much about accuracy).

At this point Mike's character may do one of two things: waste another round of fire (having wasted a total of 8 shots) and get another +1 or try to peg the Dude at 11-. He goes for it and rolls a 13—Miss!

On the other hand, he could have taken a medium action to *aim* with the weapon, boosting his natural skill to 16- (19- with the +3 auto-fire bonus) and that would have been a hit—albeit a bad one.)

Control Roll for Grouping: The Control roll determines how many bullets hit the target. The roll is at **[-Recoil]** per bullet fired (and -1 per 2 bullets fired if the Recoil of the weapon is 0).

Control Roll For Grouping

Control Roll	Bullets Hit
10+	All
+9 to +5	¾
+0 to +4	½
-1 to -4	¼
-5 to -9	2 shots
-10	1 shot

Modifiers To Grouping Control Rolls: The GM ultimately determines what governs a grouping roll but these are some of the factors.

Range: At long range auto-fire is gravely inaccurate. For any weapon firing on automatic, halve the Range of the weapon and apply that "range modifier" against the control roll. So, if a SMG has a range of 15 yards, and the target is 25 yards away, a modifier of -2 is applied to the control roll as the Range is halved to 8 yards (-1 per 8 yards distance to the target after the first 8"). It should be noted that this is not subtracted from the chance to hit, merely from the control roll.

Enhanced Dodge: The paranormal ability Enhanced Dodge subtracts its modifier directly from the control roll, the explanation being that it is harder to keep bullets tracking on such a mobile target.

Mounted Weapons: Mounted weapons either on a bipod, tripod, or vehicular pintel mount make auto-fire much easier. The chart below shows how control rolls are improved.

Mount Chart

Mount Type	Control Modifier
Bipod	+1 to Control roll
Tripod	Control / 2
Pintel	Control / 3

NOTE: For some weapons with incredible rates of fire, heavy pintels are available which give a control roll of 8- no matter how many rounds are wasted.

Strength: Very strong characters are better at keeping weapons on target and weak characters are worse. For each point a character is below a listed Strength Min for a weapon, the Control roll is at an additional -1 per 4 rounds fired. If a character has double the STR necessary to control a weapon or more (usually STR 14 and above) then halve the negative to the control roll.

Ex1: A character is carrying a minigun (min STR of 7) that fires 32 rounds of 9mm (Recoil 0) ammo per second. He blazes away into a jungle at a patch of darkness where he thinks an enemy is hiding. He has a 14 STR. The Control roll modifier is -16 but because of his STR it's only -8.

O1: Stabilizers. Some weapons are made with recoil suppressers, gyroscopes, etc. Weapons can have inherently lower control negatives than their stats suggest. One simple method is to give a weapon a heavier barrel. The GM is the final arbiter of what is allowable.

Ex1: Joe Hamilton, US Marine, fires a burst of fully automatic M16 fire at a "fish-like-humanoid" crawling over the wall of the aircraft carrier he is stationed on. The M16 does 18 points of damage, has an ROF of 8, a Recoil of 0 (-1 for every 2 shots)

and is being used by a skill of 14-. The aquatic-appearing being has 6/12 armor.

Joe isn't "wasting" any ammunition in order to hit better, but he is trained and he does take a 5 REA medium action to aim. This raises his to-hit chance to a 16-. He rolls a 9, hitting by 7. Now he must make a control roll. The roll is Skill - 4 (for recoil) + 2 (for aiming) = 12-. He again rolls a 9, making it by 3.

On the chart above it seems that 4 of the bullets he fired have struck the target. The damage is 18 + 6 + 6 + 6 =32 points. The roll for penetration would normally be 15- but because of the burst nature of the rounds, the damage is handled differently.

The fish-thing has 12 Penetration Resistance. The penetration value of the burst (using the standard rules) is equal to that of one round (18 points). The damage is 1:5 : 1 so the fishman has a 6- Armor Save. Joe hit by 7 and penetrated. The thing takes 2.5x damage: 80 points. It goes down in a spray of blood.

Creeping closer Joe sees something glimmer along its back. "Hey! These things have zippers!" he exclaims before cold wet hands grab him from behind.

Armor Modification (Optional): The easiest (and recommended) way to treat an auto-fire attack is as a single bullet with a penetration factor equal to one of the original bullets. Therefore, a burst of fire from an Uzi—6 damage—will have a penetration value of 6 no matter how many bullets hit.

The problem with this method is that, although it's simple, it doesn't accurately reflect the effect of many small bullets against hard armor. No matter how many 9mm shells you fire, if they all have standard muzzle velocities they aren't going to penetrate a vault door.

Additionally, players who miss an armor save on a really bad roll will feel cheated as they would have made their roll against most if not all of a volley of multiple shells. These rules slow play and add to the complexity of computing automatic fire attacks but they can be used if more realism is desired.

Penetration: The armor save is made against 1.5x the damage of a single bullet if 4 or more rounds hit. Otherwise it is made against the standard damage.

Armor Multiplication: If armor is strong enough to almost absolutely ignore a single hit, chances are it is strong enough to ignore even a concentrated burst. Use the chart below to determine how armor should be multiplied against an auto-fire burst:

Armor Multiplication

Armor is:	Armor multiplication
Less than bullet / 2	x1
Between bullet / 2 and 2x	x2
Greater than bullet x2	x4

Ex1: A character wearing an 8/ 16 body vest is hit 6x by an UZI (damage 6). The hit counts as 6 + (2 x 5) = 16 points of penetrating damage. Normally this would penetrate on a 13- but as the shots come in a group, the penetration factor is treated as 9. Further more, as the armor is greater than base damage / 2 (3) but less than base damage x2 (12) the armor's impact value is effectively doubled to 16.

