

Core Systems Glossary		
Mycelial Core		
What it is: The unique "DNA" of each fungus that unlocks its true potential. It serves as the primary long-term progression system for Super Rare (SR) and Ultra Rare (UR) units.		
Gameplay Mechanic: A 10-level upgrade path. Each level provides a flat stat boost, while major milestones (Level 4, 7, and 10) significantly enhance or fundamentally change how the fungus's abilities work.		
Final Evolution: At Level 10, the Core grants a "Final Evolution" passive, which is often a game-changing effect (e.g., turning a counter-attack into a Silence or making buffs uncleanable).		
Neutrality Tax		
What it is: A balance mechanic applied specifically to the Kitchen Biome.		
Gameplay Mechanic: Because Kitchen Fungi have no elemental weaknesses (Neutral), they are given a slightly lower Base Stat Total (BST) than specialized biome fungi. This ensures they are used for their reliable utility rather than outclassing elemental specialists through raw power.		
Signature Skill		
What it is: The "Ult" or "Special" of a fungus. Unlike Basic Attacks, these have a Cooldown (CD).		
Gameplay Mechanic: These skills define the unit's role (Tank, DPS, Support, etc.). They range from massive AoE explosions to complex turn-meter manipulation and team-wide heals.		
Action Economy / Turn Meter		
What it is: The system that determines the order of combat based on the SPD (Speed) stat.		
Gameplay Mechanic: Units with higher Speed move more often. Tacticians (like Shiltake Sensei) specialize in "Action Economy," meaning they use their skills to give allies extra turns or slow down the enemy's progress in the turn order.		
Stat Definitions		
Keyword	Definition	Gameplay Impact
BST	Base Stat Total	The sum of all five primary stats. Used to determine the overall power of a unit.
POT	Potency	Determines the success rate of applying debuffs (Poison, Freeze, Stun) and the effectiveness of buffs.
SPD	Speed	Dictates where a unit sits in the turn order. Vital for Tacticians and Speedsters to "set the stage."
Energy	Skill Resource	A bar that fills as units take actions. When full, the unit can use their Signature Skill.
Biome Advantage System		
The tactical "Rock-Paper-Scissors" of the game world.		
Elemental Loop: Forest -> Wetlands -> Decay -> Tundra -> Forest.		
Advantage Effect: Dealing 50% more damage and receiving 25% less damage.		
Neutral (Kitchen): Acts as the "Safe Haven"—dealing and receiving 100% damage across the board, making them the most stable choice for blind encounters.		
Negative Status Effects (Debuffs)		
Name	Effect Description	Name
Vantage	Increases Accuracy by 20%; bypasses Evasion/Stealth checks.	Vulnerability
Stealth	Unit cannot be targeted by single-target attacks. Ends after attacking.	Poison (DoT)
Intangible	Unit is immune to all damage and effects for 1 turn; cannot be targeted.	Burn (DoT)
Luminescence	Increases Crit Rate by 10%. Can stack with other ATK buffs.	Bleed (DoT)
Frost Shield	A temporary HP barrier. While active, the unit is immune to Freeze.	Stat Reductions
Regen	Restores a fixed % of Max HP at the start of each turn. Lasts for 3 turns. Stacks.	Brittle
Reflect	Returns a portion of incoming damage back to the attacker.	Silence
Immortality	Prevents death once then removes a stack of immortality; the unit survives with 1 HP.	Charm
Cloak	Dodge 1 attack.	Confusion
Increase of Stats	Any ability that increases stats, permanently, timed or stacked.	
3. Crowd Control & Manipulation (CC)		
Name	Effect Description	
Freeze	Target skips their turn entirely, can be stacked	
Move	moves the target's position randomly or as specified	
Root	Target cannot be moved/swapped and cannot dodge.	
Stun	Target skips their turn. Does not break upon taking damage.	
Class Archetype Definitions		
1. Tank (The Frontline Anchor)		
Role: To absorb damage and protect the more fragile units.		
Mechanics: High HP and DEF. They often possess "Taunt" mechanics (forcing enemies to hit them) or "Shield" abilities.		
2. DPS / Duelist (The Heavy Hitter)		
Role: To eliminate high-priority targets as quickly as possible.		
Mechanics: High ATK and SPD. They focus on single-target burst damage and critical hits. They are usually "glass cannons"—high damage, but low survivability.		
3. Mage / AoE (The Area Specialist)		
Role: To soften up the entire enemy team or apply wide-scale status effects.		
Mechanics: Balanced ATK and POT. Their skills usually hit multiple targets (Area of Effect) or apply Damage over Time (DoT) like Poison or Burn.		
4. Support / Medic (The Lifeline)		
Role: To keep the team alive and cleanse negative effects.		
Mechanics: High POT and HP. They specialize in healing, removing debuffs (Cleansing), or providing defensive utility like Evasion buffs.		
5. Tactician (The Force Multiplier)		
Role: To control the flow of battle and enhance ally capabilities.		
Mechanics: High SPD and POT. They don't deal much damage themselves; instead, they manipulate the Turn Meter, reset cooldowns, or provide complex, role-based buffs.		
6. Assassin / Rogue (The Disruptor)		
Role: To bypass the enemy frontline and take out the backline.		
Mechanics: Highest SPD and Crit. They often use "Stealth" to remain untargetable while waiting for the perfect moment to "Execute" a weakened enemy.		
Think of "Class" as the "What" (the stats) and "Role" as the "How" (the strategy).		

