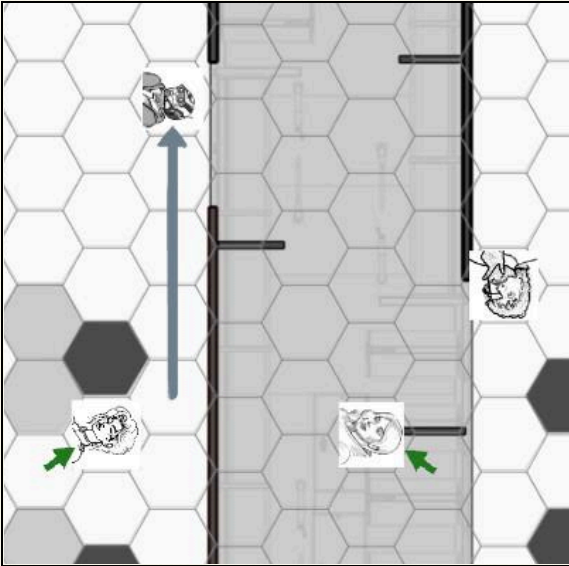


Round 5

Character	HP	Action	Damage
Windrush	17	Stunned	
Voidstar	14	Stunned (x2)	
Dusty	16	Stunned	
Hypebot420	26	Move	

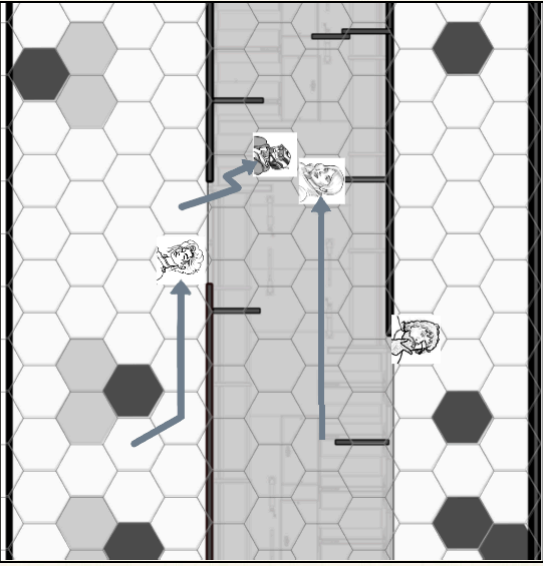
Dusty moves one space and finishes her stun.  
Voidstar remains stunned. He can't move onto the train, because it requires two spaces of movement.  
Windrush moves one space while stunned.  
Hypebot moves toward the exit.



Round 6

Character	HP	Action	Damage
Windrush	17	Move	
Voidstar	14	Stunned	
Dusty	16	Move	
Hypebot420	26	Move	

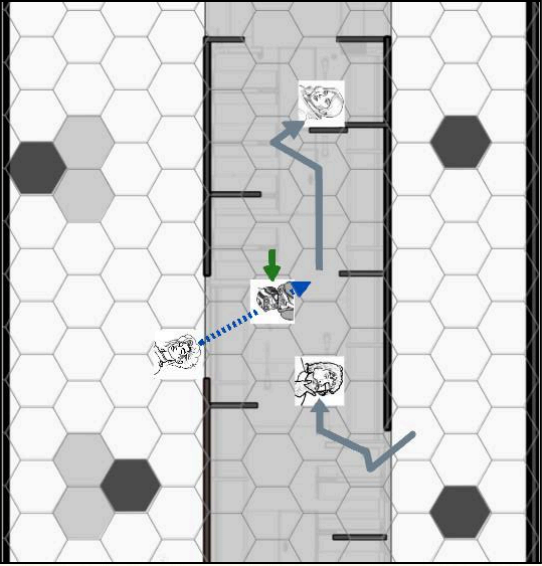
Voidstar is still stuck, but finishes his stun.  
Hypebot moves 2 spaces (because they moved on the previous round and are moving onto the trolley deck).  
Dusty moves 5 hexes.  
Windrush moves 4 hexes to chase after both.