The attacker rolls a 9 for penetration and fails to penetrate. He then rolls for damage modification and, adding his to-hit bonus, gets an 18: +3 damage. The total damage done is 16 + 3 = 19 and the armor value is treated as 16. The target takes 3 points of impact damage from the burst.

3-Round Burst

The weapon emits a short burst of 3 bullets. Some weapons (like the US M16A2 rifle) come with a selector switch which forces the weapon to fire in this mode. Otherwise, at Level 1 a character must make a weapons skill roll at -3x Recoil (minimum of -2 for weapons with 0 recoil) or fire a full burst using the grouping rules. A Level 2 or 3 character can do so on demand.

Auto-fire Bonus: A weapon firing a 3 round burst gets a +1 Auto-fire bonus. There is no control roll for the 3-Round burst but the attacker is assumed to hit with an additional round for every [2x (Recoil +1)] points the initial round hits by.

DN1: This is done for simplicity's sake, in an attempt to speed auto-fire combat as much as possible. Ideally, there would be a control roll, and perhaps a concept of 3-round grouping for accuracy (spreading the shots) vs. 3-round grouping for lethality (clustering them). These might later appear as advanced or optional rules.

If a weapon is capable of firing more than 3 rounds, a character may choose to engage more than one target with the stream of bullets. Engaging each additional target is a 3 REA firing action and requires 4 bullets. Each attack is treated as a 3 round burst with one bullet "wasted."

Ex1: Todd's mercenary descends through a broken skylight on a rope and lands with two terrorists to his right and one to the far left. He has a small 9mm H&K machine gun (12 rounds per second, -0 recoil). He has a 12 REA and Level 2 skill. He can fire 3 bursts (lucky there were only three targets!). He has a 14- weapons skill and the surprised terrorists are at no negative to be hit either for AGI, range, or size.

Talking The Gun:

There are two ways to hit multiple targets with the automatic fire rules. Using multiple 3 round bursts is the way to do it where you can aim at each target.

Using sweeping fire is the way to do it where you just hose down an area and hope for the best.

Number of Shots That Hit

Control	1 Round Hits For Each
0	2 pts. Roll was made by
-1	4 pts. Roll was made by
-2	6 pts. Roll was made by
-3	8 pts. Roll was made by

He rolls a 9, a 15, and an 11 for each of the terrorists. The recoil factor for the weapon is [2x (0+1)] = 2 so for every 2 full points he hits by (not counting the Auto-fire bonus of +1) he hits with another round. The first burst hit by 5 so he strikes with all 3 rounds—10 (6 + 2 + 2) points of damage. The second struck by 0—one round for 6 damage, and the third strikes by 3 for 8 (6 + 2) damage.

The entire burst of fire cost Todd's character 11 REA (5 for the first burst plus 6 for the other two).

Sweeping Fire

Grazing fire involves sweeping the gun (usually a machine gun) in an arc to cover an area. Often targets cannot be individually seen or there may be many targets charging the weapon and the attacker may be trying to hit all of them.

When this is done, the attacker declares a "fire line" at some distance perpendicular to the front of the gun. This line makes a triangle in which is the killing zone. Total number of rounds fired is compared to the length of the "fire line" and the chances of anyone within the zone are then determined.

The attacker makes a standard control which effects the chance of a hit as follows:

Sweeping Fire Chance To Hit

Control Roll	Chance To Hit
+10 or more	+2
+9 to +5	+1
+4 to -4	+0
-5 to -9	-1
-10 or worse	-2

The attacker then rolls once for each target within the killing zone to see if it is hit (the GM can declare that large objects get one roll per 10 SIZ to improve the chances of trees being hit). The chances of the person being hit depend, not on the skill of the firer, but on the number of bullets per yard.

The Auto-fire bonus does not add to the to-hit roll in these cases, but rather subtracts from negatives (small characters, high AGI targets, etc.)

Chance To Hit A Given Target In Zone

Ratio of Bullets to Yards	Chance To Hit	Auto-fire Bonus
2+ bullets : 1 yard	12-	+2
2 bullets : 1 yard	11-	+2
1 bullet : 1 yard	10-	+1
.75 bullets: 1 yard	9-	+1
.50 bullets: 1 yard	8-	+0
.25 bullets: 1 yard	7-	+0

NOTE: The attacker can declare the “fire line” to be as far as he wants but it should be from the left-most target to the right-most target if he wants to hit a crowd of people.

NOTE: As the rules say to roll once per person, it is conceivable that more targets could be hit than bullets fired. If this is the case, stop rolling after all the bullets have hit.

NOTE: These rules may be misused to allow a character with a low chance to hit to declare a “one inch” fire line. Generally the minimal fire line is 4 yards across.

O1: Tight Crowds. Tight crowds are those where there is one person or more per square yards. In this case, the GM should declare two or three rolls for the entire crowd (that is, the GM runs the process 3 times or until all the bullets have hit).

