The targets DR protects at half value (round down) after applying any armor divisors.

- If any damage penetrates DR, treat it as if it were a major wound, regardless of whether any damage penetrates DR.
- If any damage penetrates DR, treat it as if it were a major wound, regardless of the actual injury inflicted.
- The blow does maximum normal damage.
- The blow does double damage.
- The blow does normal damage.
- The blow does quarter damage.

In all cases, the target gets no active defense against the attack.

- The blow does maximum normal damage and ignores the targets DR.
- The blow does quarter damage, and the victim drops anything he is holding. If any damage penetrates DR, treat it as if it were a major wound, regardless of the actual injury inflicted.
- The blow does maximum normal damage.
- The blow does double damage.
- The blow does normal damage.
- The blow does quarter damage.

CRITICAL HEAD BLOW TABLE

Use this table only for critical hits to the head (face, skull, or eye). In all cases, the target gets no active defense against the attack.

- The blow does maximum normal damage and ignores the targets DR.
- The targets DR protects at half value (round up) after applying any armor divisors. If any damage penetrates DR, treat it as if it were a major wound, regardless of the actual injury inflicted.
- The blow does maximum normal damage.
- The blow does quarter damage.

CRITICAL HIT TABLE

All doublings or triplings of damage refer to basic damage (not injury). In all cases, the target gets no active defense against the attack.

- The blow does triple damage.
- The target's DR protects at half value (round down) after applying any armor divisors.
- The blow does double damage.
- The blow does maximum normal damage.
- If any damage penetrates DR, treat it as if it were a major wound, regardless of the actual injury inflicted.
- If any damage penetrates DR, it suffices double normal shock (to a maximum penalty of -8). If the injury is to a limb or extremity, that body part is crippled as well. This is only a "funny-bone" injury: crippling wears off in (16 - HT) seconds, minimum two seconds, unless the injury was enough to cripple the body part anyway.

- Normal damage only.
- Normal damage, and the victim drops anything he is holding. If any damage penetrates DR, treat it as if it were a major wound, regardless of the actual injury inflicted.
- The blow does maximum normal damage.
- The blow does double damage.
- The targets DR protects at half value (round down) after applying any armor divisors.
- The blow does triple damage.

CRITICAL MISS TABLE

You strain your shoulder! Your weapon arm is "crippled." You do not have to drop your weapon, but you cannot use it, either to attack or defend, for 30 minutes.

- You fall down! If making a ranged attack, see 7 instead.
- You drop your weapon; see 3.

DAMAGE FROM THROWN OBJECTS

Thrown objects inflict thrust damage for your ST (see Damage Table, p. 16), modified for weight as shown on the table below. Damage is usually crushing, but the GM may rule that a sharp object does cutting, piercing, or impaling damage instead. A fragile object (or a thrown character) takes the same amount of damage it inflicts; roll damage separately for the object and the target.

<table>
<thead>
<tr>
<th>Weight</th>
<th>Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to BL8</td>
<td>Thrust, -2 per die</td>
</tr>
<tr>
<td>Up to BL4</td>
<td>Thrust, -1 per die</td>
</tr>
<tr>
<td>Up to BL2</td>
<td>Thrust</td>
</tr>
<tr>
<td>Up to BL</td>
<td>Thrust, +1 per die</td>
</tr>
<tr>
<td>Up to 2xBL</td>
<td>Thrust</td>
</tr>
<tr>
<td>Up to 4xBL</td>
<td>Thrust, -1/2 per die (round down)</td>
</tr>
<tr>
<td>Up to 8xBL</td>
<td>Thrust, -1 per die</td>
</tr>
</tbody>
</table>

GURPS is a registered trademark of Steve Jackson Games Incorporated. GURPS GM’s Screen is copyright © 2004 by Steve Jackson Games Incorporated. All rights reserved.
MELEE ATTACK MODIFIERS

When attacking in melee combat, figure your effective skill by:
1. Taking your base skill with the weapon or unarmed attack you are using. (In some situations, another skill - e.g., Free Fall, Riding, or Environment Suit - will limit this skill.)
2. Applying the relevant modifiers below. Modifiers are cumulative, but combined visibility penalties cannot exceed -10 (-6, if used to blindness). If any modifier marked with an asterisk (*) applies, adjusted skill after all modifiers cannot exceed 9.

A roll of this number, or less, is a hit.

**Attacker's Maneuver**

All-Out Attack (Determined): +4
Move and Attack: -4

**Attacker's Posture**

Crawling or lying down: -4 (if attacker is crawling, he can only make reach “C” attacks)
Crouching, kneeling, or sitting: -2

**Defender's Posture**

Crawling or lying down: -3
Kneeling or sitting: -2

**Defender's Situation**

Above attacker: +1 for 3’ difference, +2 for 4’, or +3 for 5’
Below attacker: -1 for 3’ difference, -2 for 4’, or -3 for 5’

**Defender's Equipment**

Parrying with quarterstaff: +2 to Parry
Shield or cloak: +DB of shield (see Shield Table, p. 287), except vs. firearms
Unarmed parry vs. weapon: -3 to Parry (+40 vs. thrust, or w. Judo or Karate)

**Defender's Maneuver**

All-Out Attack: no defense possible!
All-Out Defense (Increased Defense): +2 to one of Dodge, Block, or Parry
Move and Attack: dodge or block only; you cannot parry

**Attacker's Situation**

Affliction (coughing, retching, etc.): see Afflictions (p. 428)
Bad footing: -2 or more (GMs option)
Grappled: -4
Holding a large shield: -2
Major distraction (e.g., all clothes on fire): -3 or more (GMs option)
Minor distraction (e.g., part of clothes on fire): -2
Mounted, and mounted attacked on its last turn: -2
Mounted, and mounts velocity relative to target is 7+: -1
Shock: -HP of injury received last turn (maximum -4)
ST below that required for weapon: -1 per point of deficit

