EXPLOSIVES / ARTILLERY:

Rifle Grenades, hand grenades, satchel charges, dynamite, landmines, and mortars all affect a certain area upon exploding. The explosions cover a circular area (see burst circle size chart below). Rifle grenades, hand grenades, dynamite, and satchel charges can all be thrown. Rifle grenades and mortars are fired, of course. Dynamite and satchel charges can be detonated as stationary explosives (under bridges or vehicles, etc). Land mines are typically buried and await pressure detonation.

Before throwing or firing explosives, the player must indicate precisely where he's aiming. Roll to hit with the projectile. If he rolls a "hit" then the throw is on target. next, he rolls damage (see damage section below). If he missed with the grenade, then he must roll a d6 to determine where it landed (high, low, short, long). Consult the table below. A hit is the "1 zone". Obviously this is the area impacted if the player rolled a hit. Otherwise, roll the d6 to see where it landed and disregard a roll of 1 (because we already know he missed, right?). Move the burst circle 1/2 diameter from the center in the direction indicated. If the player rolls a "6" then it is a wide miss that explodes harmlessly or simply does not detonate (the charge had a bad fuse). See the Burst Circle Variation chart below for further clarification.

In some circumstances, the burst circle approach is inapplicable, such as where the target is an enclosed 8"x 8" room and the grenade is tossed through the door - if the player successfully gets the grenade into the room, it'll be a hit! Be flexible where circumstances dictate and use some common sense.

For the projectile to pass through an arpeture such as a loophole, door, or window, the shot must be a direct hit, or the attacker must be in actual contact with (standing immediately to the side of, for instance) the arpeture. Foxholes are considered "arpertures" and require a direct hit to injure the occupants.

For called-in artillery or an air strike, use the burst circle (16 inch naval guns probably wouldn't want to shoot at targets within sandbox GI Joe playing distances, so let's not worry about the "big guns"). A called-in artillery barrage may fire twice per turn (and lands after all other firing has ended that turn).

Consult the DAMAGE section to determine the effect of the explosion.

Burst Circle Size:

Grenades, Satchel Charge	15"
Mortar, Land Mine, Artillery, Air Strike	20"

Burst Circle Variation:

1 (Direct Hit!)

6 Harmless Miss
(or failure to detonate)
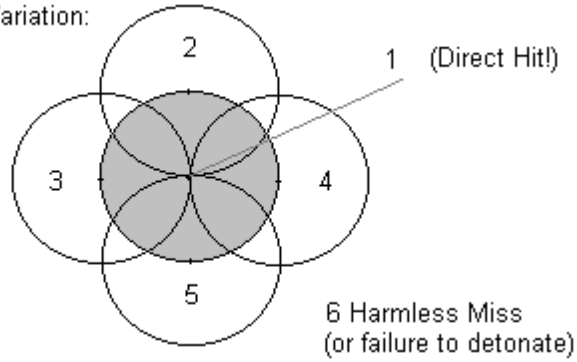
Note that if the roll shows a "miss", then place the burst circle so that it narrowly misses the intended target and extends in the direction indicated in the graphic above.

FLAMETHROWERS:

   For Flamethrower, use triangle of wire, string, or some other suitable material, that is 150 inches long, and 20 inches across the base. The apex of the angle is placed at the nozzle of the flamethrower and the center of the wide end centered on the target (if hit). All figures and structures within the triangle may be affected. Roll to hit in the traditional manner. If the shot is a hit, center the far edge of the triangle on the target to determine how much collateral damage was done. If the shot is a "miss" roll a six-sided die: on a roll of 1-3, place the end of the triangle such that it just misses the target and extends to the right; on a roll of 4-6, place the "near miss" to the left of the target.

150"   20"   1-3 / Hit / 4-6

Flamethrower
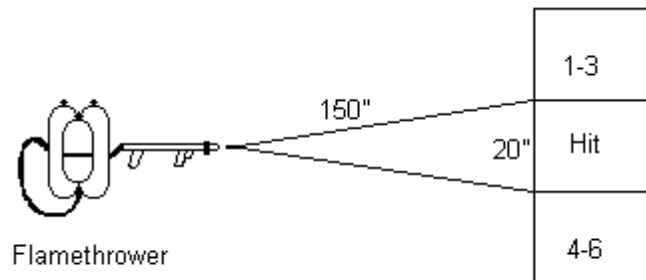
DAMAGE:

  By weapon:

   Shotgun - Use small arms damage table, below, only treat the shotgun blast as 3 hits at short range, 2 hits at medium range, and 1 hit at long/extreme ranges.

   HE Burst (grenade, rifle grenade, artillery, satchel charge, or dynamite) Burst - 1-10% killed, 11-35% Incapacitated, 36-50% Wounded, 51-00% Superficial *

   Incendiary Burst - 5% killed, 6-35% Incapicatated, 36-50% Wounded, 51-00% Superficial *

   Flamethrower - 10% killed, 11-50% Incapacitated, 51-90% Wounded, 90-00% Superficial *

   Flamethrower, if man wearing it is hit - 50% it exploded, killing bearer & creating 15" Incendiary Burst circle (see above for damage to anyone within the burst circle)*

   Claymore mine - 30" burst circle similar to the one discussed in the Artillery section. Only 50% of the circle is in the explosion zone, however. Ignore damage to anything located *behind* the claymore. Treat as HE Burst (see above).