> Ex1: Private Joe Frisbie fires an M60 machine gun (8 rounds per second) across a 12 yard line of defense some 70 yards away. He is sweeping a much larger area but is confining the rate of swing to 12 yards a second. The GM secretly determines that there are 3 enemy troopers in the darkness within the killing zone (whether or not they are much closer than 70 yards is irrelevant).
>
> Frisbie has a weapons skill of 13- and the M60 has a recoil of 2 (but it’s mounted so it has a Recoil of 1/2). This means Joe’s at -4 to his control roll. He rolls an 11 and blows it by 1.
>
> No big deal: the weapon is kicking and bucking but the bullets all go in the intended arc. There is 1 bullet per 1.5 yards of line. This is in the .50 : 1 zone (actually .66) so his base chance to hit one of them is 8-.
>
> The GM could rule that if they were crawling, hiding behind hard cover, had a paranormal ability (Enhanced Dodge), or had some other special circumstances that they could be harder to hit. He doesn’t. He makes an 8- roll (approximately 25% chance) for each of them and one goes down.
>
> The gun now tracks away from them, covering other areas and the two remaining troops move forwards.

Beaten Zones (Suppression Fire): If a character with a (usually) belt fed weapon targets an area and drops rounds into it. If a character declares suppression fire on an area and holds it for the entire second (from his 5 REA action until the turn ends) anyone entering the area will suffer a 12- chance of being hit with and Auto-fire bonus of +1 per 4 rounds fired (max. of +4). The area will be 1 yard radius per 2 rounds.

The character must make a to-hit roll to hit the area. Misses will result in some other area being suppressed (the distance depending on how much was missed by). A control roll as above can increase the chance of a hit.

Shotguns

Shotguns and other cluster weapons work in a manner similar to automatic fire. When a character is shot at by a shotgun, a "cluster" roll is made to determine how many of the shots hit in a tight cluster. The more shots that land in a tight cluster, the more damage is treated as a single shot. The less shots which are "clustered," the greater the plus to hit the target (due to the spread of the bullets). Shotguns have a Base Range of 5 yards.

Cluster Roll: The cluster roll is a random roll that takes into account range and barrel length of the weapon. The longer the barrel length, the further out the bullets will stay together. The damage for a pellet blast is treated as 1 shot **of [Cluster x base damage]** and single hits by the remaining shots.

Cluster results are read as **[Grouped Shots] + [single hits] + [Spread Bonus]**. The grouped shots are the fraction of total shots treated as a single round for penetration and damage purposes. The **[Single Hits]** number is the fraction of total shots which hit.

Individual pellets (single hits) get *no* damage modifier bonus. They just strike for the base damage of the pellet.

Ex1: A character gets a Cluster roll result of ½ + ½ + 0 for his shotgun blast. The blast consists of 12 pellets, each which hits for 2 points of damage. The first number means that half of the blast hits as a single shot. The second means that the rest of the blast hits individually. The target takes one 12 point hit and six 2 point hits.

Spread Distance: Distance determines what ranges are considered Short, Medium, and Long for Cluster Roll purposes. The Distance for a shotgun is a function of barrel length but for high tech weapons it could be anything (even adjustable).

Distance is given in yards. One times Distance is short range, 3 times Distance is medium range, and greater than that is long range.

Barrel	Spread	Distance
Sawed Off		2 yards
Short Barrel (Spas)		4 yards
Long Barrel (rifle)		8 yards

Spread: Shotguns get a plus to hit as the pellets spread out. This plus acts as the "large weapon" bonus and does *not* add to damage modifiers—only for the purpose of scoring a hit.

Shotgun Clustering Table

Cluster Roll	Short	Medium	Long
0 - 7	1x + 0 **+0**	¾ + ¼ **+1**	½ + ¼ **+2**
8 - 13	¾ + ¼ **+0**	½ + ¼ **+2**	¼ + 1 **+3**
14 - 20	½ + ½ **+0**	¼ + 1 **+3**	1 + 1 **+3**

Ex1: Monique's character wakes up in the middle of the night and hears someone in the living room. She reaches for her trusty shotgun. Creeping out of the bedroom she sees two forms in the darkness. One has a brutal looking ceremonial dagger and is pointing at her room. The other is wearing a clown suit and has a chainsaw. She's seen enough—and then they see her.

Her shotgun is sawed off and fires standard double-ought loads for 2x12 damage (12 pellets for 2 damage each). It has a rate of fire of 2. She gets to go first.

The *distance* of the gun is 2 yards—one man is 2 yards away and the other is 3. She fires at the close one first. As it turns out, he's wearing 4 / 8 body armor!

Before rolling to hit, she makes a clustering roll—and gets a 12. On the chart, under the Short (short range) column, this is a ¾ + ¼ +0 result. This means that three-quarters of the pellets hit as a single shot and one-fourth of them hit individually. She gets no bonus to hit for spread.

She rolls to hit and hits by 4—enough to double (vital hit) if she penetrates. The guy in the clown suit makes an armor save. His armor's penetration resistance is 8 and the group of shots (containing 9 pellets for 18 points of damage) has a penetration value of 18. He has a 5- roll and he rolls a 7 . . . the armor fails to save and the to-hit modifier doubles to +8.

The damage modification roll is a 10. Ten plus 8 goes to 18—that's a +3 damage modifier. The three individual shots just bounce off doing 2 points of damage each (remember, they get no damage modifier). The 18 point cluster goes to 21 points of damage and the guy takes 14-— major wound. He goes down.

She turns the gun on the other guy and rolls a 15 for cluster—the pellets go wide. That gives a ¼ + 1 hit with a +3 spread bonus. She rolls a miss by 2 . . . but it goes to a hit by 0 due to the spread bonus. The man with the knife is wearing no armor.