Round 7

Character	HP	Action	Damage
Windrush	17	Stun Arrow	
Voidstar	14	Move	
Dusty	16	Move	
Hypebot420	26	Defend	5 dam. & stun x2

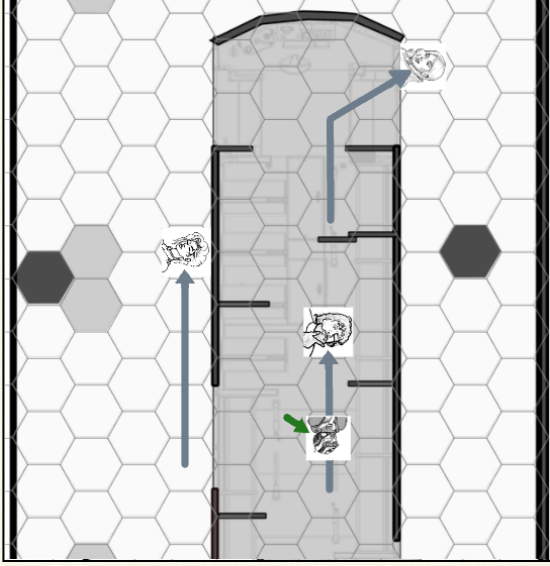
Windrush fires a stun arrow at Dusty. Before it lands, Hypebot uses their Defend action to dive in the way and take the stun arrow. The GM rules that this precludes attempting to avoid the arrow, so Windrush rolls for the attack. She rolls a [++], dealing 5 damage and double-stunning Hypebot. Dusty moves 4 spaces, because they played Move on the previous round. Voidstar moves 3 spaces, because he's climbing onto the trolley deck.



Round 8

Character	HP	Action	Damage
Windrush	17	Move	
Voidstar	14	Move	
Dusty	16	Move	
Hypebot420	21	Stunned (x2)	

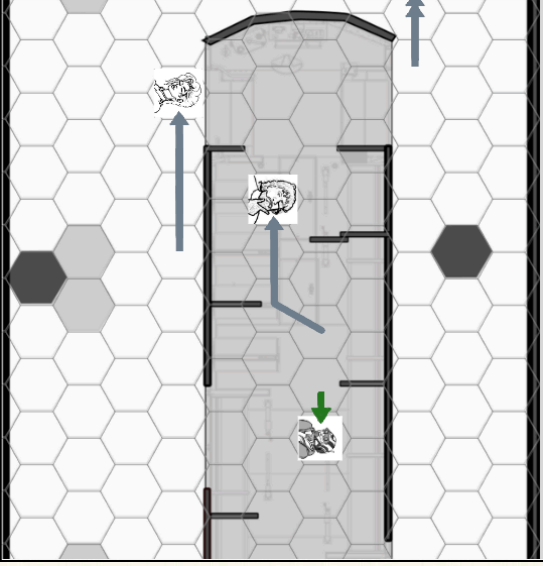
Hypebot moves one space while stunned.  
Dusty moves 4 spaces.  
Voidstar moves 3 spaces (because he just played move).  
Windrush moves 4 spaces.  
It's clear that Dusty is too far to catch.



Round 9

Character	HP	Action	Damage
Windrush	17	Move	
Voidstar	14	Move	
Dusty	16	Move	
Hypebot420	21	Stunned	

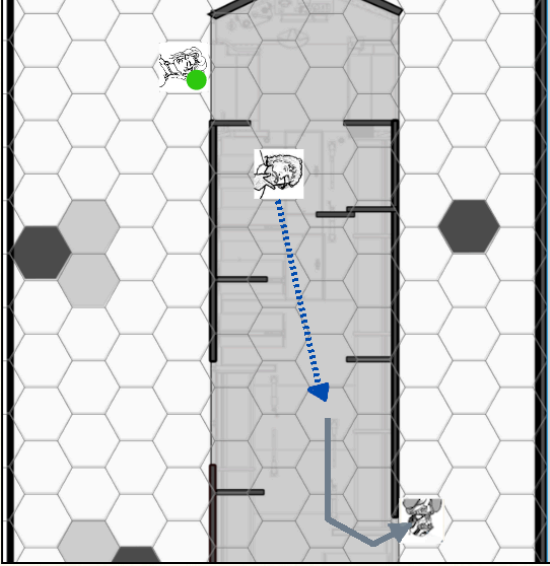
Hypebot moves one space while stunned, and finishes their stun.  
Dusty moves 4 spaces, leaving the arena.  
Voidstar moves 3 spaces.  
Windrush moves 3 spaces.



Round 10

Character	HP	Action	Damage
Windrush	17	Aim	
Voidstar	14	Microdart	
Dusty	16	Move	
Hypebot420	21	Move	5 damage & stun

Voidstar fires a microdart at Hypebot. He uses Lucky Brek to advantage it, and rolls [++][o] to deal 5 damage and stun.  
Hypebot moves 4 spaces before falling stunned.  
Windrush aims.



