GAME MASTERING

CHAPTER CONTENT

MONSTER CREATION
MORE TO COME....

Learn how to Game Master and create various challenges for your players.

You can fast track this chapter by prioritizing the summaries and text in the yellow highlight panels.

MONSTER CREATION

MONSTER CREATION SUMMARY

- Use the monster by level table as rough guide
- Follow the grade limitations when creating a monster
- Calculate Danger Rating
- Monster creation is an art, it takes experience & strong concept to create a great adversary

Standard Monster By Level

The table below displays the standard monsters that correspond to the player characters' level. Four player characters are expected to be able to defeat four normal-ranked enemies and one boss-ranked enemy that correspond to their level (a total of 5 enemy units & ~~7~~ morale tokens).

MONSTER BY LEVEL MATCH-UP

PC LEVEL	ENEMY MASTERY	DEF	P & M FORTITUDES	HP	ATTACK DMG (MAX/HIT)	(EFFECT BNS MAX)	DANGER RATING (GROUP)
1	+2	8	12 Total (e.g. 6 & 6)	22	8 (9)	(6)	55 (~~770~~)
2	+2	8	12 Total (e.g. 6 & 6)	24	9 (9)	(6)	~~70~~ (980)
3	+2	8	12 Total (e.g. 6 & 6)	26	10 (9)	(6)	80 (1,120)
4	+2	8	12 Total (e.g. 6 & 6)	34	14 (9)	(6)	140 (1,960)
5	+3	9	14 Total (e.g. ~~7~~ & ~~7~~)	55	14 (~~17~~)	(14)	350 (4,900)
6	+3	9	14 Total (e.g. ~~7~~ & ~~7~~)	60	15 (~~17~~)	(14)	400 (5,600)
~~7~~	+3	9	14 Total (e.g. ~~7~~ & ~~7~~)	65	16 (~~17~~)	(14)	450 (6,300)
8	+3	9	14 Total (e.g. ~~7~~ & ~~7~~)	~~70~~	20 (~~17~~)	(14)	600 (8,400)
9	+4	10	16 Total (e.g. 8 & 8)	100	20 (25)	(22)	1,350 (18,900)
10	+4	10	16 Total (e.g. 8 & 8)	110	21 (25)	(22)	1,550 (~~21,700~~)
11	+4	10	16 Total (e.g. 8 & 8)	120	22 (25)	(22)	~~1,775~~ (24,850)
12	+4	10	16 Total (e.g. 8 & 8)	130	28 (25)	(22)	~~2,375~~ (33,250)
16+	+5	11	18 Total (e.g. 9 & 9)	130	30 (31)	(30)	2,950 (41,300)

Their individual Danger Rating may seem low when compared to the Player Characters' combat rating, but when added together and having by the enemy number multiplier applied, each of those monsters would have their DR Multiplied by 14 ((1+1+1+1+3) × 2).

This table should only be used as a rough guide to design combat situations since it only takes only takes damage dealing ability and survival into account.

Attack DMG - This represents the sum of the monster's Major Attack and Follow-up attack damage.

Max/Hit - This is the recommended damage for the monster's individual hit, so that unarmored PCs won't be brought down by a single attack, unless the monster scores a critical hit. If the monsters' Attack DMG is higher than this, then divide it into an attack & follow-up attacks.

Effect Bonus Max - This is the recommended bonus damage for single or zone effects so that the weakest PCs won't be brought down by a single physical or mental effect roll, unless the monster rolled 12 on its 2d6 dice.

Limitations By Grades

A monster's Grade is classified by its Danger Rating. For each grade, there are rules and limits for their creation to prevent them from becoming too deadly or take too long to defeat. This is not a hard rule, but a guidance. You can break this rule, if you want to create a very specific experience.