For damage modification she lucks out and rolls a 19 which, plus 0, is 2x damage. The unarmored man takes 12 points from the "cluster" and 2 points from the one individual hit. Since he has no armor, he takes the full 14 points of damage. The man drops.

Tangle Attacks

Tangle attacks are those which have the purpose of binding a target's legs and arms. Examples of tangle attacks are thrown nets, whips used to wrap arms, and bolas. When a character is hit by a tangle attack the amount he was struck by determines the degree to which he is tangled. Such attacks are treated as "grabs" in that the tangled character can attempt to extricate himself by either breaking the hold or cutting the cables.

A tangled character attacking the binding implement he gets +5 to hit the binding substance if his arms are free. If the binding implement is either destroyed by the blow or makes an STC roll and suffers a major failure then the character is freed.

Difficulty of Escape: Being wrapped by a whip isn't the same as being caught in the Space Patrol's "Force Bubble." You can simply yank the whip off your arm but you've pretty much got to blast your way out of the bubble. Similarly, untying bolas may be easier than getting yourself out of a weighted net. A character caught by a tangle attack can usually spend an action to extricate themselves. In this case the REA cost of that action is listed (it's usually either medium or long). In some cases (the Space Patrol's energy bubble gun) simply taking off the tangling object isn't an option. In others (a net), if the attack hits poorly the object is easier to remove than if you're really wrapped up in it.

Escape requires an AGI roll at the listed negative. If the roll is failed because of the negative, the GM may rule that the character has partially freed himself and lower the negative for the next attempt.

DP, Armor, and STC: Tangle attacks have physical statistics and can be attacked like any object. Usually if the object is "Escape Proof," then any attack directed at the character tangled will hit the trapping device first (you can't stab the guy inside the force bubble unless you break the bubble). On the other hand, tangled characters can usually be hit at some bonus if they're exposed (the possibility of Escape exist).

Strength (STR): Some tangle attacks have a STR and work a lot like a Grab attack. An example is a whip—if you're strong enough you may just be able to rip right out without either taking a long time to untie yourself or breaking the device. If the tangle attack has a STR listed then when the character is hit by 4 or more, he gets a roll on the Grapple table using his STR - 10 against the tangle's STR (treat STR's of 10 and below as .5, .25, .125, etc.)

Karg rolled. The web-nets of the black shiny spider-thing arced over him. He darted towards it and then jigged left when one of the smaller, bulbous white spiders that clung to the big one's under belly jumped off and scampered towards him.

They'd meant to shackle his legs for the arena—to make him an easy kill—but the hilt of the axe had contained his lock-tools and he was free of the leg irons. He still had one trick left.

The white spider jumped; its massive stinger seeming to quiver with venom. Karg caught it in the air and split it from maw to midsection. It's stinger splattered like an overripe fruit.

The big thing reared up and Karg saw hundreds of the smaller ones clustered there—suckling at it. Disgust coiled in his gut and he fought nausea. They were starting to break free then, working their way out of the big one's flesh. The stone corridor it had come out of was still open—but he'd never make it running.

A white spider plopped onto the ground. Karg snapped his last trick out of the handle of the axe.

It was a thin spike—needle sharp—balanced for throwing. He'd learned to use it in the forbidden lands to the east. The poison on the blade would kill almost anything . . . instantly. To hold the blade was to kiss death. The edge was so sharp he'd never even feel it cut. In the east they trained for years before ever touching a live one. He had no such luxury.

He hurtled the spike at the massive creature and, not even watching to see if it hit, he stepped back and swung at the deadly white spider trying to sink it's stinger into his foot.

Karg heard the cry from the crowd around the arena before he heard the monster fall. When he looked up from the dead spider, he saw the it, overturned, its legs flailing. The smaller ones staggered and fell around it.

Someone in the arena, realizing what was to happen next, was closing the gate. Too slowly.

Second mistake, Karg thought. Second mistake.

***

Ready: Low technology tangle attacks are notoriously hard to use. They must be readied *each* time they're used and if they miss by a lot they can be almost useless. Some weapons like a whip are ready to use when they're taken out. Others, like bolas or lassos must be wound up before they can be used. Not all weapons have a Ready time—if they do use this chart below. This cost is paid in addition to a 5 REA medium action to draw (if the weapon isn't already in hand).

Tangle Weapon Ready Table

Skill Level	Action	Notes
Level 1	8 REA long	Skill roll required
Level 2	5 REA medium	Skill roll required
Level 3	3 REA short	Skill roll at +3 required
Level 4	None	No skill roll required

Recover: When a character misses with a tangle attack the weapon must be *recovered*. The amount of REA this takes depends on skill level. Many weapons, like bolas, don't need to be (or cannot be) recovered. If the weapon has a listed recover time use the table below to determine what kind of action it is.

Tangle Weapon Recovery Table

Skill Level	Action	Notes
Level 1	8 REA long	Skill roll required
Level 2	5 REA medium	Skill roll required
Level 3	3 REA short	Skill roll at +3 required
Level 4	None	No Skill roll required

Tangle Effects

Tangle Attack Hit By:

0 to +3	+4 to +6	+7 to +9	+10 or more
Grab Effect	Limb Bound	Wrapped	Entangled

Grab Effect: The character is treated as grabbed and until he breaks free of, escapes from, or destroys the tangling object, he gets no AGI bonus and has limited movement.