1. Class (The Stat Skeleton)	
The Class is a rigid category that dictates the Math. Every single Tank in the game follows the same stat distribution logic. This makes it easier for you to balance the game's math because you know that if a unit is a "Tank," it will always have high HP and DEF.	
2. Role (The Kit's Personality)	
The Role is the Behavior of that unit's skills. This is why two Fungi in the same Tank Class can feel completely different to play.	
Example: Two "Tank Class" Fungi	
Porcelain Guard (05): Role is "Taunt Tank." His job is to force enemies to hit him.	
Snow-Bank Hermit (32): Role is "Cover Tank." He doesn't make enemies hit him; he creates a "Ice Wall" to protect others.	
Class	Possible Roles (Kit Style)
Tank	Wall, Taunt, Cover, Juggernaut
DPS	Nuker, Duelist, Multi-Hit, Execute
Mage	DoT, AoE, Saboteur (Debuffer)
Support	Medic (Healer), Purifier, Buffer, Battery (Energy)
Tactician	Disruptor, Tempo, Commander, Mimic
Assassin	Stealth, Rogue, Stalker, Poisoner

	Basic Glass Hats					
Glass	HP	ATA	DEF	SPD	POW	SKT
Tank	100	90	150	90	100	400
Tactician	100	100	100	100	100	400
SPC	90	180	90	100	90	400
Support	120	80	120	100	160	400
Wage	100	100	90	100	100	400
Assault	80	140	80	100	100	400