COPPER GRADE (DR: 1 - 300)

FOR COMBAT ROLL	+2	+3	+4
ATTACK DMG MAX	14	12	10
MAX/HIT	9	8	7
EFFECT BNS MAX	6	5	4

FOR DEFENSE OF	8	9	10
HP MAX	80	62	44
MP MAX	40	30	22
FORTITUDE TTL	12	14	16

SILVER GRADE (DR: 301 - 1,200)

FOR COMBAT ROLL	+3	+4	+5
ATTACK DMG MAX	20	18	16
MAX/HIT	17	16	15
EFFECT BNS MAX	14	13	12

FOR DEFENSE OF	9	10	11
HP MAX	160	124	88
MP MAX	80	62	44
FORTITUDE TTL	14	16	18

GOLD GRADE (DR: 1,201 - 4,800)

FOR COMBAT ROLL	+4	+5	+6
ATTACK DMG MAX	28	26	24
MAX/HIT	25	24	23
EFFECT BNS MAX	22	21	20

FOR DEFENSE OF	10	11	12
HP MAX	300	234	164
MP MAX	150	30	22
FORTITUDE TTL	16	18	20

GOLD GRADE+ (DR: 4,801 - 10,000)

FOR COMBAT ROLL	+5	+6	+7
ATTACK DMG MAX	36	34	32
MAX/HIT	31	30	29
EFFECT BNS MAX	30	29	28

FOR DEFENSE OF	11	12	13
HP MAX	300	234	164
MP MAX	150	30	22
FORTITUDE TTL	18	20	22

GOLD GRADE++ (DR: 10,001 & 100,000)

Most limitations can be ignored for Gold Grade++ monsters. But try to keep the MAX/HIT limit for normal attacks. Also keep in mind that a single normal monster with DR 100,000 is considered to be a Very Hard Combat Situation for a group of 5 PCs of level 16 and above.

It is possible to create even stronger monsters (Gold Grade+++), but balancing it for a meaningful combat situation would be very difficult.

Calculating Monster/NPC Danger Rating

To calculate a monster or NPC's danger rating, use the following formula:

Effective HP × Effective Damage / 3

Effective HP: A monster's effective HP is the equivalent amount of HP it would have compared to the most basic monster with 8 defense. To calculate this, just multiply its HP by the Defense HP Multiplier (See the Defense HP Multiplier table). If it doesn't have any HP then use its MP instead. Each Barrier Token a monster posseses at the start of combat is considered as 5HP. For regenerating barriers, multiply the regeneration number by 3, as monsters are expected to last 3 rounds.

DEFENSE HP MULTIPLIER

ENEMY DEFENSE	HP MULTIPLIER
5	0.63
6	0.71
7	0.82
8	1.00
9	1.29
10	1.83
11	2.75
12	4.49
13	8.21
14	17.55
15	19.79
16	23.39
17	27.57

Effective Damage: A monster's effective damage is the equivalent of the amount of damage it could do to a level 1 PC with 8 defense. To Calculate the effective damage it deals in a turn.

If it has more than one method of dealing damage, such as (A) one zone effect damage and one follow up attack or (B) one major attack and multiple follow-up attacks, then use the method that deals the most damage. Use the relevant Attack DMG Table and Effect BNS Table to calculate the effective damage.

If a monster can make simultaneous attack, then multiply the effective damage by the number of targets it can attack at a time.

If the Effect damage affects a whole zone, then multiply the number by 3

Ignore the specials, because it is generally intended to deal 4-5 times the damage or create a disadvantageous situation for the PCs that's hard to quantify.