Limb Bound: If a limb was targeted (-2 to hit) then any weapon in that limb is at -3 to hit with and -3 damage modifier until freed. If the tangle attack has a listed STR then the tangled character must win a roll against the STR to use the item. If no limb was targeted the following rules apply: if the target was running he must make an AGI roll at -3 or fall. Any attacks on anything but the tangling object are at -2 to hit and -2 damage modifier. Escape rolls are at -2. If the character fails an escape roll by 3 or more he becomes *wrapped*.

Wrapped: The character attacks at -4 to hit and -4 damage modifier until freed. Escape rolls are at -4 and if a character fails an escape roll he becomes *entangled*. Short reach weapons and firearms may still be used unless the weilding limb was

Upper and Lower Body Tangles:

When a character is hit with a tangle attack, usually only his upper body (arms and head) or lower body (abdomen and legs) is entangled. Some tangle attacks, like nets, can entangle the entire body.

Normally, unless an attack is declared to the "lower body," the upper body will be hit. This has the effects listed to the left.

If a character's lower body is targeted (or the character is hit with a net) then the following effects apply (or *both* are applied):

Grab: If the character was running, make an AGI roll at -2 or fall. If the character was sprinting, make an AGI roll at -4 or fall. Otherwise (taking step actions or walking) the character will not fall.

Limb Bound: The target only gets half his AGI bonus. If the character was walking he must make an AGI roll at -1 or fall. If the character continues walking or takes step actions, make AGI rolls at -2 or fall.

Wrapped or worse: The character gets no AGI bonus and cannot move.

***Striking Through A Tangle*:** Characters may be struck through a tangle. If a character is caught in a lasso, bola, or whip, a hit by 0 will hit the tangle instead of the character. If the character is caught in a net, a hit by 0 or +1 will hit the tangle instead of the character (damage that goes through the tangle is applied to the character.)

targeted (in which case it is rendered useless). Attacks on the tangling device are at -2 damage modifier. Attempts to break the tangle are at -2 STR. An AGI roll at -0 is necessary to *draw* a weapon. If it is failed it cannot be re-attempted until the character is free.

Entangled: The only legal action is attempts to escape (-6), attempts to break free (-4 STR), or attack the tangling object (-4). The character is basically stuck.

Tangle Weapons Table

Weapon	Escape	Ready / Recover		STR	DP / STC / Armor
Whip	+0	yes	yes	12 STR	12 / 13- / 2
Bola	-2	yes	no	13 STR	8 / 13- / 2
Net	-4	yes	yes	14 STR	18 / 13- / 2
Lasso	-1	yes	yes	13 STR	14 / 13- / 2

Notes:
Whips can be used to lash instead of tangle. They do +3 Impact damage.

Bolas are thrown weapons that have a Base Damage of 4. If the legs are rendered "useless," then a character moving must make an AGI roll at -1 per yard / second he was moving (max of -6). If the character was standing still he must still roll at -2).

Nets are particularly dangerous. On a miss by 5+ the character must make a skill roll at -4 if Level1, -2 if Level 2, +0 at L3, and +4 at L4 or entangle himself by the amount missed by!

Martial Arts (Q & A)

Martial Arts aren't exactly weapons—but they can be complicated and we decided to answer some common questions about them here. Instead of a list of rules, we've chosen a Question and Answer format because the most important data is simply explained in the combat section.

Q. If I have Karate and Kung Fu, can I throw a Karate punch that's at the Kung Fu negatives to be blocked?

A. No. If you have two or more martial arts you can use *either* attack—but not both. In other words, if you had Level 3 Kung Fu and Level 3 Karate you could choose to throw either a +3 damage punch (using your Karate skill) or a +1 damage punch that's at –2 to be blocked (using your Kung Fu skill).

Q. If I have more than one martial art, what's my block roll?

A. You use whichever block roll is better. If a character has Tai Chi and, say Tae Kwon Do at the same level and the same skill roll, he'll always use his Tai Chi blocks since that art form is more defensive.

Q. At Level 3 can I throw a *one* punch per turn for 4 REA? Can I throw *one* kick per turn for 5 REA?

A. At Level 3 and above you may, *once per turn*, throw a 5 REA attack for 4 REA. That's punches. You can't do that with kicks *unless* you have Tae Kwon Do, which allows you to throw a kick *once per turn* for 5 REA.

Q. I have two martial arts that add to my grapple score. What's my grapple score work out to?

A. When determining your offensive or defensive grapple score, only use the martial art which gives the *best* score for either one. You don't add Jujitsu and Tai Chi grapple modifications to get a super-high grapple score. But, if you have more than one martial art that affects grapple score, you get a cumulative +1 for each art after the best that adds to the score. NOTE: you must have at least a 9- roll with a martial art to get any grapple bonus from it.

Q. What's the *minimum* roll I've got to have in a Grappling Martial Art to get the Grappling bonus?

A. A 9- roll is usually required . . . but the GM may allow special dispensation if a character is "about" to increase his roll. The GM should frown on characters with multiple Grappling arts at low rolls who attempt to rack up as many pluses as they can.

Q. Can you give me some examples of martial arts moves in combat that illustrate certain points?

A. Sure we can. Here they are.

Ex1: Two martial artists, one knowing Karate at Level 2 and the other knowing Tae-kwon-do at Level 2 are facing off at one step distance (approximately two yards between them). Each has an 11 PHY, 11 REF, and 13- skills.

At one step distance either must step once to hit—but the Tae-kwon-do expert can throw a kick at medium range and no negative to hit—the Karate expert would have to be Level 3 to do that . . . and then his kick would still hit at –1. But, once he gets in close, his strikes do more damage.