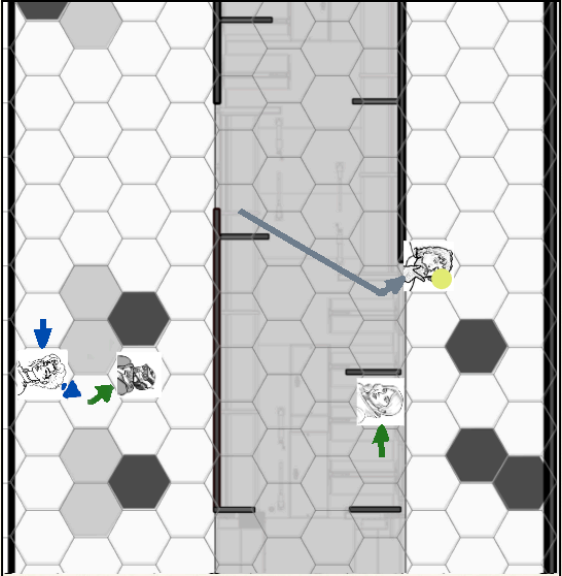


Round 3

Character	HP	Action	Damage
Windrush	22	Restrain	
Voidstar	19	Move	
Dusty	24	Defend	
Hypebot420	20	Stunned	+6 HP

Windrush attempts to restrain and search Hypebot. She has an ability to restrain any target with less HP than herself, but Hypebot uses their Persistent ability, which gives them +6 HP until the end of combat. They move one space because they're defending. Windrush can't restrain Hypebot, but asks the GM if they can search Hypebot's satchel for the module. She learns that Hypebot doesn't have it.

Dusty defends, and moves into cover.  
Voidstar moves into a better position.  
His aim will disappear if not used on the next turn.

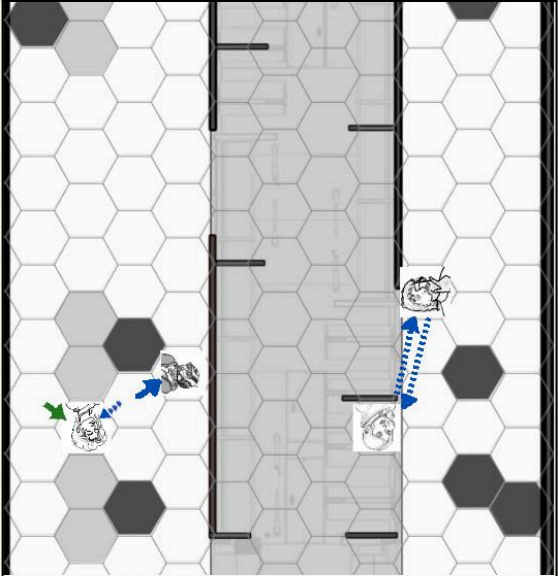


Note that Windrush's ability to search Hypebot on the same turn they failed to restrain them and their ability to do so when Hypebot is one space away and can move one space while stunned are two examples of the GM choosing to interpret the rules in a flexible manner. This game works much better when the GM runs it flexibly.

Round 4

Character	HP	Action	Damage
Windrush	22	Defend	5 damage & stun
Voidstar	19	Microdart	5 dam. & stun x2
Dusty	24	Slingshot	9 damage & stun
Hypebot420	26	Trained Strike	

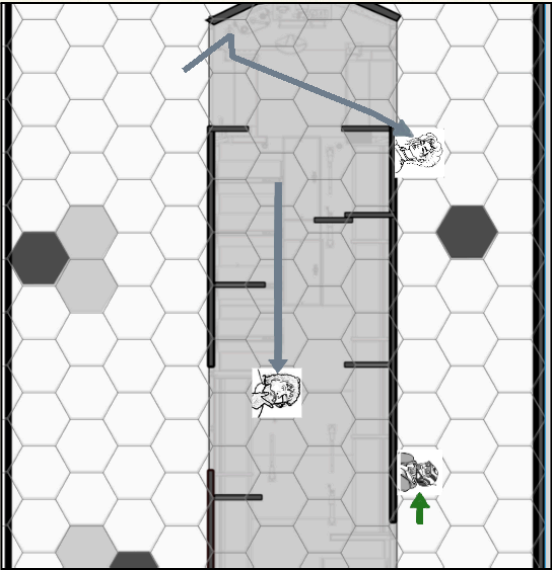
Voidstar microdarts Dusty. Because he's aimed, it's advantaged and deals +4 damage. He rolls [+][o]. Dusty takes 9 damage and is stunned. Dusty fires her slingshot and uses her Lucky Break, giving it advantage. She rolls [+][+], dealing 5 damage and 2x stun. Hypebot attacks Windrush. Windrush moves one space and rolls [-][-] for defense, so the attack proceeds. Hypebot rolls [o][+], dealing 5 damage and stunning her before moving one space.