EFFECTIVE ATTACK DAMAGE

DMG / ATTK BNS	+0	+1	+2	+3	+4	+5	+6	+7	+8
ATTACK DMG: 0	0.67	1.11	1.72	2.47	3.33	4.28	5.28	6.28	7.28
ATTACK DMG: 1	1.11	1.72	2.47	3.33	4.28	5.28	6.28	7.28	8.28
ATTACK DMG: 2	1.56	2.33	3.22	4.19	5.22	6.28	7.28	8.28	9.28
ATTACK DMG: 3	2.00	2.94	3.97	5.06	6.17	7.28	8.28	9.28	10.28
ATTACK DMG: 4	2.44	3.56	4.72	5.92	7.11	8.28	9.28	10.28	11.28
ATTACK DMG: 5	2.89	4.17	5.47	6.78	8.06	9.28	10.28	11.28	12.28
ATTACK DMG: 6	3.33	4.78	6.22	7.64	9	10.28	11.28	12.28	13.28
ATTACK DMG: 7	3.78	5.39	6.97	8.5	9.94	11.28	12.28	13.28	14.28
ATTACK DMG: 8	4.22	6.00	7.72	9.36	10.89	12.28	13.28	14.28	15.28
ATTACK DMG: 9	4.67	6.61	8.47	10.22	11.83	13.28	14.28	15.28	16.28
ATTACK DMG: 10	5.11	7.22	9.22	11.08	12.78	14.28	15.28	16.28	17.28
ATTACK DMG: 11	5.56	7.83	9.97	11.94	13.73	15.28	16.28	17.28	18.28
ATTACK DMG: 12	6.00	8.44	10.72	12.8	14.68	16.28	17.28	18.28	19.28
ATTACK DMG: 13	6.45	9.05	11.47	13.66	15.63	17.28	18.28	19.28	20.28
ATTACK DMG: 14	6.89	9.66	12.22	14.52	16.58	18.28	19.28	20.28	21.28
ATTACK DMG: 15	7.34	10.27	12.97	15.38	17.53	19.28	20.28	21.28	22.28
ATTACK DMG: 16	7.78	10.88	13.72	16.24	18.48	20.28	21.28	22.28	23.28
ATTACK DMG: 17	8.23	11.49	14.47	17.1	19.43	21.28	22.28	23.28	24.28
ATTACK DMG: 18	8.67	12.1	15.22	17.96	20.38	22.28	23.28	24.28	25.28
ATTACK DMG: 19	9.12	12.71	15.97	18.82	21.33	23.28	24.28	25.28	26.28
ATTACK DMG: 20	9.56	13.32	16.72	19.68	22.28	24.28	25.28	26.28	27.28
DMG Increment:	(0.45)	(0.61)	(0.75)	(0.86)	(0.95)	(1.00)	(1.00)	(1.00)	(1.00)

EFFECTIVE EFFECT DAMAGE

EFFECT BONUS	+0	+1	+2	+3	+4
EFFECT BNS: 0	1.56	2.28	3.11	4.03	5.00
EFFECT BNS: 1	2.28	3.11	4.03	5.00	6.00
EFFECT BNS: 2	3.11	4.03	5.00	6.00	7.00
EFFECT BNS: 3	4.03	5.00	6.00	7.00	8.00
EFFECT BNS: 4	5.00	6.00	7.00	8.00	9.00
EFFECT BNS: 5	6.00	7.00	8.00	9.00	10.00
EFFECT BNS: 6	7.00	8.00	9.00	10.00	11.00
EFFECT BNS: 7	8.00	9.00	10.00	11.00	12.00
EFFECT BNS: 8	9.00	10.00	11.00	12.00	13.00
EFFECT BNS: 9	10.00	11.00	12.00	13.00	14.00
EFFECT BNS: 10	11.00	12.00	13.00	14.00	15.00
DMG Increment:	(1.00)	(1.00)	(1.00)	(1.00)	(1.00)

*The damage increment of effect damage is easy to calculate. Each additional effect roll bonus and effect damage bonus would increase the effective damage by 1. A quick formula used to calculate effective damage is: (**Effect Damage Bonus +1**)*

Multiply, Divide and Round Down: To get the final Danger Rating of a monster, multiply its **Effective HP** by its **Effective Damage** and divide the result by 3. Following that, round the result down to the nearest 5 if it's under 200 and round it to the nearest 25 if the result is 200 or higher. This number is not an exact science. If you think that the creature deserve higher or lower number due to their gimmick, then adjust the number as you deem appropriate.

Using the Bale Weasel as example, here is how Danger Rating is calculated:

Effective HP: 40 x 1.83 = 73.2

Effective Damage:

- Claws: (3 x 6 = 18 Dmg) (+4 attack) Effective damage 20.33
- Razor Spin: (1 + 4 + 6) x 3 = 33 **(Higher)**

Danger Rating: (73.2 x 33) / 3 = 800 (805.2 rounded to the nearest 25)

BALE WEASEL (Nickname: Sickle)

Silver Grade Fiend, Animal
***Size:** Medium, **Speech:** No, **Danger Rating:** 800*

TURN SPEED: 6 **MOV:** 20m/40m (2zone/4zone) Land
HP: 40 **MP:** 20 **Morale T:** 1 (Normal)
DEF: 10 **P.Fort:** 10 **M. Fort:** 6