Wearing a shield in close combat: -DB of shield

**Other Actions by Attacker**

Deceptive Attack: -2 per -1 penalty to foe's defense
Dual-Weapon Attack: -4/-8 with primary/off hand (-4/-4 w. Ambidexterity)
Evaluate: +1 per turn (maximum +3)
Off-hand attack: -4 (no penalty w. Ambidexterity)

**Defender's Posture**

Crawling or lying down: -3
Kneeling or sitting: -2

**Defender's Situation**

Above attacker: +1 for 3’ difference, +2 for 4’, or +3 for 5’
Affliction (coughing, retching, etc.): see Afflictions (p. 428)
Bad footing: -1 or more (GMs option)
Below attacker: -1 for 3’ difference, -2 for 4’, or -3 for 5’
Can't see attacker: -4, and a block or parry requires a Hearing-2 roll
Close combat: only reach “C” weapons can parry
Distraction (e.g., clothes on fire): -1 or more (GMs option)
Encumbered: penalty equal to encumbrance level to Dodge, or to Judo, Karate, or any fencing Parry
Mounted: penalty equal to difference between 12 and Riding skill (no penalty for Riding at 12+)
Stunned: -4

**Nature of Attack**

Attack from behind: no defense possible (defense at -2 w. Peripheral Vision)
Attacked from side or "runaround" attack: -2 (no penalty w. Peripheral Vision)
Attacker used laser sight: +1 to Dodge if dot is visible
Deceptive Attack: -1 per -2 the attacker took to hit his target
Dual-Weapon Attack: -1 if both attacks strike the same target
Flail: -4 to Parry/-2 to Block (-2/-1 vs. nunchaku); fencing weapons can't parry at all
Successful feint: penalty equal to attacker's margin of victory
Thrown weapon: -1 to Parry, or -2 to Parry if weapon is small (1 lb. or less)

**Other Actions by Defender**

Acrobatic Dodge: +2 to Dodge if Acrobatics roll succeeds, -2 if it fails
Dodge and Drop: +3 to Dodge vs. ranged attack
Feverish Defense: +2 (costs 1 FP)
Multiple parries: -4 to Parry per parry after the first, cumulative (halved for fencing weapons, and for Trained By A Master or Weapon Master)
Off-hand parry: -2 to Parry (no penalty w. Ambidexterity)
Retreat: +3 to Dodge, or to Boxing, Judo, Karate, or any fencing Parry; +1 otherwise

**Human and Humanoid HIT LOCATION TABLE**

<table>
<thead>
<tr>
<th>Roll</th>
<th>Location (Penalty)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Eye (-9)</td>
<td>[1,2]</td>
</tr>
<tr>
<td>5</td>
<td>Skull (-7)</td>
<td>[1,3]</td>
</tr>
<tr>
<td>5</td>
<td>Face (-5)</td>
<td>[1,4]</td>
</tr>
<tr>
<td>6-7</td>
<td>Right Leg (-2)</td>
<td>[5]</td>
</tr>
<tr>
<td>8</td>
<td>Right Arm (-2)</td>
<td>[5,6]</td>
</tr>
<tr>
<td>9-10</td>
<td>Torso (0)</td>
<td>[1,7]</td>
</tr>
<tr>
<td>12</td>
<td>Groin (-3)</td>
<td>[5,6]</td>
</tr>
<tr>
<td>13-14</td>
<td>Left Leg (-2)</td>
<td>[5]</td>
</tr>
<tr>
<td>15</td>
<td>Hand (-4)</td>
<td>[6,8,9]</td>
</tr>
<tr>
<td>16</td>
<td>Foot (-4)</td>
<td>[8,9]</td>
</tr>
<tr>
<td>17-18</td>
<td>Neck (-5)</td>
<td>[1,10]</td>
</tr>
<tr>
<td>+</td>
<td>Vitals (-3)</td>
<td>[1,11]</td>
</tr>
</tbody>
</table>

**HUMAN AND HUMANOID HIT LOCATION TABLE**

**Roll**

- Eye (-9)
- Skull (-7)
- Face (-5)
- Right Leg (-2)
- Right Arm (-2)
- Torso (0)
- Groin (-3)
- Left Arm (-2)
- Left Leg (-2)
- Hand (-4)
- Foot (-4)
- Neck (-5)
- Vitals (-3)

**Location (Penalty)**

[1,2]
[1,3]
[1,4]
[5]
[5,6]
[1,7]
[5,6]
[5]
[6,8,9]
[8,9]
[1,10]
[1,11]

**Notes**

[1] An attack that misses by 1 hits the torso instead.
[2] Only impaling, piercing, and tight-beam burning attacks can target the eye - and only from the front or sides. Injury over HP/10 blinds the eye. Otherwise, treat as skirt, but without the extra DR!
[3] The skill gets an extra DR 2. Wounding modifier is x4. Knockdown rolls are at -10. Critical hits use the Critical Head Blow Table (p. 556). Exception: These special effects do not apply to toxic damage.
[4] Jaw, cheeks, nose, ears, etc. If the target has an open-faced helmet, ignore its DR. Knockdown rolls are at -5. Critical hits use the Critical Head Blow Table. Corrosion damage gets a x1.5 wounding modifier, and if it inflicts a major wound, it also blinds one eye (both eyes on damage over full HP). Random attacks from behind hit the skull instead.
[5] Limb. Reduce the wounding multiplier of large piercing, huge piercing, and impaling damage to x1. Any major wound (loss of over 1/2 HP from one blow) cripples the limb. Damage beyond that threshold is lost.
[6] If holding a shield, double the penalty to hit: -4 for shield arm, -8 for shield hand.
[7] Human males and the males of similar species suffer double shock from crushing damage, and get -5 to knockdown rolls. Otherwise, treat as a torso hit.
[8] Extremity. Treat as a limb, except that damage over 1/2 HP in one blow inflicts a crippling major wound. Excess damage is still lost.
[9] If rolling randomly, roll 1d: 1-3 is right, 4-6 is left.
[10] Neck and throat. Increase the wounding multiplier of corrosion attacks x1.5, and that of cutting damage to x2. At the GMs option, anyone killed by a cutting blow to the neck is decapitated!
[11] Heart, lungs, kidneys, etc. Increase the wounding modifier for an impaling or any piercing attack to x3. Increase the wounding modifier for a tight-beam burning attack to x2. Other attacks cannot target the vitals.
RANGED ATTACK MODIFIERS