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ID#	Fungus Name	Rarity	Biome	Class	Role	Key Synergy #1	Key Synergy #2	Key Synergy #3	HP	ATK	DEF	SPD	POT	BST	Passive	Passive Descr'ty	Signature Skill	Skill Description	Cooldown	Core Ability	Base Effect (Lvl Final: Evolution (M 10))
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Tank	Juggernaut	Grunt	Brawler	
DPS	Executioner	Berserker		
Mage	Spreader	Daze	Slower	
Support				
Tactician	Scout	Survivor	Control	Disrupter
Assassin				
Role	Purpose	Combat Logic	Key Synergy	
Grunt	Economic frontline/fodder.	Simple, low-cost units that provide a body on the board. They often have basic skills like "Shield Bash" that provide minor utility while soaking up hits.	Phalanx (with Wall)	
Juggernaut	Counter-offensive tanking.	They want to be hit. Their skills trigger when they take damage, or they gain "Rage" stacks that increase their Attack power the lower their HP gets.	Vengeance (with Taunt) [4	
Brawler	Sustained frontline pressure.	A hybrid between Tank and DPS. They have higher HP than a Duelist but more damage than a Wall. They thrive in the front row, dealing consistent physical damage.	Brawling Pair (with Medic)	
Executioner	Finishing the Job.	Their damage scales based on how much HP the enemy is missing. They are designed to act last in a turn to "clean up" weakened foes.	Coup de Grâce (with Stalk	
Berserker	High-Risk Power.	They trade their own HP or Defense for massive Attack boosts. They are "Glass Cannons" that require a Captain or Medic to keep them from self-destructing.	Gourmet Line (with Captai	
Slower	Tempo manipulation.	They reduce the enemy's SPD stat or "Turn Meter." This ensures your team always moves first, allowing you to set up your strategy before the enemy can react.	Time Warp (with Tactician	
Spreader	Contagion management.	When they hit a target that already has a DoT (like Poison), they "Spread" that effect to all adjacent enemies. They turn a single-target debuff into an AoE plague.	Plague Wind (with DoT)	
Survivor	Tank Priority	Focuses on Single-target damage mitigation and preventing one shot potential.	Lifeline (with Taunt). Not A	
Daze	Accuracy disruption.	They apply "Daze" or "Blind," causing the enemys next attacks to have a high chance of missing. This is a "soft" defense that protects the whole team from damage.	Chaos Theory (with Contro	
Scout	Target Acquisition.	They "Mark" enemies, which removes their Evasion and allows Nukers to hit them with 100% certainty.	Sniper Nest (with Nuker).	
Control	Manipulation and chaos.	Unlike CC, which stops turns, Control changes turns. They use Charm (force enemy to hit their own team) or Confuse (random targeting).	Chaos Theory (with Daze)	

We have established the growth rates for Speed, but we haven't yet defined the specific Core Mechanics of how Speed translates into turns or how the Energy bar actually fills during combat.

To make the most of your Battery and Slower roles, we need a "Tick-Based" or "Action Gauge" system. Here is a proposal for how these concepts work in the Funguy engine:

1. The Speed Concept: "The Spore Gauge"

Instead of simple round-based turns, use a 1,000-point Action Gauge.

Logic: At the start of combat, every unit begins at 0. The game "ticks" forward, and each unit's SPD stat is added to their gauge.

The Turn: When a Funguy reaches 1,000 points, they take their turn, and their gauge resets to 0.

Strategic Impact:

High Speed (Assassins/Tacticians): A unit with 200 SPD takes a turn every 5 ticks.

Low Speed (Tanks): A unit with 50 SPD takes a turn every 20 ticks.

Slowers: When Bitter-Cold Oyster (37) reduces enemy SPD by 20%, it physically slows how fast their gauge fills, allowing your team to "lap" them.

2. The Energy Concept: "The Mycelium Network"

The Energy bar (usually 100 points) is what allows a FunGuy to cast their Signature Skill.

Passive Gain: Every unit gains 20 Energy automatically when they start their turn.

Action Gain:

Dealing Damage: +5 Energy.

Taking Damage: +10 Energy (This is why Not Alone with Survivor is so strong—it boosts this number).

Kills: +15 Energy does not stack with damage energy gained

Active Gain (The Battery Role):

Yeast Bud (43): Your "Rapid Rise" ability allows allies to cast at 80 Energy instead of 100. This is a massive "Tempo" advantage in the Spore Gauge system.

3. Role-Specific Speed & Energy Tunings

Based on your Excel data, we can categorize how these roles interact with the "Clock":

Role	Speed Profile	Energy Profile
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Assassin/Stalker	Fastest: Aims to move twice before the enemy Tank moves once.	Low: Relies on basic attacks and passives; Signature is a "Finisher."
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| Battery | Medium-Fast: Needs to move often to feed the team. | High: Their skills generate Energy for others. |

Wall/Tank	Slowest: Low SPD ensures their Shields/Taunts stay active longer. High: Gains most Energy from being hit (Taking Damage).
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| Slower | Fast: Needs to move first to apply the SPD debuff to the enemy team. | Medium: Needs their Ultimate to lock down the enemy "Spore Gauge."

4. Tactical Examples using your Units

Star-Tip Scout (36): With 195 SPD (the highest in your sheet) and Light Speed (starts with 50% Turn Meter), this unit will always move first. This allows her to use Starlight Rush to give an ally an immediate turn before the enemy even breathes.