MASTERY B.	STR	AGI	AWA	EMP
+4	2	4	3	1

Masteries: Sports 8, Thievery 8, Cheap Shot

Analyze: Information 10, Psychology 10, Thaumaturgist Kit 10, Chemist Kit 10
Falter: HP 50% and below
(Behaviour Change: Starts hissing menacingly)
Neutralize 1: Scare Away: Intimidate 20 (10 falter)
Neutralize 2: Chemistry Kit 20 (10 falter)

ACTIONS Major 1 minor 2

ATTACKS & EFFECTS

Claw (Major Action): *Melee attack, range: 0, +4 attack, 6 HP Sharp Unarmed Combat damage.*

Claw (minor action, 2 follow up after Shred Major Action): *Melee attack, range: 0, +2 attack, 6 HP Sharp Unarmed Combat damage.*

Razor Spin (Major Action): Zone physical effect roll, range: 0-1, Size: 5m sphere (1 zone), +4 effect, +6 HP Sharp Unarmed Combat damage reduced by the target's physical fortitude.

SPECIAL

Dirty Trick (Free Action, 2 danger tokens): *Make a Cheap Shot manuever roll at a target.*

FEATURE

Free Movement: *This unit can't be targetted by opportunity strikes. It can also move without restriction along with the medium or smaller sized units it's grappling.*

Other Considerations

Monster design is an art. The guide above only help you create a monster that's relatively threatening. It takes more than maths to create monsters that provide memorable and interesting experience for your players.

Use the folowing considerations when designing your monsters:

HP vs MP: The main metric for monster survivability is their HP. Generally, their MP should be half of their HP. But for monsters with low HP for their grade (roughly below 20% of Max HP Limit), their MP should be doubled if it is thematically relevant.

Turn Speed: In general, monsters that use mainly ranged attacks & effects should have lower turn speed, in the range of 3 or below so that the PC spellcasters get the chance to move before they're taken out.

Monsters that focuses on melee attacks should move earlier, at turn speed 4 and above. The more damage they can do among monsters of their grade, the slower they should be. This also applies to ranged monsters.

Attributes & Masteries: There is more freedom in seetting Attribues, but a monster's mastery is based on the combat roll bonus you set for it.

Neutralization: A monster's neutralization option is based mainly on their type. They should have at least 1 neutralization option that correspond to their type. The relevant rolls should be at comprised of at least 1 skill roll and 1 toolkit roll.

Specials: Generally, 5 tokens damage dealing specials should be roughly 4-5 times as powerful as their Attack DMG. Reduce the power proportinally according to the number of tokens required to activate it. But not all specials need to deal damage. Be creative and create a spectacular special that provides interesting experience for the players.

Features: This is where you give a monster distinct functions and abilities. Create features that allow it to fulfil a specific role in a group and make it easy to understand for the players.

Group Synergy: Monsters should not be designed in isloation. Consider the theme of the combat situation you want to create first then come up with the monsters that allows you to achieve your goal.

Monster & Task Upgrade Conversion

There are simple formulas for converting monsters to a higher grade version. These formulas can be used to provide more challenge for players and it is an alternative method to downgrading Player Characters.

COPPER to SILVER:

- **HP & MP:** multiply by 2
- **Defense & Fortitudes:** add 1
- **Combat Rolls (Attack & Effect):** add 1
- **Attack Damage:** multiply by 1.5 (round down)
- **Danger Rating:** multiply by 4
- **Task Difficulty (Hazards and others):** add 1

SILVER to GOLD:

- **HP & MP:** multiply by 2
- **Defense & Fortitudes:** add 1
- **Combat Rolls (Attack & Effect):** add 1
- **Attack Damage:** multiply by 1.33 (round down)
- **Danger Rating:** multiply by 4
- **Task Difficulty (Hazards and others):** add 1

COPPER to GOLD:

- **HP & MP:** multiply by 4
- **Defense & Fortitudes:** add 2
- **Combat Rolls (Attack & Effect):** add 2
- **Attack Damage:** multiply by 2
- **Danger Rating:** multiply by 16
- **Task Difficulty (Hazards and others):** add 2

The monster neutralization TD is not raised to encourage more mission pllanning and the use of Skills and Toolkits.

Horde Creation

To create horde units, start with a normal unit and modify it according to the following formula. To emphasize the dread of endless charging horde, remove ranged attacks and limit effects distance to zones the horde occupy.