When making a ranged attack, figure your effective skill by:
1. Taking your base skill with your ranged weapon.
2. Applying the target's Size Modifier (SM).
3. Modifying for the target's range and speed; see Size and Speed/Range Table (p. 550).
4. Applying the relevant modifiers below. Modifiers are cumulative, but combined visibility penalties cannot exceed -10. If any modifier marked with an asterisk (*) applies, adjusted skill after all modifiers cannot exceed 9.

A roll of this number, or less, is a hit. If using rapid fire, you score one extra hit for every full multiple of Recoil by which you make your attack roll.

Attacker's Maneuver

All-Out Attack (Determined): +1
Move and Attack: -2 or -Bulk of weapon, whichever is worse

Attacker's Situation

Affliction (coughing, retching, etc.): see Afflictions (p. 428)
Bad footing: -2 or more (GMs option)
Close combat: a penalty equal to the weapons Bulk
Damage: -HP of injury received last turn (maximum -4)
Minor distraction (e.g., part of clothes on fire): -2

Other Actions by Attacker

Aim for one turn: +Accuracy of weapon
Dual-Weapon Attack: -4/-8 with primary/off hand
Extra Aim: +1 for 2 seconds, +2 for 3+ seconds
Off-hand attack: -4 (no penalty w. Ambidexterity)
Pop-up attack: -2, and No Aim Possible
Reduction: +1 for 1d hits, +2 for 2-4 hits, +3 for 5+ hits
Shock: -HP of injury received last turn (maximum -4)
ST below that required for weapon: -1 per point of deficit

Attacking from Moving Vehicle or Mount

If weapon is not in a stabilized mount, the combined bonus for Accuracy, Aim, bracing, and targeting systems cannot exceed the vehicle's SR.
Air vehicle: -1 for a handheld weapon, 0 otherwise
Exposed rider hanging on side of vehicle/mount and shooting over/under it: -6
Ground vehicle, good road: -1 for a handheld weapon, 0 otherwise
Ground vehicle, bad road: 0 for a stabilized turret or stabilized open mount; -1 for a fixed mount, hardpoint, or carriage; -2 for an external open mount; -3 for a handheld weapon
Ground vehicle, off-road: -1 for a stabilized turret or stabilized open mount; -2 for a fixed mount, hardpoint, or carriage; -3 for an external open mount; -4 for a handheld weapon
Space vehicle: 0

Turning in exposed saddle/seat of vehicle/mount to fire at foe behind: -4
Vehicle/mount dodged last turn and you're not the operator/rider: -2, or -4 if flying
Vehicle/mount failed control roll: penalty equal to margin of failure
Water vehicle, calm water: 0 for a stabilized turret or stabilized open mount; -1 for a fixed mount, hardpoint, or carriage; -2 for an external open mount; -3 for a handheld weapon
Water vehicle, rough water: -1 for a stabilized turret or stabilized open mount; -2 for a fixed mount, hardpoint, or carriage; -3 for an external open mount; -4 for a handheld weapon

Opportunity Fire

Checking target before firing: -2
Hexes watched: 0 for 1 hex; -1 for 2 hexes; -2 for 3-4 hexes or a line; -3 for 5-6 hexes; -4 for 7-10 hexes; -5 for 11+ hexes watched

Visibility

Blind, target completely invisible, or in total darkness: -10
Cannot see foe: -6, or -4 if you know his location to within 1 yard
Partial darkness, fog, smoke, etc.: -1 to -9 (GMs option)
Target has light concealment (e.g., bushes): -2

Grenades: This represents a fusing problem: the weapon detonates 1d seconds late.

Mislire

The weapon fails to fire. A successful Armoury+2 or IQ-based weapon skill roll (takes a Ready maneuver) can identify the problem. If the weapon is a revolver, the next shot will fire normally. Otherwise, each attempt to fix the problem requires three Ready maneuvers, two hands free, and a successful Armoury+2 or IQ-based weapon skill roll. Critical failure causes a mechanical or electrical problem.

Grenades: The grenade is a dud, and will never explode.

Stoppage

The weapon fires one shot, then jams or otherwise stops working. (Treat the fired shot as a normal attack.) Each attempt to clear the stoppage requires three Ready maneuvers, two hands free, and a successful Armoury roll, or IQ-based weapon skill roll at -4. A success fixes the weapon. Failure means it isn’t fixed yet, but you can try again. Critical failure causes a mechanical or electrical problem.

Beam weapons: Treat as a mechanical or electrical problem.

Grenades and other single-use weapons: The weapon is a dud; it will never fire or explode.

Explosion

Any TL3 firearm or TL4 grenade, breechloader, or repeating firearm may blow up in the gunner’s face, inflicting 1d+2 cr ex [2d]. If the weapon uses an explosive warhead, use the warheads damage instead. TL5+ weapons do not explode - treat as a mechanical or electrical problem.

FIREARM MALFUNCTIONS

When a weapon malfunctions, roll d3:
3-4 - Mechanical or electrical problem.
5-8 - Mislire.
9-11 - Stoppage.
12-14 - Mislire.
15-18 - Mechanical or electrical problem, and possible explosion.