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Excel Master Format: Synergy Definitions				
Type	Category	Req Units	Name	Effect
Biome	Forest	2	Sprout	5% Max HP
Biome	Forest	3	Growth	10% Max HP
Biome	Forest	5	Deep Roots	Team regens 5% HP at start of turn.
Biome	Wetlands	2	Mist	5% Potency
Biome	Wetlands	3	Saturate	10% Potency
Biome	Wetlands	5	Rising Tide	10% DoT damage.
Biome	Decay	2	Spore	5% Attack
Biome	Decay	3	Fester	10% Attack
Biome	Decay	5	Rot & Reap	10% Lifesteal. Stacks with other abilities
Biome	Tundra	2	Frost	5% Defense
Biome	Tundra	3	Rime	10% Defense
Biome	Tundra	5	Flash Freeze	10% increased chance to Freeze enemies on
Biome	Kitchen	2	Aged to Perfection	Bufs & DoTs last +1 Turn. (No Hard CC)
Biome	Kitchen	5	Express Line	All Skill Cooldowns -1 Turn. (Min. 2)

Class Growth Tables (Per Level)

These values represent the average stat gain per level. By Level 200, these small differences create massive gaps in role performance.

Class	HP	ATK	DEF	POT	SPD
Tank	65	5	12	5	0.8
DPS	25	12	5	5	1.2
Mage	18	10	2	10	0.8
Support	30	5	5	12	1
Tactician	22	8	4	10	1.3
Assassin	15	12	3	5	1.8

Star Rating (Evolution) Multipliers

Since the level cap is tied to the 6-Star system, we apply a "Star Multiplier" to the Total stats. This makes 6-star units significantly stronger than 1-star units of the same level.

Star Level	Stat Multiplier	Level Cap
1	1	100
2	1.2	120
3	1.5	140
4	2	160
5	2.5	180
6	3.5	200

This includes Lvl, Stars, Class, Set Bonus, and Equipment Stats

Funguy	Lvl	Star Lvl	Class	HP	ATK	DEF	SPD	POT			
Inky Cap Assassin	100	1	DPS	90	170	85	150	120			
	Multipliers	1	15 [5]	25	12	5	1.2	5			
					1	1.15	1	1	1		
Item	Rarity	Lvl	Substrate	Set Bonus	Equipment Bonus						
Cap	Rare	1	Volcanic Ash	0	1 [8]	70	1.05 [7]	1 [8]	1 [9]	1	1
Stipe	Rare	1	Volcanic Ash	2	1.1 [10]	14	1.05	1	1	1	UR lvl 20 Grants 5% energy gain
Mycelium	Rare	1	Fine Sand	0	1 [11]	2.8	1.02 [12]	1 [13]	1 [14]	1	1
Symbiotic	Rare	1	Fine Sand	2	1.10 [15]	21	1.05	1	1 [16]	1 [17]	1
				0	1 [18]						
				0	1 [19]						
				0	1 [20]	2793	1848	629	317	620	
In the Funguy universe, equipment is known as Substrates (the material they grow on).											

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Adjusted Stats for input

The 4 Equipment Slots

Slot	Name	Primary Stats	Role Importance
Slot 1	The Cap	HP / POT	Vital for Mages and AoE to boost debuff landing.
Slot 2	The Stipe	DEF / HP	Essential for Walls and Juggernauts.
Slot 3	The Mycelium	SPD / CRT	The "Engine" slot for Assassins and Batteries.
Slot 4	The Symbiote	ATK / Unique	Focuses on raw damage or unique utility effects.

Substrate Set Bonuses (4-Piece Sets)

Equipping 4 pieces of the same set unlocks a Set Bonus that multiplies your Role Synergies.