Ex2: A character with Level 3 Jujitsu has grapple scores of 9 / 7 and blocks a Karate expert's blow by 5 with an "attempt to throw" block (which costs an extra REA). This allows him to execute a throw. The Karate guy has grappling scores of 6 / 4 so the Jujitsu expert must roll a 13- to execute the throw. He rolls a 10, making the roll by 3 and the karate dude goes down.

There will be more as we get questions . . . check the web page.

Flails ("Block *this!*")

Flails are weapons that are articulated with a chain or rope so that the user gains extra leverage. Examples are the medieval ball and chain or the martial arts nunchuka. Flails act like clubs with the exception that they are difficult to block. A flail will have a block factor of -1 to -3 depending on how flexible the weapon is. This number is deducted from the defender's block roll against such blows.

Flail Table

Weapon	Base Damage	STR Min.	REA Cost	Back Swing	Reach	Block Neg.
Nunchaku	+4 (impact)	10	+1	+0	Short	-2
Morning Star	+8 (impact)	11	+3	+3	Medium	-3
Flail	+10 (impact)	12	+2	+4	Long	-1

Fencing Weapons ("Something Better!")

Fencing weapons are light, fast swords that, while not very effective on the battlefield, are excellent civilian weapons and are the mainstay of the swashbuckling campaign.

Fencing weapons have the following properties:

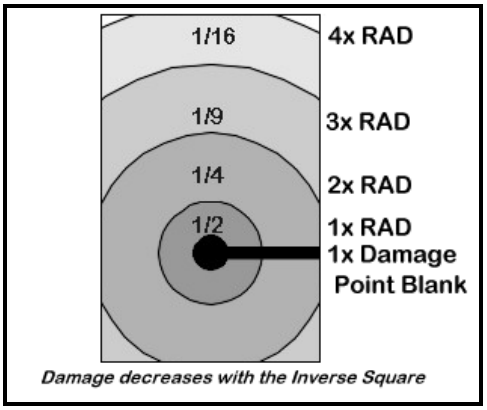
- A character using a fencing weapon cannot perform a Full Strike maneuver.
- Fencing weapons block heavier weapons badly: they take a –1 to their block roll for each point of the attacking weapon's Base Damage above 5 (so a broadsword is blocked at –1).
- Against armor with a Penetration Resistance of 8 or higher, the effective Penetration Resistance is doubled (so 4 / 8 armor becomes 4 / 16 armor and plate mail at 6 / 12 becomes nearly impenetrable at 6 /24).

Flail Table

Weapon	Base Damage	STR Min.	REA Cost	Back Swing	Reach
Epee	+3 Pen.	--	+0	+0	Medium
Rapier	+4 Pen	9	+0	+1	Medium
Saber	+5 Pen.	11	+1	+2	Medium

Explosives

In JAGS, explosive damage decreases by the inverse square law. This means that for a listed damage (base damage) at a given range (Radius or RAD) the damage will be divided by the square of the multiple of that distance (see table below).



Damage decreases with the Inverse Square

The RAD of an explosive depends on how it is constructed. Military explosives usually have a RAD of 4 yards while small non-professional explosives usually have a RAD of 2. Some very large explosives have even greater RADs.

Ground Zero: Anything touching an explosive takes the listed base damage. This is the point blank, maximum power of the blast. Within RAD yards, everything hit takes ½ Base Damage, between 1x RAD and 2x RAD everything takes ¼ Base Damage. Explosion damage is computed on the Impact Damage chart.

Ex1: A stick of dynamite has a base damage of 30 and a RAD of 2 yards. Anyone touching it when it goes off will take 30 points of damage (ouch!). Anyone from 0 to 2 yards away will take 30 / 2 = 15 points of damage. From 2 to 4 yards, the damage is 30 / 4 = 8 points of damage. From 4 to 6 yards (3x RAD) the damage is 30 / 9 = 3 points and from 6 to 8 yards the damage is 30 / 16 = 2.

Damage Modification: The damage modifier for explosions is +2 DM per 5 points of SIZ (BLD) the target has. This means that a normal man (BLD 10, therefore, SIZ 10) has an automatic +4 DM from explosions. Giants take more damage—midgets: less.

Damage is figured from the Base Damage modified by the to-hit roll for all targets within the area of the blast.

Shockwaves: Shockwaves can do extreme damage to a target by destroying internal organs. The GM may halve worn armor against explosive attacks if the armor is not sealed.

Area Effects: The amount of damage a target absorbs from an explosive blast is proportional to its area. While this can be very cumbersome to work out, the GM should apply another hit for each 10 points of BLD the target has above 10 (thus a being with a BLD of 20 would be hit twice).

Structures tend to take 4 hits at each radius (so an explosive detonated on a wall would do 4 hits at range 0 to RAD, 4 hits at 2x RAD, 4 hits at 3x RAD, etc.) This can easily take down structures. The effects of the explosive at a given radius should be worked out before the effects at the next radius are worked out (so the STC of the structure will be decreased before it has to roll for the next radius of damage).

Shaped Charges: Many explosives come in shaped charges. A shaped charge is represented by extra damage

which the direct target takes but the surrounding area does not. This is usually some multiple of the base damage of the explosive.

Ex1: A shaped anti-armor rifle grenade round does 405 points of damage to the target but has an explosive listing of 24 RAD 2 (which means that people relatively close to the blast point will be hurt but the target hit will be penetrated and probably destroyed).