NORMAL HP BASED HORDE:

- **HP Treshold:** Same as Unit HP
- **MP & Mental Fortitude:** Remove
- **Turn Speed:** Always 1
- **Masteries, Falter & Neutralization:** Remove
- **Additional Immunity:** Maneuvers, Grapple
- **Calculate Combined Damage:** Combine the Major Attack and follow up atttacks. If there are multiple attack options, pick the most powerful. For zone damage, just use the damage bonus.
- **Mass Zone Attack:** The bonus damage is the calculated Combined Damage.
- **Major & follow up Horde Attack:** The damage is the calculated Combined Damage.
- **Follow up attacks:** The horde can make as many follow up attacks as it has minor actions.
- **HP Damage only:** All damage converted to HP Damage.
- **Cover:** Provide cover to units of the same size as original.

(APPARITION) MP BASED HORDE:

- **MP Treshold:** Same as Unit MP
- **HP & Physical Fortitude:** Remove
- **Turn Speed:** Always 1
- **Masteries, Falter & Neutralization:** Remove
- **Additional Immunity:** Maneuvers, Grapple
- **Calculate Combined Damage:** Combine the Major Attack and follow up atttacks. If there are multiple attack options, pick the most powerful. For zone damage, just use the damage bonus.
- **Mass Zone Attack:** The bonus damage is the calculated Combined Damage.
- **Major & follow up Horde Attack:** The damage is the calculated Combined Damage.
- **Follow up attacks:** The horde can make as many follow up attacks as it has minor actions.
- **MP Damage only:** All damage converted to MP Damage.
- **No Cover:** Do not provide cover to units.

RAVENOUS PRETA (Nickname: Feral Lurch)

Silver Grade Undead, ***Role:*** *Front*
Size: *Medium,* ***Speech:*** *No,* ***Danger Rating:*** *325*

TURN SPEED: 4 **MOV:** 10m/20m (1zone/2zone) Land
HP: 50 **MP:** 25 **Morale T:** 1 (Normal)
DEF: 8 **P.Fort:** 6 **M. Fort:** 6

MASTERY B.	STR	AGI	AWA	EMP
+3	3	2	0	0

Masteries: -

Analyze: Information 9, Chemistry Kit 9, Thaumaturgist Kit 9
Falter: HP 50% and below
(Behaviour Change: Body stiffen and skin starts to crack)
Neutralize: Appease spirit: Appeal 18 (9 falter),
Thaumaturgist Kit 18 (9 falter)

ACTIONS Major 1 minor 2

ATTACKS & EFFECTS

Claw (Major Action): *Melee attack, range: 0, +3 attack, 7 HP Sharp Unarmed Combat damage.*

Claw (minor action, 1 follow up after Claw Major Action): *Same as above, but does not deal excess damage.*

FEATURE

Regenerate: *You regain 5 HP at the start of your turn.*

RAVENOUS PRETA HORDE (Nickname: Feral Lurch)

Silver Grade Undead, ***Role:*** *Front, Multi-Target*
Size: *Medium+,* ***Speech:*** *No,* ***Danger Rating:*** *3,250*

TURN SPEED: 1 **MOV:** 10m/20m (1zone/2zone) Land (pour)
HP T: 50 **MP:** - **Morale T:** 5 (Horde)
DEF: 8 **P.Fort:** 6 **M. Fort:** -

MASTERY B.	STR	AGI	AWA	EMP
+3	3	2	0	0

Masteries: -

Analyze: Information 9, Chemistry Kit 9, Thaumaturgist Kit 9
Falter: -
Neutralize: -
Immunity: Maneuvers, Grapple

ACTIONS Major 1 minor 2

ATTACKS & EFFECTS

Mass Claw (Major Action): *Physical effect against all targets sharing the same zone as the horde, +3 effect, +14 HP Sharp Unarmed Combat damage reduced by the individual target's physical fortitude.*

Horde Claw (Major Action): *Melee attack, range: 0, +3 attack, 14 HP Sharp Unarmed Combat damage.*

Horde Claw (minor action, 2 follow up after Mass Bite or Bite Major Action): *Same as above, but does not deal excess damage.*

FEATURE

Medium Cover: *This horde provides zone cover for non-horde units allied to it of the same size or smaller.*