Mechanical or Electrical Problem

The weapon fails to fire. A successful Armoury or IQ-based weapon skill roll (takes a Ready maneuver) can diagnose the problem. Once the problem is known, make an Armoury skill roll to correct it. Each repair attempt takes one hour, and any critical failure destroys the weapon.

Grenades: This represents a fusing problem: the weapon detonates 1d seconds late.

Mislire

The weapon fails to fire. A successful Armoury+2 or IQ-based weapon skill roll (takes a Ready maneuver) can identify the problem. If the weapon is a revolver, the next shot will fire normally. Otherwise, each attempt to fix the problem requires three Ready maneuvers, two hands free, and a successful Armoury+2 or IQ-based weapon skill roll. Critical failure causes a mechanical or electrical problem.

Grenades: The grenade is a dud, and will never explode.

Stoppage

The weapon fires one shot, then jams or otherwise stops working. (Treat the fired shot as a normal attack.) Each attempt to clear the stoppage requires three Ready maneuvers, two hands free, and a successful Armoury roll, or IQ-based weapon skill roll at -4. A success fixes the weapon. Failure means it isn’t fixed yet, but you can try again. Critical failure causes a mechanical or electrical problem.

Beam weapons: Treat as a mechanical or electrical problem.

Grenades and other single-use weapons: The weapon is a dud; it will never fire or explode.

Explosion

Any TL3 firearm or TL4 grenade, breechloader, or repeating firearm may blow up in the gunner’s face, inflicting 1d+2 cr ex [2d]. If the weapon uses an explosive warhead, use the warheads damage instead. TL5+ weapons do not explode - treat as a mechanical or electrical problem.

SIZE AND SPEED/RANGE

<table>
<thead>
<tr>
<th>Size</th>
<th>Linear Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&quot;</td>
<td>2.5 cm</td>
</tr>
<tr>
<td>2&quot;</td>
<td>5 cm</td>
</tr>
<tr>
<td>3&quot;</td>
<td>7.5 cm</td>
</tr>
<tr>
<td>4&quot;</td>
<td>10 cm</td>
</tr>
<tr>
<td>5&quot;</td>
<td>12.5 cm</td>
</tr>
<tr>
<td>6&quot;</td>
<td>15 cm</td>
</tr>
<tr>
<td>7&quot;</td>
<td>17.5 cm</td>
</tr>
<tr>
<td>8&quot;</td>
<td>20 cm</td>
</tr>
<tr>
<td>9&quot;</td>
<td>22.5 cm</td>
</tr>
<tr>
<td>10&quot;</td>
<td>25 cm</td>
</tr>
<tr>
<td>12&quot;</td>
<td>30 cm</td>
</tr>
<tr>
<td>14&quot;</td>
<td>35 cm</td>
</tr>
<tr>
<td>16&quot;</td>
<td>40 cm</td>
</tr>
<tr>
<td>18&quot;</td>
<td>45 cm</td>
</tr>
<tr>
<td>20&quot;</td>
<td>50 cm</td>
</tr>
<tr>
<td>24&quot;</td>
<td>60 cm</td>
</tr>
<tr>
<td>30&quot;</td>
<td>75 cm</td>
</tr>
<tr>
<td>40&quot;</td>
<td>100 cm</td>
</tr>
<tr>
<td>60&quot;</td>
<td>150 cm</td>
</tr>
<tr>
<td>100&quot;</td>
<td>250 cm</td>
</tr>
<tr>
<td>3,000</td>
<td>1 mile</td>
</tr>
<tr>
<td>3,000</td>
<td>3,000 yd</td>
</tr>
<tr>
<td>1,500</td>
<td>2,500 yd</td>
</tr>
<tr>
<td>700</td>
<td>1,125 yd</td>
</tr>
<tr>
<td>1,000</td>
<td>1,600 yd</td>
</tr>
<tr>
<td>1,500</td>
<td>2,250 yd</td>
</tr>
<tr>
<td>2,000</td>
<td>3,000 yd</td>
</tr>
<tr>
<td>3,000</td>
<td>4,500 yd</td>
</tr>
<tr>
<td>5,000</td>
<td>7,500 yd</td>
</tr>
<tr>
<td>7,500</td>
<td>12,000 yd</td>
</tr>
<tr>
<td>10,000</td>
<td>16,000 yd</td>
</tr>
</tbody>
</table>
**FRIGHT CHECK TABLE**

When you fail a Fright Check, roll 3d, add your margin of failure on the Fright Check, and consult the table below. This sometimes gives implausible results. The GM should either reroll these or change them to something more appropriate—especially for Fright Checks stemming from awe (e.g., divine beauty) or mind-warping complexity (e.g., otherworldly geometry or radical philosophical concepts) instead of fear.