   Land mine - Burst circle similar to the one discussed in the Artillery section, only it is 20" in diameter.

Buildings, wooden, or unarmored vehicle
- in HE burst, 10% destroyed, 11-25% damaged
- in incendiary or flame triangle 50% on fire
Buildings, stone or brick, or armored vehicle
- in HE burst, 10% damaged
- in Incendiary or flame triangle 25% on fire
Bazooka/LAW/TOW/Stinger:
- on wooden structure/bldg - 30% destroyed, 31-60% damaged
- on stone or brick bldg - 20% destroyed, 21-41% damaged
- on infantry, treat as HE burst if shooter hits the target
- on vehicle, see Armored Fighting Vehicle Damage section

Figures in destroyed Building: 20% killed, 50% incapacitated, 80% wounded.

Note: although the explosives each cause their own severity of wounds, you may consult the Figure Damage (Small Arms Fire) table to determine where the figure was wounded. In this case, only pay attention to the "Area Affected" column (as the effect is determined by the odds above according to the type of explosives or incendiary).

FIGURE DAMAGE:

After determining that a hit occurred, roll on this table to determine the hit location. After determining the hit location, roll to determine the severity of the hit. (If using the "Hero Rule" described in the EXPERIENCE section, add 10 to the severity roll. Regardless of the number or severity of wounds, the Hero will not perish - at most the Hero will only be incapacitated for the duration of the game.)

Hit Location	Area Affected	Killed %	Incapacitated %	Wounded %	Superficial Wound %
1-5	Head, no Helm	1-10	11-80	81-95	96-00
	Head w/Helm	5	6-60	61-75	76-00
6-20	Chest (or back)	1-5	6-45%	46-75	96-00
21-30	Abdomen	-	1-5%	6-95	96-00
31-40	R. Upper Arm	-	1	2-95	96-00
41-45	R. Lower Arm	-	1	2-95	96-00
46-50	R. Hand	-	1	2-95	96-00
51-60	L. Upper Arm	-	1	2-95	96-00
61-65	L. Lower Arm	-	1	2-95	96-00
66-70	L. Hand	-	1	2-95	96-00
71-75	R. Upper Leg	-	1-2	3-95	96-00
76-80	R. Lower Leg	-	1-2	3-95	96-00
81-85	R. Foot	-	1	2-95	96-00
86-90	L. Upper Leg	-	1-2	3-95	96-00
91-95	L. Lower Leg	-	1-2	3-95	96-00
96-00	L. Foot	-	1	2-95	96-00

* Note: be creative when circumstances dictate. A soldier in a foxhole is unlikely to be hit in the foot by a sniper. If the part of the body ostensibly "hit" is not even exposed, then re-roll until the hit location is in an area that is logical under the circumstances.

EFFECT OF FIGURE DAMAGE:

Incapacitated - out of action. 20 turns to get aid or will die; can not aid self. Can not move self.

Wounded - lose use of limb hit; if head wound, c/n aim as well (chance to hit minus 50%); if chest or abdomen hit, movement rate is cut by 75%, grenade throw range minus 75%. Aid required within 20 turns or it becomes incapacitation. Can aid self if have skill and equipment (aid kit), takes 5 turns for field dressing/bandage.

Superficial Wound - no penalties. Aid required within 20 turns or it becomes a wound. Can aid self even without skill, but still must have the equipment (aid kit/bandage).

2 "Incapacitated" injuries = death
2 "Wounds" = incapacitated
2 "Superficials" = wound

If you are using the "Hero Rule" (outlined above in EXPERIENCE section), then add 10 to the damage roll. This should keep the kids' main character in play longer. Heroes do not die, they only become incapacitated for the duration of the game. A player's initial propensity to place the Hero in impossible situations causes the Hero to become incapacitated fairly quickly in the game, so players soon learn that the "Hero Rule" doesn't make their favorite character invincible, and they become less reckless.

HAND TO HAND COMBAT:

Weaponless combat presumes that neither combatant is armed with a weapon. If either is armed, then the Primitive Weapon section applies to the attack by the party so armed. Who attacks first? Someone has to take the initiative. Use this heirarchy:

HTH (Hand to Hand) Initiative:
1. Unwounded figure attacks before wounded
2. Stationary man before moving man
3. Veteran before Average, Average before Recruit
4. If all is *still* equal, each player makes a percentile roll, higher number fires first.