In the case of shaped mines like claymores (where the explosive is directed in a cone but is not concentrated against a tiny point) then the RAD may be much greater as the damage is concentrated rather than expanding as a sphere.

Shrapnel: Many anti-personnel weapons are covered with material designed to break and do damage to living targets. Although shrapnel exists for almost all explosions, the chance of being hit by debris is usually ignored. Persons caught in the blast radius of an anti-personnel attack will be hit with shrapnel using the same rules as shotgun shells and a base to-hit number of 14- or up. Usually it is simple to treat a shrapnel hit at 1xRAD like a shotgun blast at short range, 2xRAD like a shotgun blast at medium range and 3x RAD like a shotgun blast at long range.

To-Hit Bonuses With Explosive Attacks: Projectiles which explode give an attacker some advantages. Firstly, an attack need not be made to hit a target—only to hit *near* a target. If an explosive projectile is targeted at the ground (presumably near something that the attacker wants damaged) the roll to hit is made only against a Range and Visibility modifier (the target gets no AGI bonus). If the attacker misses, the shot will be off by $1/10^{th}$ of the total distance between the attacker and the target for each point the roll was blown by.

Fire and Electrical Damage

Energy damage is treated as impact damage most of the time (lasers are treated as penetrating damage). Fire, however, has a tendency to make things burn and lightning is more disruptive to biological and electronic targets than most blunt trauma. These effects can be applied to anything from flamethrowers to dragon's breath attacks. These rules, however, are considered advanced as their inclusion may tend to slow play.

Fire

When a target is burnt it makes a resistance roll or catches. The resistance roll is based on the material and the amount of damage done by the attack. The chart below gives the base resistance roll, and the modifiers are as follows:

- Inanimate Objects are at -1 to their resistance roll for each **[Full Damage Points / STC]** points of damage the fire attack did.

- Biological targets (most characters) get a resistance roll at -1 for each **[Minor Wound]** points of damage the fire attack did.

NOTE: The negatives are based on the total damage—not the damage done after armor. A person in heavy armor can be set aflame but unhurt (in the beginning).

Fire Resistance Table

Material	Resistance Roll	- 1 / X damage	Notes
Flesh	13-	Varies	General roll for modern (flame resistant) clothing.
Hair	10-	Varies	If a character is specifically hit in the head use this.
Leather Armor	14-	8	Leather offers good protection against fire
Cloth	11-	2 - 4	Usually worn over plate mail (medieval clothing)
Brick/Concrete	16-	10 - 20	Building exteriors.
Bio-Armor	18-	Varies	Bio-armored characters are hard to set on fire.
Interior (modern)	13-	6 - 10	If an attack is used in a home or office.
Heavy Wood	14-	8 - 15	Exterior doors, wooden walls.
Light Wood	12-	4 - 12	Interior doors, light wooden furniture.

Ex1: Concrete has a rating of 60 DP per inch. A cement wall with 60 DP and a 10- STC is hit by 451, a flame wielding super villain for 24 points of damage after armor. It has a 12- resistance roll to keep from catching fire (16- roll minus one for every 60/10 = 6 points of damage).

Ex2: A thug (Minor Wound number of 3) is hit by a flamethrower for 24 points of damage. This is 8x his minor wound rating so his resistance roll drops from a 13- to a 5 or less—fwoosh!

Failed Rolls: When a roll is failed, the severity of the burn is determined on the following table. Damage is done at the beginning of the turn and takes effect before initiative is rolled. Each second, the material makes another resistance roll. If the roll is made, the material stops burning. If the roll is failed the fire may grow (if the roll was failed badly) or dwindle (if the roll is almost made). The new negative to the resistance roll is based on the damage the *currently burning fire is doing*. Things that are already on fire get a -1 to their resistance rolls.

Burn Severity Table

Resistance Roll	Damage Per Turn
- 1 to -4	¼ original damage.
- 5 to -9	½ original damage.
-10 or worse	1x original damage. Subsequent fails add + ¼

Extinguishing fires gives a plus to the resistance roll the flame made each turn. A person rolling on the ground gets a +4 to his resistance roll. Smothering a fire gives +2 (for bad equipment) up to +6 (for professional fire blankets). Extinguishers usually give a +5 to the roll. Submergence in water or similar measures may give a +8 or higher.

Electricity

Electrical damage can cause effects like stopping the heart or contracting muscles. Damage from lightning, stun guns, or other "electrical weapons" is treated like impact damage with the target taking a -1 to his CON roll. For each **[Minor Wound]** points of damage the target takes, he suffers an additional -1. This makes the damage effects disproportionate to the damage.

Underwater, treat Electricity as explosive with a RAD of 4 yards.

> **Tasers:** For non-lethal weapons that use high voltage-low amperage currents to disable, the GM should consider using the POWER vs. STAT attacks in the Paranormal Abilities book to represent the effects of a hit with an incapacitation weapon.

Specific Hit Locations ("Called Shots")

Under the advanced combat rules, a character may make a "Called Shot" to a target's head, eye, arm, leg, etc. Called shots are at an automatic negative to hit for the size of the object (at range that size modifier will be multiplied by any distance, speed, or visibility modifiers).

When a target is hit, the rules below will apply. In some cases there is a positive damage modifier. This is done to offset the to-hit negative: shots to the head are harder to pull off but more vital.