4, 5 - Stunned for one second, then recover automatically.
6, 7 - Stunned for one second. Every second after that, roll vs. unmodified Will to snap out of it.
8, 9 - Stunned for one second. Every second after that, roll vs. Will, plus whatever bonuses or penalties you had on your original roll, to snap out of it.
10 - Stunned for 1d seconds. Every second after that, roll vs. modified Will, as above, to snap out of it.
11 - Stunned for 2d seconds. Every second after that, roll vs. modified Will, as above, to snap out of it.
12 - Lose your lunch. Treat this as retiring for (25 - HT) seconds, and then roll vs. HT each second to recover; see *Incapacitating Conditions* (p. 428). Depending on the circumstances, this may be merely inconvenient, or humiliating.
13 - Acquire a new mental quirk (see *Quirks*, p. 162). This is the only way to acquire more than five quirks.
14, 15 - Lose 1d FP, and take 1d seconds of stun-don of fear.
16 - Seizure. You lose control of your body and fall to the ground in a fit lasting 1d minutes and cry, or do something else equally alarming for 1d minutes. At the end of that time, roll vs. unmodified Will once per minute to snap out of it.
20 - Faint bordering on shock, lasting for 4d minutes. Also, lose 1d FP.
21 - Panic. You run around screaming, sit down and cry, or do something else equally pointless for 1d minutes. At the end of that time, roll vs. unmodified Will once per minute to snap out of it.
22 - Acquire a -10-point Delusion (p. 130).
23 - Acquire a -10-point Phobia (p. 148) or other -10-point mental disadvantage.
24 - Major physical effect, set by GM: hair turns white, age five years overnight, go partially deaf, etc. In game terms, acquire -15 points worth of physical disadvantages (for this purpose, each year of age counts as -3 points).
25 - If you already have a Phobia or other mental disadvantage that is logically related to the frightening incident, your self-control number becomes one step worse. If not, or if your self-control number is already 6, add a new -10-point Phobia or other -10-point mental disadvantage.
26 - Faint for 1d minutes, as per 18, and acquire a new -10-point Delusion, as per 22.
27 - Faint for 1d minutes, as per 18, and acquire a new -10-point mental disadvantage, as per 23.
28 - Light coma. You fall unconscious, rolling vs. HT every 30 minutes to recover. For 6 hours after you come to, all skill rolls and attribute checks are at -2.
29 - Coma. As above, but you are unconscious for 1d hours. Then roll vs. HT. If the roll fails, remain in a coma for another 1d hours, and so on.
30 - Catatonia. Stare into space for 1d days. Then roll vs. HT. On a failed roll, remain catatonic for another 1d days, and so on. If you have no medical care, lose 1 HP the first day, 2 the second, and so on. If you survive and awaken, all skill rolls and attribute checks are at -2 for as many days as the catatonia lasted.
31 - Seizure. You lose control of your body and fall to the ground in a fit lasting 1d minutes and costing 1d FP. Also, roll vs. HT. On a failure, take 1d of injury. On a critical failure, you also lose 1 HT permanently.
32 - Stricken. You fall to the ground, taking 2d HP in the form of a mild heart attack or stroke.
33 - Total panic. You are out of control; you might do anything (the GM rolls 3d: the higher the roll, the more useless your reaction). For instance, you might jump off a cliff to avoid the monster. If you survive your first reaction, roll vs. Will to come out of the panic. If you fail, the GM rolls for another panic reaction, and so on!
34 - Acquire a -15-point Delusion (p. 130).
35 - Acquire a -15-point Phobia (p. 148) or other -15-point mental disadvantage worth -13 points.
36 - Severe physical effect, as per 24, but equivalent to -20 points of physical disadvantages.
37 - Severe physical effect, as per 24, but equivalent to -30 points of physical disadvantages.
38 - Coma, as per 29, and a -15-point Delusion, as per 34.
39 - Coma, as per 29, and a -15-point Phobia or other -15-point mental disadvantage, as per 35.
40 - As 39, above, but victim also loses 1 point of IQ permanently. This automatically reduces all IQ-based skills, including magic spells, by 1.

**CRITICAL SPELL FAILURE TABLE**

Roll 3d on the table below. If the result is inappropriate—or if it is the result that the caster intended—roll again. The GM is free to improvise instead of using the table. Improvisations should be appropriate to the spell and the situation, and should never kill the caster outright.

3 - Spell fails entirely. Caster takes 1d of injury.
4 - Spell is cast on caster (if harmful) or on a random nearby foe (if beneficial).
5-6 - Spell is cast on one of the casters companions (if harmful) or on a random nearby foe (if beneficial).
7 - Spell affects someone or something other than its intended target—friend, foe, or random object. Roll randomly or make an interesting choice.
8 - Spell fails entirely. Caster takes 1 point of injury.
9 - Spell fails entirely. Caster is stunned (IQ roll to recover).
10-11 - Spell produces nothing but a loud noise, bright flash of light, awful odor, etc.
12 - Spell produces a weak and useless shadow of the intended effect.
13 - Spell produces the reverse of the intended effect.
14 - Spell seems to work, but it is only a useless illusion. The GM should do his best to convince the wizard and his companions that the spell *did* work!
15-16 - Spell has the reverse of the intended effect, on the wrong target. Roll randomly.
17 - Spell fails entirely. Caster temporarily forgets the spell. Make an IQ roll after a week, and again each following week, until he remembers.
18 - Spell fails entirely. A demon or other malign entity appropriate to the setting appears and attacks the caster. (The GM may waive this result if, in *his opinion*, caster and spell were both lily-white, pure good in intent.)
TASK DIFFICULTY
This modifier is separate from modifiers for the culture, equipment, language, tech level, etc. of the person attempting the task, in that it applies to anyone who attempts the task. It is cumulative with all other modifiers.

-10 - Automatic. Tasks so trivial that the GM should waive the need for a success roll, except under extraordinary circumstances.
-8 or -9 - Trivial. Situations where failure is extremely unlikely, and would require incredibly bad luck.
-6 or -7 - Very Easy. Tasks where failure is possible, but would require bad luck.
-4 or -5 - Easy. Most mundane tasks, including rolls made by ordinary people at day-to-day jobs.
-2 or -3 - Very Favorable. Mildly risky tasks that most people would undertake without hesitation.
-1 - Favorable. Tasks that most people would hesitate at, due to the risk, but that a career adventurer would regard as easy.
0 - Average. Most adventuring tasks, and the majority of skill used under stress.
1 - Unfavorable. Stressful tasks that would challenge a novice adventurer, but not an old hand.
2 or +1 - Very Unfavorable. Stressful tasks that would challenge a professional. Skilled adventurers still routinely accept such risks!
4 or +2 - Hard. Tasks so challenging that even an expert will look for alternatives. A true "master" is still unlikely to feel challenged.
6 or +3 - Very Hard. Situations that even the masters might have second thoughts about.
8 or +4 - Dangerous. Tasks at which even the greatest masters expect to fail.
10 - Impossible. No sane person would attempt such a task. The GM may wish to forbid such attempts altogether.