Round 11

Character	HP	Action	Damage
Windrush	17	Move	
Voidstar	10	Move	
Dusty	16	-	
Hypebot420	17	Stunned	

Hypebot moves one space.  
Voidstar moves 4 spaces. Windrush uses her aim to move onto the trolley deck and then another 5 spaces. Hypebot surrenders.



Conclusion

Hopefully, this makes the logic of the combat system make sense. This is not a simple combat encounter, but it could easily be played in 10 - 15 minutes. Although fairly complicated as a whole, each player's options were straightforward in the moment. We hope that by seeing or trying out this system, what might seem idiosyncratic upon first description becomes intuitive once its reasoning is clear: everyone picks an action at the start and reveals it at once. Attacks go first. Defenders defend when attacked or after all attacks are played. All movements are resolved, starting with the lowest in the turn order and working backwards, unless someone higher in the turn order prefers to go earlier. Then any aim or special actions are played.

Most importantly, this isn't chess: it's more like a very formal way to play with action figures. It's meant to be a logical, balanced framework, but every table and GM should feel free to only follow the rules in so far as they make sense or serve their needs.

If any rule is uncertain, decide among the table, and consider sharing your thoughts with us over social media to help others and improve subsequent editions.



Roll for initiative:

Each player rolls 2d10 and adds it to their speed.

Characters	Speed	Roll	Initiative
Windrush	20	14	34
Voidstar	23	10	33
Dusty	24	3	27
Hypebot420	16	9	15

Dusty has the module.

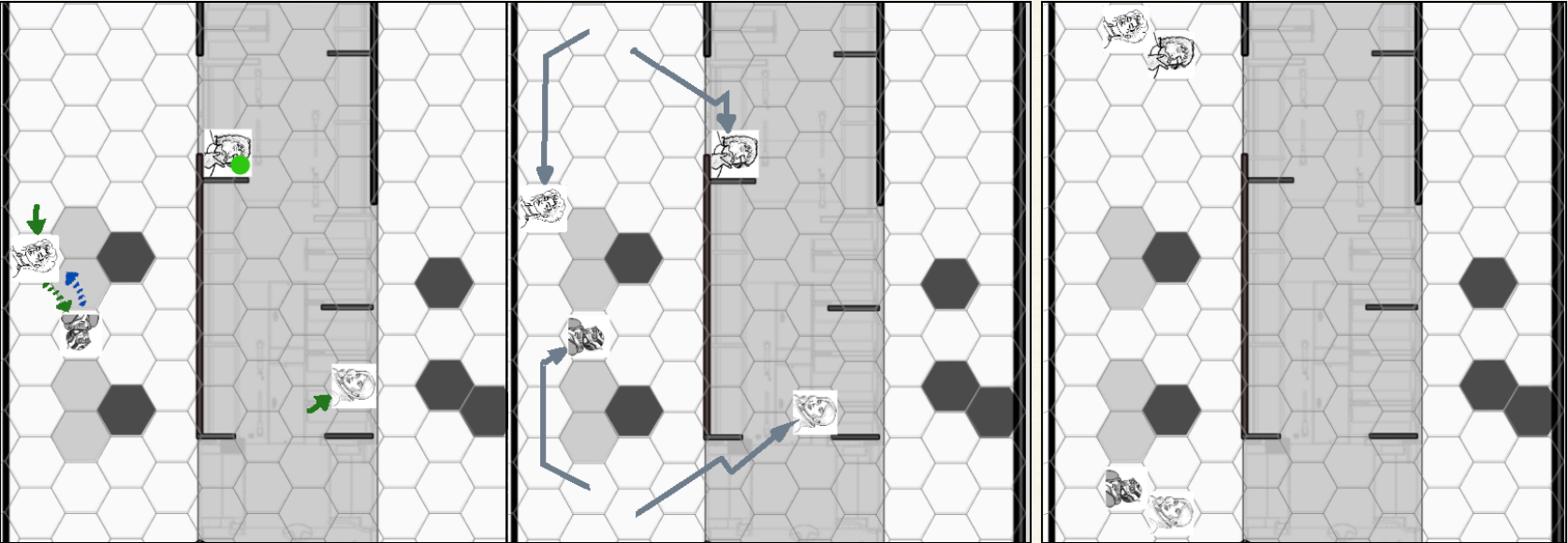
Round 1				
Character	HP	Action	Damage	
Windrush	22	Move		
Voidstar	19	Move		
Dusty	24	Move		
Hypebot420	26	Move		

On the first round, everyone plays Move. Hypebot advances to a covered position. Dusty moves into the trolley (it costs an extra space of movement to step up onto the trolley deck, but Dusty has a +1 to Movement). Voidstar advances to a covered position in the trolley, and Windrush moves to cover to oppose Hypebot.