> **Vital Targets:** Vital targets (throat, heart, eye, etc.) are hard to hit, easier to defend, and give the attacker a certain Damage Modifier. When a hit to a vital target is declared, the attacker rolls at a given negative and, if successful, *does not add what he hit by for the Damage Modifier roll*. Instead he adds the vitality modifier.
>
> Note: The to-hit negatives are *size* modifiers (and stack with other negative modifiers including AGI modifiers). If you do hit someone, add their AGI bonus to your damage modifier (2x if the attack penetrated). This essentially nullifies the defender's AGI bonus if the attack hits.
>
> Ex1: A karate master attacks a 13 AGI target, striking to the throat. The karate master has a 16- skill and therefore needs to roll a 10- . . . which goes to a 7- with the AGI modifier . . . and the target's at +3 to block (presumably the target doesn't have a block roll).
>
> He rolls a 7. The damage modifier is +10 (+7 for targeting the throat with a non-penetrating attack, +3 for the target's AGI mod—which is added back here to cancel it out).

Location	To-Hit Modifier	Damage Modifier Bonus	Defender Bonus
Heart	-4 to hit	+9 DM if penetrated (otherwise +4)	+2 to block
Throat	-6 to hit	+14 DM if penetrated (otherwise +7)	+3 to block
Eye	-9 to hit	+24 DM if penetrated (otherwise +10)	+3 to block

Non-Vital Targets: Hacking limbs off, shooting the legs to disable, and stunning blows to the head are possible as well. In this case there is a negative to hit the target and a special effect.

Head Blow: The head is –3 to hit at range (size modifier) and –1 to aim for specifically in HTH combat (in addition to AGI mods). The only special effect of a *called* head shot (the GM may rule that any shot "hits the head" but unless the player calls for a specified shot these rules aren't in effect) is a –1 to the target's CON roll for purposes of being Stunned, Dazed, or knocked Unconscious. Called shots to the head are at +1 to block.

Arm: The arm is at –2 to hit, in addition to AGI mods (for ranged or HTH combat). When struck, the most damage that can be done is a Major Wound. If the damage is equal to a Major Wound, the arm is broken (or hacked off). Otherwise, the effects of a CON roll are as follows.

- **Stunned:** The target fights at –2 for two seconds. If unarmed, this –2 will apply to *one* attack each second. If the arm is wielding a weapon, the weapon strikes at –2 and blocks at –2 (or just shoots at –2).
- **Dazed:** The target fights at –4 with the arm for 3 seconds.
- **Unconscious:** The arm is useless for 10 seconds, make a CON roll each 10 seconds to regain use. The target is Dazed.
- **Internal Damage:** The arm is broken—or just useless—until the damage is healed. The target is Dazed.
- **Dying:** The arm is broken or hacked off (non-heroic characters lose the limb). This lasts several weeks. The target suffers Internal Damage.
- **Dead:** The arm is probably gone. The target is automatically unconscious and suffers Internal Damage.

Leg: Shots to the leg can cause a fighter to fall, or simply be unable to flee. Specific attempts to target the leg are at –2 to hit (in addition to AGI mods). If hit the most damage that can be done is a Critical Wound. If a Major Wound is caused, the target will lose use of the leg. If a Critical Wound is caused the leg is probably gone. If the character was walking when the blow lands, AGI rolls to remain standing are at –1. If running, AGI rolls are at –2. If Sprinting, AGI rolls are at –4.

- **Stunned:** The character must make an AGI roll or fall. If made the target will lose 1 point of AGI bonus for the next two rounds (counting the round the target was hit)
- **Dazed:** The target must make an AGI roll at –2 or fall. Sprinting speed is reduced to running speed for 3 seconds. The character loses 1 point of AGI mod for the next 3 turns.
- **Unconscious:** The target must make an AGI roll at -4 or fall. The character loses all AGI bonus for 4 seconds. HTH attacks are at –2 to hit. The character is Dazed.
- **Internal Damage:** The character falls and the leg is out of commission until the damage heals. The character is Unconscious
- **Dying:** The leg is broken. The character suffers Internal Damage.
- **Dead:** The leg is probably gone. The character is Dying.

Maiming Characters: Heroic characters rarely get arms cut off, eyes put out and legs pulped. To simulate this, simply have the limb disabled for several weeks instead of breaking it.

Maximum Damage: When a limb takes damage, the most a character can generally take is a Major Wounds worth of damage in a single hit. If a critical wound is done, consider having the limb be severed even if the CON roll doesn't indicate a dead or dying result.

Surprise

When a character is attacked unexpectedly, he is at a disadvantage. Similarly, if two "war parties" encounter each other suddenly, both may be surprised. These rules cover the effects of unexpected encounters or ambushes.

Total Surprise: If a character is attacked from what he feels to be a position of safety, and the attacker is ready for him (an example is an ambush in the target's home—when he's not on alert). The attacker gets a free shot at him at +5 to hit (plus any aim) and then may take the rest of his turn at normal modifiers. The GM should allow the target a perception roll (minus any stealth modifiers) if the attacker aims (+0 for a 3 REA aim, +1 for a 5 REA aim, +2 for an 8 REA aim).

Partial Surprise: If a character is "on alert" when someone sneaks up, there is no +5 to hit but the rules are otherwise the same.

Mutual Surprise: If two combatants encounter each other suddenly, the GM may rule that each member of each group must make a WIL roll. Those making their rolls by 3+ get to act (with normal initiative rolls) in the first second of encounter. Those who do not make their WIL rolls by 3+ may dodge or block but may not attack. Activating defensive abilities (raising a Force Field) is allowed.