Other Technological Skills: -1 per TL of difference between the skill and the equipment.

Familiarity
Unfamiliar with equipment: -2
Equipment from another Tech Level: add Familiarity penalty and Tech Level Modifiers.
Six or more familiarities for a given skill: roll against your skill. On a success, you may use the new device at no penalty.
Unfamiliar Culture: -3 to Carousing, Connoisseur, Criminology, Dancing, Detect Lies, Diplomacy, Fast-Talk, Games, Gesture, Heraldry, Intimidation, Leadership, Merchant, Poetry, Politics, Psychology, Public Speaking, Savoir-Faire, Sex Appeal, Sociology, Streetwise, and Teaching.

Geographical and Temporal Scope
The following penalties apply to skills such as Area Knowledge, Current Affairs (Regional), Geography (Regional), and History, when used outside your specialty.
Distance: use the penalties under Long-Distance Modifiers. At TL5 and above, the GM may choose to roll 3d against TL+1 (e.g., 9 or less at TL8) to ignore all distance penalties.
Time: use the Long-Distance Modifiers, substituting years for miles.
Tech Level differences: double the time modifier (a two-TL difference would be x4, etc.).

Area classes (from smallest to largest): Neighborhood; Village or Town; City; Barony, County, Duchy, or Small Nation; Large Nation; Planet; Interplanetary State; and Galaxy.
Knowing a larger area and wanting information on a smaller area: -2 for one class of difference, double for each additional class of difference.
Knowing one area and wanting information on a similar-sized area within the same larger area: use Long-Distance Modifiers.
Knowing small area and wanting information on larger area that surrounds it: -2 per class of difference.

Physiology Modifiers
These modifiers apply to the following skills: Body Language, Diagnosis, First Aid, Physician, Pressure Points, Pressure Secrets, and Surgery.
Species with similar physiology: -2 (human vs. Elf) to -4 (human vs. troll).
Species with very different physiology, but still from your world: -5. This includes all normal animals.
Utterly alien species: -6 or worse (GMs option).
Machine: No roll possible! These skills do not work at all on creatures with the Machine metatrait.
A successful roll against the relevant racial specialty of Physiology negates penalties.

Tech-Level Modifiers
IQ-Based Technological Skills: see below.

<table>
<thead>
<tr>
<th>Equipment's TL</th>
<th>Skill Penalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skills TL+4 or more</td>
<td>Impossible!</td>
</tr>
<tr>
<td>Skills TL+3</td>
<td>-15</td>
</tr>
<tr>
<td>Skills TL+2</td>
<td>-10</td>
</tr>
<tr>
<td>Skills TL+1</td>
<td>-5</td>
</tr>
<tr>
<td>Skills TL</td>
<td>0</td>
</tr>
<tr>
<td>Skills TL-1</td>
<td>-1</td>
</tr>
<tr>
<td>Skills TL-2</td>
<td>-3</td>
</tr>
<tr>
<td>Per extra -1 to TL</td>
<td>-2</td>
</tr>
</tbody>
</table>

Other Technological Skills: -1 per TL of difference between the skill and the equipment.

Equipment Modifiers
No equipment: -10 for technological skills, -5 for other skills. Note that many skills cannot be used at all without equipment!
Improved equipment: -5 for technological skills, -2 for other skills.
Basic equipment: No modifier. This is the case most of the time.
Good-quality equipment: +1. Costs about 5x basic price.
Fine-quality equipment: +2. Costs about 20x basic price.
Best equipment possible at your TL: +TL/2, round down (minimum +2). Not usually for sale!
If you have "basic" or better equipment that is not in perfect condition:
Missing important items: -1 per item.
Damaged equipment: -1 to -3.

Language Modifiers
Applies to Fast-Talk, Public Speaking, Research, Speed-Reading, Teaching, and Writing.
Broken Comprehension: -3
Accented Comprehension: -1
Artistic Endeavors (Poetry, Singing, etc.): Double these penalties!

Time Spent
Extra Time: 2x as long gives +1, 4x gives +2, 8x gives +3, 15x gives +4, and 30x gives +5.
Note that this bonus only applies if it would make sense to take extra time for the task at hand (GMs judgment).
Haste: -1 per 10% less time taken.
In a cinematic game, the GM might allow a single attempt at -10 to complete a task instantly.
Note that if a skill specifies time modifiers (for example, ceremonial magic), these override the generic modifiers above.

CRITICAL SUCCESS AND FAILURE
A roll of 3 or 4 is always a critical success.
A roll of 5 is a critical success if your effective skill is 15+.
A roll of 6 is a critical success if your effective skill is 16+.
A roll of 18 is always a critical failure.
A roll of 17 is a critical failure if your effective skill is 15 or less; otherwise, it is an ordinary failure.
Any roll of 10 greater than your effective skill is a critical failure: 16 on a skill of 6, 15 on a skill of 5, and so on.

SIZE MODIFIER AND REACH

<table>
<thead>
<tr>
<th>SM</th>
<th>Reach</th>
<th>SM</th>
<th>Reach</th>
</tr>
</thead>
<tbody>
<tr>
<td>+1</td>
<td>+0*</td>
<td>+6</td>
<td>+7</td>
</tr>
<tr>
<td>+2</td>
<td>+1</td>
<td>+7</td>
<td>+10</td>
</tr>
<tr>
<td>+3</td>
<td>+2</td>
<td>+8</td>
<td>+15</td>
</tr>
<tr>
<td>+4</td>
<td>+3</td>
<td>+9</td>
<td>+20</td>
</tr>
<tr>
<td>+5</td>
<td>+5</td>
<td>+10</td>
<td>+30</td>
</tr>
</tbody>
</table>

* A reach "C" weapon increases to reach 1, but there are no other effects.
QUICK REACTION TABLE

Roll 3 dice and apply any reaction modifiers.