Round 2				
Character	HP	Action	Damage	
Windrush	22	Defend		
Voidstar	19	Aim		
Dusty	24	Defend		
Hypebot420	26	Slingshot	6 damage & stun	

Hypebot attempts to fire a slingshot at Windrush. Windrush defends from behind cover and rolls a [o][+], which grants a counter-attack with disadvantage. Windrush strikes with her staff, which gives her one space of movement and has a reach of two spaces. She rolls a [-][+], so even with disadvantage deals 6 damage and stuns Hypebot. Dusty moves one space because she's defending. Voidstar aims.

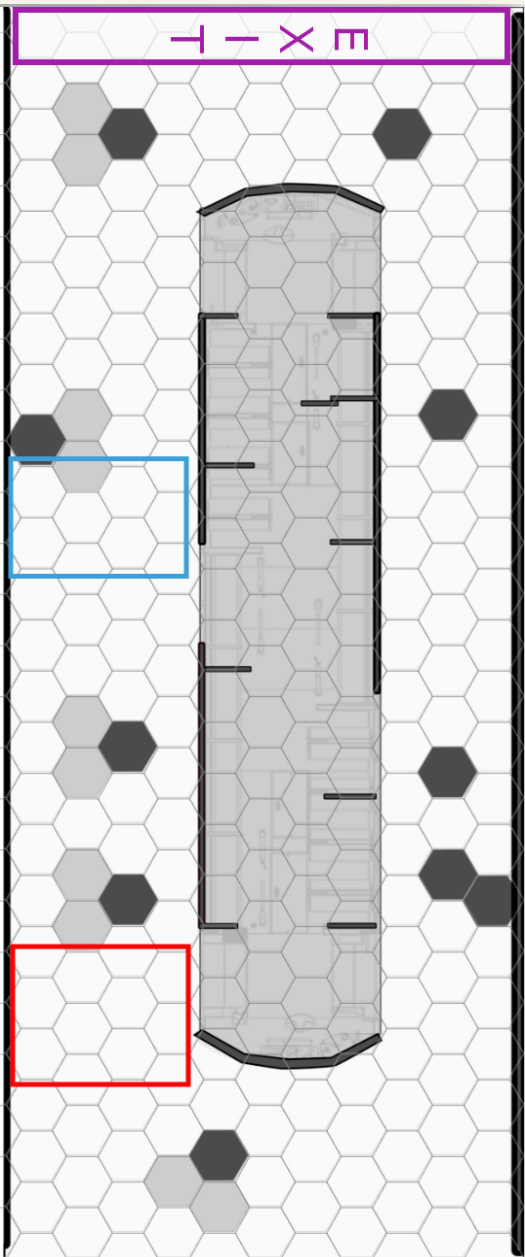
The [-] is grayed out to represent that the player only rolls the second die because it's disadvantaged.



Jacob Coffin



The Trolley Factory



Setup

This encounter takes place in a cyberspace simulation meant to allow combatants to learn and test any and all tactics without causing actual harm.

The environment is an assembly and repair bay of a trolley factory, in which a partially assembled trolley is surrounded by assembly arms and tool stations.

Within the simulation, players are placed on two teams. Each team consists of loved ones of a different synth that is in imminent danger of succumbing to a fatal case Progressive Compositional Cascade Syndrome. The loved ones of Athena and Benny have both learned that there is a rare quantum computing module in this factory capable of stabilizing one synth's positronic brain. Team Athena arrived first and retrieved it. But while attempting to leave, Team Benny blocks their path.

Within the simulation, teams can roleplay any approach they like, but it's understood that both are motivated to recover the module by any means necessary. Players can decide for themselves whether the character's prior relationship makes their use of violence dispassionate or vindictive. But both sides are motivated to hold nothing back to win.

The characters start ~10 hexes apart. The module is carried in a fanny pack. Players on team Athena should decide privately who has the module, and who has an empty decoy pack.

Descriptions of the action have been color coded to highlight how to resolve the phases of each round: attacks; defenses; movements; and special actions.

Downtime, Interstitials, and Rest

Interstitials

An interstitial is any time jump that occurs within a story. The most common kind of interstitial is a Transit event, in which characters board a vehicle and must wait until it arrives before continuing their quest. If a story takes place over a period greater than 24 hours, the players will likely need rest. Sometimes they may have to wait for certain events to happen before they can proceed with the next step of a plan. Whether traveling, stopping to eat or rest, or just passing time until someone or something is available, these periods allow players and their GM to describe any actions that they wish to perform outside of a roleplay encounter. This may include resting, crafting, researching, retrieving, or any other reasonable action that the players wish to perform during the time available.