Set Name	2-Piece Bonus	4-Piece Bonus Title (The "S")	4-Piece Bonus
Rich Compost	15% HP	Regrow	Heal 5% Max HP at the start of every turn.
Volcanic Ash	10% ATK	Scorch	Skills deal +20% damage against burning targets.
Peat Moss	10% DEF	Thick Skin	Reduces all damage taken by 15%.
Fine Sand	10% SPD	Swift Spore	Gain immunity for the first 2 rounds of combat.
Bioluminescence	15% POT	Overcharge	Energy gain from all sources increased by 10%.
Ancient Clay	10% Crit Chance	Brutality	50% Critical Hit Damage.
Permafrost	15% DEF	Deep Freeze	10% chance to Freeze an enemy when they hit you.

Equipment State Scaling (Level 1 to 20)

Since your Fungi go to Level 200, Equipment provides Percentage (%) bonuses rather than just flat numbers to ensure they stay relevant in the late game.

1. Class Passive Boosts (Item Affinity)

These bonuses apply to the Total Stats provided by all equipped gear and set bonuses.

Class	Item Affinity Name	Passive	HP	DEF	ATK	SPD	POT	Crit Damage	Energy Gain
Tank	Titan's Heart	+25% HP & DEF		1.25	1.25				
Assassin	Quick-Strike	+10% ATK & SPD				1.1	1.1		
DPS	Slayer's Edge	+15% ATK & CRT DMG				1.15		1.15	
Mage	Arcane Flow	+20% POT & Energy gain					1.2		1.2
Support	Vital Link	+15% POT & HP		1.15			1.15		
Tactician	Mastermind	+15% SPD & POT				1.15	1.15		

This is a great idea. Setting up a "Master Gear Reference" table will allow you to use a simple "VLOOKUP" or index in your main sheet.

By keeping everything in one table, you can see exactly how a "Rare" item stops growing while a "UR" item keeps climbing.

The Master Equipment Blueprint

Item Slot	Tr	Rarity	#	Max Level	Base Flat (Lvl 1)	Growth per Lvl (Flat)	Main % (Lvl 1)	Main % (Lvl 20)	Guaranteed Sub-Stat 1 (at Max)	Guaranteed Sub-Stat 2 (at Max)	Guaranteed Sub-Stat 3 (at Max)	Column 1	HP	ATK	DEF	SPD
Cap		Rare		10	50 HP	20 HP	5% HP	15% HP	5% POT							
Cap		SR		15	100 HP	32 HP	8% HP	25% HP	10% POT	5% DEF						
Cap		UR		20	150 HP	52.5 HP	12% HP	40% HP	15% POT	10% DEF	5% SPD					
Stipe		Rare		10	10 DEF	4 DEF	5% DEF	15% DEF	5% HP							
Stipe		SR		15	30 DEF	8 DEF	8% DEF	25% DEF	10% HP	5% POT						
Stipe		UR		20	50 DEF	10 DEF	12% DEF	40% DEF	15% HP	10% POT	5% energy					
Mycelium		Rare		10	2 SPD	0.8 SPD	2% CRT	8% CRT	5% CRT DMG							
Mycelium		SR		15	5 SPD	1.3 SPD	4% CRT	15% CRT	10% CRT DMG	5% ATK						
Mycelium		UR		20	10 SPD	1.5 SPD	6% CRT	25% CRT	25% CRT DMG	10% ATK	5% SPD %					
Symbiote		Rare		10	15 ATK	6 ATK	5% ATK	15% ATK	5% CRT DMG							
Symbiote		SR		15	50 ATK	10 ATK	8% ATK	25% ATK	10% CRT DMG	5% Life Steal						
Symbiote		UR		20	100 ATK	15 ATK	12% ATK	40% ATK	20% CRT DMG	10% Life Steal	10% POT					

How to read the "Stat Increase Per Level" column:

To calculate the stat at any level in your spreadsheet, use this formula:

'Current_Flat_Stat = Base_Flat + (Growth_per_Lvl * Current_Level)'

Example: Level 10 UR Cap

Base: 150

Growth: 52.5 x 10 = 525

Total Flat HP: 675 (This will reach 1,200 at Level 20).

Excel Setup Recommendation

1. Defense Constant: Set this to 2,000. If you find the game is too fast, increase it to 3,000. If fights are too slow, decrease it to 1,500.
2. Minimum Damage: Always add a 'MAX(1, Formula)' so that even the weakest hit deals at least 1 damage.