The attacker chooses his next HTH action from list below:

Do you want to:

Overpower (tackle if running, knock to ground if standing, pull or push from seat if seated)

Strike (with fists or feet like pugilists or karatekas)

Wrestle (contacting opponent to try for a hold, lock, or flip)

These rules presume that all combatants are fit and muscular. If circumstances dictate, vary from these rules as appropriate. After selecting the chosen action, consult the appropriate table below:

Overpower:

Roll 1d10:

1	Opponent dodged - counts as a miss for pushing and a slipped grasp for pulling
2-5	Opponent grasped, but was not overpowered - you're grabbing onto them - and it's their turn next!
6-7	Opponent grasped **and** overpowered (knocked down or pulled from seat, or whatever circumstances dictate) but gains initiative - it's their turn next!
8-9	Opponent grasped and overpowered - roll 1d6 each, highest number takes next turn. Maybe you'll get a chance to hit twice in a row! (Note: If you're using the OPTIONAL RULES: PERSONAE, MANPOWER, RANK, and SKILLS, then the figure with the highest Agility goes next!)
0	Opponent grasped and overpowered - you have the next turn - lucky you! Two turns in a row!

Strike (with fists or feet):

Roll 1d10:

1	Miss - you're off balance - defender gets a free swing at the

	attacker!
2-5	Miss - both roll 1d6 to see who swings next. (Note: If you're using the OPTIONAL RULES: PERSONAE, MANPOWER, RANK, and SKILLS, then the figure with the highest Agility goes next!)
6-9	Hit - you're off balance though, so each party rolls 1d6 to see who gets the next turn (Note: If you're using the OPTIONAL RULES: PERSONAE, MANPOWER, RANK, and SKILLS, then the figure with the highest Agility goes next!)
0	Hit - you've maintained your balance and automatically get to strike again!

Wrestle:

Roll 1d10:

1	Attempted hold slips - opponent strikes next
2-8	Hold/flip (or break hold) successful, but you're off balance. Both parties roll 1d6, higher number strikes next (flip) may break hold (of held). (Note: If you're using the OPTIONAL RULES: PERSONAE, MANPOWER, RANK, and SKILLS, then the figure with the highest Agility goes next!)
9-0	Hold/flip successful - attack again!

DAMAGE from Hand to Hand Combat:

Every two successful actions (hits, kicks, overpowers, or holds) that occur in a row will count as a single "Superficial" damage as per the section on "Figure Damage."

(Explanatory Note: if 2 Superficials = 1 Wound, and 2 Wounds = Incapacitation, then 4 Superficials will result in Incapacitation. If it takes two successful actions to result in a Superficial, then it takes 8 HTH events to result in Incapacitation, which is a long time in this game. This should set the stage for some good fist fights reminiscent of early John Wayne movies and Bonanza episodes.)

PRIMITIVE WEAPON USE:

Unless play factors clearly indicate that one party has initiative (and goes first), all parties use the HTH Initiative hierarchy as articulated above (and restated here for your convenience):

HTH (Hand to Hand) Initiative:
1. Hero before non-Hero
2. Unwounded figure attacks before wounded
3. Stationary man before moving man
4. Veteran before Average, Average before Recruit
5. If all is *still* equal, each player makes a percentile roll, and the higher number attacks

Ranges are presumed to be at extremely close (contact) range.

See the table below:

Roll:	1 - 10	11 - 50	51 - 70	71 - 90	91 - 00
Bayonet (fixed) / Spear Knife Knuckles Club / Staff Entrenching Tool Machete / Sword / Axe	miss - defender strikes next	miss - roll for initiative	hit - Superficial damage - roll for initiative	hit - defender Wounded - attacker strikes again	hit - defender Incapacitated

*Note: characters with the applicable primitive weapon skill move one column to the right.

To determine hit location, consult the Figure Damage table. As with all of these rules, make adjustments as necessary to reflect some semblance of reality. For instance, an attacker isn't likely to bayonet the defender in the foot if the defender is below the attacker in a deep foxhole. A little common sense can go a long way toward simulating more realistic combat.

Optional Surprise Rule: add +10% to attacker's roll if target is Surprised. For example, hiding around a corner, stealthy Joe waits to club the enemy sentry as he rounds the blind corner. What if the surprise fails? What if Joe's intended victim spots his shadow before he strikes? We can simulate this encounter (and any other where Surprise is an issue) as follows: the well-hidden attacker makes a percentage roll, and must roll 75% or less for complete surprise. If the roll is greater, then Joe goofed, and the victim is on the alert - thus requiring the application of normal initiative rules:

1. Hero before non-Hero
2. Unwounded figure attacks before wounded
3. Stationary man before moving man
4. Veteran before Average, Average before Recruit
5. If all is *still* equal, each player makes a percentile roll, and the higher number strikes first.

LIGHTS:

Like firearms, lights have range, too. Should your soldiers endeavor to sneak past a guard tower with a searchlight, it might be helpful to know how large the beam of light *is* and how far the illumination is cast.   Consult the table below for common varieties of light sources.

Light Type	Range	Beam Width
Penlight (2xAA type)	12"	24"
Flashlight (3xD type)	36"	36"
Tac-Light (MP-5 type)	48"	24"
Handheld Spotlight	84"	42"
Headlights (vehicle)	84"	48"
Searchlight (veh mounted type)	264"	100"

Note: the beam of light uses the same logic as the flamethrower... the length of the triangle is the Range, and the beam's widest point is the Beam Width. Anything within the beam is clearly visible to onlookers.