Researching during an Interstitial

If a player wishes to research during an interstitial, the GM must first identify what information the player or players might find. The GM should then decide how challenging a research action is.

- A difficult research action requires the player to roll a 9 or a 10 on a d10 roll
- A very hard research action requires a player to roll a 10 on a d10 roll

The number of rolls a player may make in a given time is outlined below:

A player with a total Int. + Research & Investigation score of ...	... has a research skill level of...	... and can make the following number of d10 rolls per 4 hour period ...	... or one d10 research attempt roll per the following length of time.
16 or higher	Master	4	60 minutes
14 or 15	Expert	3	80 minutes
12 or 13	Adept	2	120 minutes
9 or 10	Novice	1	240 minutes
8 or lower	None	0	Never

Players should make these roles sequentially, not all at once. This maximizes suspense, and if they get lucky early they may decide to complete their research activities early to rest or do something else.



These are the action cards used in this encounter. Keep in mind that typically, each player only has to keep track of one or two attacks.

Action - Movement

Move

Move 4 hex

-1 hex if played previous round

-1 hex for rough terrain

-2 for moving another body.

Optional if Aimed:  
Move 6 hex

Action - Movement

Move

Move 5 hex

-1 hex if played previous round

-1 hex for rough terrain

-2 for moving another body.

Optional if Aimed:  
Move 6 hex

Action - Special

Aim

Advantages next attack or defense  
Applies Aim effect to next attack  
Disadvantages defense against next attack  
Effect is retained for one additional round if not used

Defense

Defend

Negate effect of attack and move 1 hex  
Roll with Disadvantage unless adjacent or behind cover

--	Fail
-	Attack Disadvantaged
0	Counter Attack w/ Dis.
++	Counter Attack

Attack - Close

Unarmed

Punch

Damage: 4

Adjacent

Offers 1 hex of movement

--	None
-	None
0	None
+	Stun
++	Stun

If Aimed:  
8 Damage & Stun

Attack - Close

Unarmed

Trained Strike

Damage: 5

Adjacent

Offers 1 hex of movement

--	None
-	None
0	Stun
+	Stun
++	Stun

If Aimed:  
10 Damage & Stun

Attack - Close

Bo Staff

Staff Strike

Damage: 6

Adjacent + 1

Offers 1 hex of movement

--	None
-	None
0	Stun
+	Stun
++	Stun

If Aimed:  
10 Damage & 2x Stun

Attack - Special

Restrains

Restrain

Disarm & indefinite stun

Damage: 0

Adjacent

Must have more than 6 HP greater than target to use

--	Falls & offers counter attack w/ disadvant.
-	Falls, but +3 dam.
0	~
+	~
++	~

Attack - Ranged

Shortbow

Stun Arrow

Damage: 4

2 - 6

Range: 7 - 9 with disadvant.

--	-2
-	-1
0	Stun
+	Stun
++	Stun x2

If Aimed:  
Advantaged even if disadvantages apply

Attack - Ranged

Slingshot

Slingshot

Damage: 4

≤ 5

Range: 6 - 7 with disadvant.

--	~
-	~
0	+1 & Stun
+	+1 & Stun
++	+1 & Stun x2

If Aimed:  
+2 Damage

Attack - Ranged

Darter

Microdart

Damage: 4

2 - 6

Range: 7 - 8 with disadvant.

--	~
-	Stun
0	+1 & Stun
+	+2 & Stun x2
++	

If Aimed:  
+4 damage & Advantage

Attack - Close

Improvised Melee

Club

Damage: 6

Adjacent

Offers 1 hex of movement

--	None
-	None
0	None
+	Stun
++	Stun

If Aimed:  
10 Damage & Stun

This works out to produce the following probabilities. The table reports the likelihood of rolling a success the number of times listed at the top of each probability column within a the number of d10 rolls listed to the left:

d10 rolls:	If 9 or 10 is a passing score (difficult)			If 10 is a passing score (very hard)		
	1x	2x	3x	1x	2x	3x
4: one adept researcher over 8 hours two adept researchers over 4 hours.	60%	20%	3%	35%	5%	<1%
8: one master researcher over 8 hours four adept researchers over 4 hours	85%	50%	20%	55%	20%	4%
12: one master researcher over 12 hours two expert researchers over 8 hours	93%	70%	45%	72%	34%	11%
16: four adept researchers over 8 hours sixteen novice researchers over 4 hours	97%	85%	65%	81%	48%	21%

Based on the amount of time available and the number and skill of the players, a GM can use the probabilities above to decide what level of difficulty to apply in order to bias the outcomes appropriately to maintain tension. For instance, a GM may wish to make a single success likely but uncertain. Or they may want to tune the difficulty to make it probable that the players will have one or two successes, but unlikely that they'll complete three research actions successfully. Use the table accordingly.