1. The Speed Economy Fix

New Speed Formula:

Why 15? At 6-Stars, every unit gains +90 Flat Speed. This ensures the gap between a fast unit (185) and a slow unit (70) stays roughly the same, even at max level.

2. Damage Formula Update (\$C = 3000\$)

The New Formula:

$$\$ \text{\texttt{Damage}} = \text{\texttt{ATK}} \times \text{\texttt{left}} \left(\frac{3000}{3000 + \text{\texttt{DEF}}} \right) \$$$

3. Re-Simulating the Duel (The "Tactical" Version)

Chanterelle (Tank - 6 Star)

$$\text{HP: } \$[(310 \times 3.5) + 1200] \times 1.55 \times 1.25 = \mathbf{\$4,427}$$

$$\text{DEF: } \$[(310 \times 3.5) + 250] \times 1.50 \times 1.25 = \mathbf{\$2,503}$$

$$\text{SPD: } \$[(70 + 90) + 40] \times 1.10 \times 1.0 = \mathbf{\$220}$$

Inky Cap (Assassin - 6 Star)

$$\text{ATK} = \$[(310 \times 3.5) + 400] \times 1.55 \times 1.10 = \text{\textbf{\$2,535}}$$

$$\text{SPD: } \$[(150 + 90) + 40] \times 1.15 \times 1.10 = \mathbf{\$354}$$

4. The "Turn Economy" Check

Assassin SPD: 354

Tank SPD: 220

Ratio: $\$354 / 220 = \mathbf{1.6x}$

Result: The Assassin will move once, then the Tank will move, and roughly every 2nd turn, the Assassin will "lap" the Tank and get a double-turn. This perfectly hits your goal of "no more than twice before others."

5. The Damage Check (\$C = 3000\$)

Inky Basic ATK: 2,535

Chanterelle Mitigation: $\$3000 / (3000 + 2503) = \mathbf{\$0.54}$

Actual Damage: \$2,535 \times 0.54 = **\$1,368**

Battle Progress:

- | | |
|--|--|
| 1. Inky Basic: 1,368 Dmg (Tank HP: 3,059) | |
| 2. Tank Turn: Chanterelle uses Sunlight Barrier (Gains Shield) | |
| 3. Inky Crit: 3,693 Dmg (Blocked mostly by Shield). | |

The Verdict: The Tank is now surviving long enough to actually use her skills! This makes the game about strategy and timing rather than just who is faster.

Excel Blueprint for your "Rules" Tab

Variable	Value	Notes
Damage Constant (C)	3000	Higher = Longer Battles
Speed Star Bonus	+15 per Star	Keeps turn order stable
Star Multiplier (Stats)	1.0 to 3.5	Applies to HP, ATK, DEF
Class Mult: Tank	1.25 (HP/DEF)	
Class Mult: Assassin	1.10 (ATK/SPD)	

Level	Spore Essence	Core Fragments	Prime Spores	Milestone
1	5,000	10	0	Core Unlocked
2	7,500	15	0	
3	10,000	20	0	
4	15,000	25	10	Ability +15% Power
5	20,000	30	20	
6	25,000	40	30	
7	35,000	50	50	Ability +25% Power
8	50,000	65	75	
9	75,000	80	100	
10	150,000	120	250	Final Evolution Unlock

[1] Go to Lvl up and Equipment to change Character listed

[2] Level

[3] Stars

[4] Taunt's should be able to redirect hits to the Juggernaut in this case so the Jugg can trigger their abilities.

[5] Spd multiplier

[6] Rich Compost HP Bonus

[7] Lvl 1 HP bonus

[8] Lvl 20 HP Bonus

[9] LVL 20 Sub Stat POT bonus

[10] Volcanic Ash ATK bonus

[11] Peat Moss DEF Bonus

[12] Crit Chance Bonus

[13] Crit Chance Bonus

[14] Crit Damage Bonus

[15] Fine Sand SPD Bonus

[16] Crit Damage Bonus

[17] Lifesteal Bonus

[18] Bioluminescence POT bonus

[19] Ancient Clay Crit Chance Bonus

[20] Permafrost DEF Bonus