0 or less: Disastrous. The NPC hates the characters and will act against them if it's convenient to do so; attacking, offering grossly unfair terms in a transaction, and so on.

1 to 3: Very Bad. The NPC dislikes the characters and will act against them if it's convenient to do so; attacking, offering grossly unfair terms in a transaction, and so on.

4 to 6: Bad. The NPC cares nothing for the characters and will act against them (as above), if he can profit by doing so.

7 to 9: Poor. The NPC is unimpressed. He may make threats, demand a huge bribe before offering aid, or something similar.

10 to 12: Neutral. The NPC ignores the characters as much as possible. He is totally uninterested. Transactions will go smoothly and routinely, as long as protocol is observed.

13 to 15: Good. The NPC likes the characters and will be helpful within normal, everyday limits. Reasonable requests will be granted.

16 to 18: Very Good. The NPC thinks highly of the characters and will be quite helpful and friendly, freely offering aid and favorable terms in most things.

19 or better: Excellent. The NPC is extremely impressed by the characters, and will act in their best interests at all times, within the limits of his own ability - perhaps even risking his life, wealth, or reputation.

GENERAL INJURY:
LOST HIT POINTS

Less than 1/3 your HP left - You are reeling from your wounds. Halve your Move and Dodge (round up).

0 HP or less - You are in immediate danger of collapse. In addition to the above effects, make a HT roll at the start of your next turn, at -1 per full multiple of HP below zero. Failure means you fall unconscious (or simply stop working, if you weren't truly alive or conscious in the first place); see Recovering from Unconsciousness (p. 423). Success means you can act normally, but must roll again every turn to continue functioning. *Exception:* If you choose Do Nothing on your turn, and do not attempt any defense rolls, you can remain conscious without rolling. Roll only on turns during which you attempt a defense roll or choose a maneuver other than Do Nothing.

-1xHP - In addition to the above effects, make an immediate HT roll or die. (If you fail by only 1 or 2, you're dying, but not dead - see Mortal Wounds, p. 423). If you succeed, you can still talk, fight, etc., as above (until you fail a HT roll and collapse). Roll again each time you suffer injury equal to a further multiple of your HP, whether as a result of one wound or many.

-5xHP - You die immediately. You have lost a total of 6 times your HP!

-10xHP - Total bodily destruction.

THROWING DISTANCE

1. Divide the object's weight in pounds by your Basic Lift to get the "weight ratio."
2. Find the weight ratio in the Weight Ratio column of the table below. If it falls between two values, use the higher value.
3. Read across to the Distance Modifier column and find the "distance modifier."
4. Multiply your ST by the distance modifier to find the distance in yards you can throw the object.

<table>
<thead>
<tr>
<th>Weight</th>
<th>Distance Modifier</th>
<th>Weight</th>
<th>Distance Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.05</td>
<td>3.5</td>
<td>2.0</td>
<td>0.30</td>
</tr>
<tr>
<td>0.10</td>
<td>2.5</td>
<td>2.5</td>
<td>0.25</td>
</tr>
<tr>
<td>0.15</td>
<td>2.0</td>
<td>3.0</td>
<td>0.20</td>
</tr>
<tr>
<td>0.20</td>
<td>1.5</td>
<td>4.0</td>
<td>0.15</td>
</tr>
<tr>
<td>0.25</td>
<td>1.2</td>
<td>5.0</td>
<td>0.12</td>
</tr>
<tr>
<td>0.30</td>
<td>1.1</td>
<td>6.0</td>
<td>0.10</td>
</tr>
<tr>
<td>0.40</td>
<td>1.0</td>
<td>7.0</td>
<td>0.09</td>
</tr>
<tr>
<td>0.50</td>
<td>0.8</td>
<td>8.0</td>
<td>0.08</td>
</tr>
<tr>
<td>0.75</td>
<td>0.7</td>
<td>9.0</td>
<td>0.07</td>
</tr>
<tr>
<td>1.0</td>
<td>0.60</td>
<td>10.0</td>
<td>0.06</td>
</tr>
<tr>
<td>1.5</td>
<td>0.40</td>
<td>12.0</td>
<td>0.05</td>
</tr>
</tbody>
</table>

MANEUVER TABLE

<table>
<thead>
<tr>
<th>Maneuver</th>
<th>Description</th>
<th>Active</th>
<th>Defense</th>
<th>Movement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aim</td>
<td>Aim a ranged weapon to get its Acc bonus.</td>
<td>Any*</td>
<td>Step</td>
<td>Step</td>
</tr>
<tr>
<td>All-Out Attack</td>
<td>Attack at a bonus or multiple times.</td>
<td>Any†</td>
<td>None</td>
<td>Half Move</td>
</tr>
<tr>
<td>All-Out Defense</td>
<td>Increased or double defense.</td>
<td>Any†</td>
<td>Varies</td>
<td>Varies</td>
</tr>
<tr>
<td>Attack</td>
<td>Attack unarmed or with a weapon.</td>
<td>Any</td>
<td>Step</td>
<td>Step</td>
</tr>
<tr>
<td>Change Posture</td>
<td>Stand up, sit down, etc.</td>
<td>Any</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Concentrate</td>
<td>Focus on a mental task.</td>
<td>Any*</td>
<td>Step</td>
<td>Step</td>
</tr>
<tr>
<td>Do Nothing</td>
<td>Take no action but recover from stun.</td>
<td>Any‡</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Evaluate</td>
<td>Study a foe prior to a melee attack.</td>
<td>Any</td>
<td>Step</td>
<td>Step</td>
</tr>
<tr>
<td>Feint</td>
<td>Fake a melee attack.</td>
<td>Any</td>
<td>Step</td>
<td>Step</td>
</tr>
<tr>
<td>Move and Attack</td>
<td>Move and attack at a penalty.</td>
<td>No Parry</td>
<td>Full Move</td>
<td>Full Move</td>
</tr>
<tr>
<td>Move</td>
<td>Do nothing but move.</td>
<td>Any</td>
<td>Full Move</td>
<td>Full Move</td>
</tr>
<tr>
<td>Ready</td>
<td>Prepare a weapon or other item.</td>
<td>Any</td>
<td>Step</td>
<td>Step</td>
</tr>
<tr>
<td>Wait</td>
<td>Hold yourself in readiness to act.</td>
<td>Any</td>
<td>Varies</td>
<td>Varies</td>
</tr>
</tbody>
</table>

* Taking an active defense may spoil your aim or concentration.
† Gives +2 to Dodge, Block, or Parry, or allows two defenses against each attack.
‡ Defenses are at -4 if taking Do Nothing due to stun.