Assisted Research

A player can assist an ally with a research action by rolling for [Intelligence + a relevant skill] if they can justify it within the story. If successful, they can increase an ally's research skill rating one step for the duration of the interstitial. This takes the player providing assistance 60 minutes to perform.

Other use cases

This system can be adapted for use in any high-stakes tasks that a player might perform continuously for hours or over a few days. For instance, players looking to recruit supporters for a vote or a mass action might perform recruitment checks using their community connection skill, and recruit an ally or a block of supporters based on the result.







Aiming and Special Rules

Under standard rules an aim action is only valid if the player doesn't take damage on the turn in which they play it, but a GM can choose to make aim actions effective regardless of damage if they wish to increase its use in the game. They can also adjust the duration within which the action can be used, either by allowing it to be kept longer or requiring that it be used sooner. Allowing aim to be performed despite taking damage and requiring that it be used immediately has the effect of making combat faster and increasing the typical damage within each round.

Alternative Rules

The combat system has been tested with many possible rules. Here are some we considered but left out. Feel free to use them if you like.

Cinematic Mode

In Cinematic Mode, all natural critical fail rolls ( rolls of [-2] ) made by players are rounded up to -1. This naturally biases play in the favor of players and guarantees that they never experience a full failure unless disadvantaged.

Two-action rounds

All actors in the fight select two actions to play in sequence within a round. Actions are resolved in the same order as in one-action rounds, but without an action selection step between the two selected actions. This was found to be a stable form of play, but is harder to run. Players looking for a more chess-like experience may find it worth the effort.

Fixed turn order

A table can decide to resolve actions strictly in turn based on the established turn order. Turn order can be unchanging or it can rotate so that the first person to go in each round moves to the last place so that lower-order players eventually get opportunities to be first if the fight goes on long enough. This simplifies the process of resolving actions, but was felt to give too much advantage to the characters who got to perform move actions before attackers could attack.

A few others

- ~ If a character is stunned before they resolve their attack, apply disadvantage.
- ~ A player making an attack gains no armor benefit from cover.
- ~ Players aiming are defending at a disadvantage, and aim actions are successful regardless of damage taken while aiming. This has the potential to greatly increase damage taken during combat.

Cyberspace & Neurospace

Cyberspace is an expansive term that describes any virtual environment. The term can be used as a catch-all that includes both virtual reality environments and the internet at large. In the same way the internet exists across desktop computers, mobile apps, and so on, “cyberspace” can describe interfacing with others at a distance through a small hand-held screen, a room-scale display, a portable headset, a fully immersive virtual reality rig, etc.

For those looking to fully enter cyberspace, however, available technology can provide a level of simulation to all senses that acts as a full reality substitution. Virtual reality which is recognizable to the user as a simulation is known as **shallow VR**, and is common for casually hanging out or browsing [the fediverse](#). Conversely, VR that is indistinguishable from the physical world – which is referred to as “biospace” – is known as **deep VR**. This is a form of VR used for e-sports, travel experiences, intimate encounters, and forays into wild virtual environments such as the live mental constructions known as [neurospace](#).

Deep VR is built on three things: the first is the quality of the simulation. Optics present images across a user's full field of view with greater resolution and refresh rates than human eyes can perceive. [Floaties](#) manipulate the vestibular system to match the acceleration and gravity a user feels to their movement in the virtual world. And armatures allow a user to walk, jump, and feel the resistance of objects they touch.

The second component is [Transcranial Magnetic Stimulation](#). Thousands of microelectrodes within the headset stimulate activity in sensory cortices to augment sensation.

The third element that creates deep VR is a form of meditative hypnosis. Users can initiate a series of experiential triggers which have been tailored to the user and to which the user has trained to be receptive. This display – whether a series of chimes that play as a user walks down a monastery hallway or an abstract display of racing points of light set to electronic tones – escorts a users' mind into a state of receptiveness in which they experience the virtual world with heightened senses. A similar process is used to comfortably exit deep VR. This procedure is known as a **shift**. A users' personalized shift routines are stored in their VR configuration settings, along with their interface gesture preferences and avatar style.

The use of deep VR can be dangerous in the same way as rock climbing. It can be a thrilling experience with managed risks, or it can be a fatal mistake if practiced recklessly. There are two ways in which bad experiences in deep VR can result in severe, light-threatening psychosis. The first is that it has the ability to traumatize. The events experienced feel as real (or even realer) than real life. A bad experience can instill intense post-traumatic stress. Additionally, a sudden break in the illusion can induce severe, debilitating shock. This can leave victims anxious, paranoid, unsure of what's real, or feeling disconnected from their bodies. It can cause paralysis, phantom pains, and [Body Integrity Dysphoria](#). Like any activity, however, these dangers are proportional to the risks one wishes to take.



Knife Throw & Yeet

The ability to precisely throw items is packaged as a single proficiency that costs 2 skill points. It can be used to throw knives, shuriken, or a drinking glass. The knife throw action affords two hexes of movement, while the yeet action offers greater range.

Like a tackle, it can be useful to remember that unskilled characters (including NPCs) can throw items with Disadvantage. They may not deal meaningful damage, but this can be a useful approach to prevent adversaries from successfully playing the aim action.

Glueshot & Whip

The glue gun costs 2.5 skill points and includes the microdarter, rifle, pistol, and nanodarter. It does no damage, but can stun and possibly restrain targets. The whip action costs 1.5 skill points, and offers a range of 3 and one movement action. These attacks offer a glimpse of the ways an industrious player can invent new and interesting fighting styles. As long as the rest of the table think it's balanced, go wild, and share what you make with the developer group for inclusion in later editions.

Attack - Ranged

Shuriken

Knife Throw

Damage: 2

Range: ≤ 5

2

hexes of movement

--	-2
-	-1
0	Stun
+	+2 & Stun
++	+4 & Stun

If Aimed:  
Can be played twice (with Advantage)

Attack - Ranged

Improvised

Yeet

Damage: 2

Range: ≤ 5

Range 6 - 7 with disadvant.

--	~
-	-1
0	0
+	+1 & Stun
++	+2 & Stun

If Aimed:  
+2 damage & Advantage

Attack - Ranged

Gluegun

Glueshot

Damage: 0

Range: ≤ 4

Range 5 - 6 with disadvant.

--	~
-	~
0	Stun
+	Stun x2
++	Stun x2

If Aimed:  
Restrains targets ≤ 10 HP (or Advantage)

Attack - Ranged

Whip

Whip!

Damage: 4

Range: ≤ 3

1 hex of movement

--	-2
-	-1
0	Stun
+	+1 & Stun
++	+2 & Stun

If Aimed:  
+3 damage & Advantage

Mind Diving / Skidooing

A virtual environment built from real-time readings of a subject's brain activity is known as **neurospace**. Entering such an interactive VR construction is called **mind diving** or “**skidooing**”. Technologically, the process consists of reading a brain using magnetic resonance imaging (or whatever technology the GM wishes to employ), feeding that input into a computer for processing, then feeding the resulting sensory output to VR rigs. Based on the technology (and needs of the story), skidooing can be more or less immersive by having the players venture further into neurospace. To proceed deeper, psychonauts can perform actions that allow them to activate increasingly immersive tools.

Levels of Immersion

The most superficial mind dive is a **level-1 skidoo**, which consists of at least two psychonauts using standard VR equipment to explore the virtual construction of the host's mind. The psychonauts receive input through their VR gear, and the host broadcasts brain activity with magnetic resonance imaging. The host has no ability to perceive what the psychonauts are doing. The psychonauts are merely observers. All mind dives start at level 1.

At **level 2**, the psychonauts present themselves in the host's mind. The host receives auditory, olfactory, and/or visual stimuli so that they are able to observe what the psychonauts are doing. This makes the psychonauts present in the mindscape, which allows them to interact with the host bi-directionally. In a level 2 skidoo, the mindscape becomes much more interactive to the psychonauts, and dangers increase. Psychonauts must enter a level 1 skidoo and prepare themselves and the host in order to proceed to a level 2 skidoo.

A **level 3** skidoo describes those with even greater immersion. This includes any mind dive in which the host enters their own neurospace (called a “host-in-mind” skidoo) or one in which the host receives transcraned magnetic stimulation to transmit sensations directly into the host's brains. Coupled with the sensory input, transcranial stimulation increases psychonauts' sensitivity to the mindscape, and communicates the psychonaut's actions more fully to the host. The psychonauts' ability to perceive the mindscape increases dramatically, and with it their ability to travel deeper into it and observe more complex thoughts and environments. This further increases the danger of permanent trauma for all involved. Players proceed through a level 2 skidoo in order to enter a level 3 skidoo.

A **level 4** skidoo would describe any mind dive techniques which fall outside of those that have been tested and medically studied. This designation includes bleeding-edge techniques that use drugs or novel neural stimulation techniques. These approaches are experimental and their results can be unexpected. They are considered high risk by most practitioners. As with each level, they require the psychonauts to navigate a level 3 skidoo before activating level 4.