LOST FATIGUE POINTS

Less than 1/3 your FP left - You are very tired. Halve your Move, Dodge, and ST (round up). This does not affect ST-based quantities.

0 FP or less - You are on the verge of collapse. If you suffer further fatigue, each FP you lose also causes 1 HP of injury. To do anything besides talk or rest, you must make a Will roll; in combat, roll before each maneuver other than Do Nothing. On a success, you can act normally, but you suffer the usual 1 HP per FP lost. On a failure, you collapse, incapacitated, and can do nothing until you recover to positive FP. On a critical failure, make an immediate HT roll. If you fail, you suffer a heart attack; see Mortal Conditions (p. 429).

1xFP - You fall unconscious. While unconscious, you recover lost FP at the same rate as for normal rest. You awaken when you reach positive FP. Your FP can never fall below this level. After this stage, any FP cost comes off your HP instead!

DAMAGE TABLE

<table>
<thead>
<tr>
<th>ST</th>
<th>Thrust</th>
<th>Swing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1d-6</td>
<td>1d-5</td>
</tr>
<tr>
<td>2</td>
<td>1d-6</td>
<td>1d-5</td>
</tr>
<tr>
<td>3</td>
<td>1d-5</td>
<td>1d-4</td>
</tr>
<tr>
<td>4</td>
<td>1d-5</td>
<td>1d-4</td>
</tr>
<tr>
<td>5</td>
<td>1d-4</td>
<td>1d-3</td>
</tr>
<tr>
<td>6</td>
<td>1d-4</td>
<td>1d-3</td>
</tr>
<tr>
<td>7</td>
<td>1d-3</td>
<td>1d-2</td>
</tr>
<tr>
<td>8</td>
<td>1d-3</td>
<td>1d-2</td>
</tr>
<tr>
<td>9</td>
<td>1d-2</td>
<td>1d-1</td>
</tr>
<tr>
<td>10</td>
<td>1d-1</td>
<td>1d</td>
</tr>
<tr>
<td>11</td>
<td>1d-1</td>
<td>1d+1</td>
</tr>
<tr>
<td>12</td>
<td>1d-1</td>
<td>1d+2</td>
</tr>
<tr>
<td>13</td>
<td>1d</td>
<td>2d-1</td>
</tr>
<tr>
<td>14</td>
<td>1d</td>
<td>2d</td>
</tr>
<tr>
<td>15</td>
<td>1d+1</td>
<td>2d+1</td>
</tr>
<tr>
<td>16</td>
<td>1d+1</td>
<td>2d+2</td>
</tr>
<tr>
<td>17</td>
<td>1d+2</td>
<td>3d-1</td>
</tr>
<tr>
<td>18</td>
<td>1d+2</td>
<td>3d</td>
</tr>
<tr>
<td>19</td>
<td>2d-1</td>
<td>3d+1</td>
</tr>
<tr>
<td>20</td>
<td>2d-1</td>
<td>3d+2</td>
</tr>
<tr>
<td>21</td>
<td>2d</td>
<td>4d-1</td>
</tr>
<tr>
<td>22</td>
<td>2d</td>
<td>4d</td>
</tr>
<tr>
<td>23</td>
<td>2d+1</td>
<td>4d+1</td>
</tr>
<tr>
<td>24</td>
<td>2d+1</td>
<td>4d+2</td>
</tr>
<tr>
<td>25</td>
<td>2d+2</td>
<td>5d-1</td>
</tr>
<tr>
<td>26</td>
<td>2d+2</td>
<td>5d</td>
</tr>
<tr>
<td>27</td>
<td>3d-1</td>
<td>5d+1</td>
</tr>
<tr>
<td>28</td>
<td>3d-1</td>
<td>5d+1</td>
</tr>
<tr>
<td>29</td>
<td>3d</td>
<td>5d+2</td>
</tr>
<tr>
<td>30</td>
<td>3d</td>
<td>5d+2</td>
</tr>
<tr>
<td>35</td>
<td>4d-1</td>
<td>6d+1</td>
</tr>
<tr>
<td>40</td>
<td>5d</td>
<td>7d+1</td>
</tr>
<tr>
<td>50</td>
<td>5d+2</td>
<td>8d-1</td>
</tr>
<tr>
<td>55</td>
<td>6d</td>
<td>8d+1</td>
</tr>
<tr>
<td>60</td>
<td>7d-1</td>
<td>9d</td>
</tr>
<tr>
<td>65</td>
<td>7d+1</td>
<td>9d+2</td>
</tr>
<tr>
<td>70</td>
<td>8d</td>
<td>10d</td>
</tr>
<tr>
<td>75</td>
<td>8d+2</td>
<td>10d+2</td>
</tr>
<tr>
<td>80</td>
<td>9d</td>
<td>11d</td>
</tr>
<tr>
<td>85</td>
<td>9d+2</td>
<td>11d+2</td>
</tr>
<tr>
<td>90</td>
<td>10d</td>
<td>12d</td>
</tr>
<tr>
<td>95</td>
<td>10d+2</td>
<td>12d+2</td>
</tr>
<tr>
<td>100</td>
<td>11d</td>
<td>13d</td>
</tr>
</tbody>
</table>