

SKILLS TUTORIAL

Skills are generally fairly easy. The system uses 3d6, and you want to roll less than or equal to your skill. This is represented as ##- where ## is your skill rating. So if you have a skill of 14, your skill roll is 14- (which means Fourteen or less).

Skill Costs

Generally, skills are either STAT based or GENERAL. STAT based skills cost 3 points for the basic skill (which you get at $9 + (\text{STAT}/5)$), while GENERAL skills are 2 points for your initial skill (which is 11). Some skills can be either STAT or GENERAL (Knowledge skills for example can be INT based, or General). If a skill can be either, you can use whichever is most advantageous (for example, if you have a 10 INT, then you might as well buy it as General).

To increase a skill costs 2 additional points. So, a general skill starts at 11-, for 2 points. For 4 points, you can have it at 12-, and so on.

Some skills (like Navigation, Computer Programming, Survival, etc) require 'adders'. Adders are flat point costs that increase the cost of the skill. Navigation for example can be Navigation Land, Ocean, Air, Space, Underground, and so forth.

You can find a list of Hero 5th edition skills [HERE](#), However, please note that this is a list from someone's house rules, so it may not match perfectly. However, it does have 90% match with the real rules, and it's good enough and I can point out any issues as they come up.

Critical Success

If your roll is 6 or less, and your roll is less than or equal to half your skill, then you had a critical success. For example, if you have a 14- Stealth skill, and you roll a 6, you make it by 8, and you have a critical success. Critical successes may not have any game mechanics meaning, depending on the skill and circumstance (Stealth crits aren't really any more helpful, but a Critical while diagnosing an illness or repairing a piece of equipment may result in benefits).

Familiarities

A familiarity with a skill indicates you have some passing knowledge of the skill, but are not an expert. A familiarity costs 1 point, and grants you an 8- skill roll.

Everyman Skills

Everyman skills are 'free' skills that you get for being human (aliens may have different, or no, everyman skills). Everyman skills are always 8- (like a familiarity).

COMBAT TUTORIAL

Combat is fairly straightforward. Here's the general gist.

PHASES

There are 12 phases per turn. Each turn is 12 seconds long, so one phase is one second.

Your speed indicates how many times you act in a round. The specific phases you act on are indicated on your sheet.

The combat starts always on Phase 12. Everyone goes on Phase 12.

We go in reverse order, based on DEX or EGO, depending on what kind of action you're performing. So, if there is a speedster with Dex 30/SPD 6, a mentalist with Ego 30/Dex 20/SPD 4, and a brick with dex 20/SPD 3 in combat, the order is as follows.

30 : Mentalist (if doing a mental activity)
30 : Speedster
20 : Mentalist (if doing a physical activity)
20 : Brick

If two people have the same DEX/EGO, the ego action goes first. If two people have the same DEX/EGO, and are taking the same type of action (ego or physical), then the person with the higher speed goes first.

Everyone gets a post 12 recovery then (your Recovery Stat). This adds REC to both Endurance and Stun. So, it's worth it to use high End powers on the initial phase of combat, as you'll get an immediate recovery.

You may abort a future phase, to take an abortable action immediately, but you lose your future action. You cannot abort on a phase when you've already had an action (but you can abort your action on that phase to act earlier to do an abort action). Some abortable actions are : Block, Dodge, Dive for Cover, Activate a non-attack/non-movement power (usually used to abort to activate a forcefield or other defense, including missile deflection).

If you have a power that requires you to expend endurance every phase it's active, you spend the endurance cost every time you have an action, even if you hold it. So, for example, if you have a forcefield, and it costs 4 END, and you have a speed 4, you pay 4 End on phase 3, 6, 9, and 12. Even if you don't take any actions on those phases, you still pay the endurance cost.

You can voluntarily lower your speed during the post phase-12 upkeep. Doing so locks you to a lower speed until the next phase 12. This is often used to cut down on endurance use over long term.

ATTACKS

To attack someone, you have to beat their DCV. To determine if you do so involves some math.

$$11 + (\text{Attacker's OCV}) - (\text{Defender's DCV}) \pm (\text{Situational Modifiers})$$

For example, if Polar Star is firing a laser blast at Dwarf Star, and Polar has an OCV of 6, and Dwarf Star has a DCV of 5, then the math is :

$$11 + 6 - 5 = 12$$

Polar Star needs a 12 or less to hit Dwarf Star.

Now, what if Dwarf Star had aborted to Dodge, Dodging is a situational modifier. It adds 3 to the DCV of the defender.

$$11 + 6 - 5 - 3 = 9$$

Polar Star needs a 9 or less to hit Dwarf Star.

Other situational modifiers can be combat levels, penalties (called shots, range, vision), or powers of enemies.

Ego combat works similarly, except Ego Combat involves ECV only. ECV vs ECV, the attackers ECV vs the defenders ECV.

DAMAGE

There are many types of damage in the system.

Physical
Energy
Mental
Adjustment
Flash

Physical and Energy damage are broken down into further types : Normal, Killing, or NND (No Normal Defense).

Mental damage is either Effect or Stun. Stun damage can be bought to do actual body damage, but it's not done by default. Effect damage causes an effect (telepathy, mental illusions, etc).

Adjustment is always effect (but again, may be purchased to do body in rare occasions). This causes a power or attribute to be adjusted, either positively (Aid, Heal) or negatively (Drain, Suppress).

Flash is always effect. The effect is to temporarily disable a sense.

Each type of damage has some form of defense that stops or partially mitigates it.

Physical Damage : Is stopped by PD (either resistant or normal).

Energy Damage : Is stopped by ED (either resistant or normal).

No Normal Defense Damage : Is stopped only by the specific defense for it, and is all or nothing. A very special type of NND is called (*Against Very Limited Defense*, or AVL D). AVL D damage is only mitigated by its specific defense. For example, a gas grenade might be bought NND vs Self Contained Breath or Lack of Breathing. If you have life support (Self contained breathing), or you're in a vehicle that has a sealed compartment, you are immune to the damage. A sonic weapon might be bought AVL D vs Sonic Flash Defense or being Deaf. In this case, if you had Hearing Flash Defense, you'd get to reduce the damage by your flash defense, but it would still apply (Being deaf would be considered to be 10 pts of flash defense).

Mental Damage : Is stopped by Mental Defense, if it's Stun damage. If it's Effect, the mental defense instead makes it harder to gain the effect. For example, if a mental blast does 30pts of stun, and you have 20 pts of Mental Defense, then you reduce the stun by 20 pts, and take 10. On the other hand, if someone is trying to forge a telepathic contact with you, and you have an Ego of 18, and 20 defense, they have to beat your EGO plus Mental Defense by 10 to read your surface thoughts (in the example, they need 48 on the effect dice).

Adjustment : Negative Adjustments are halted by Power Defense. Power Defense is also a common NND or AVL D defense. Power Defense works exactly like PD or ED or MD.

Flash Defense : Flash Defense is armor for your senses. Each point of Flash Defense reduces the number of *segments* you are flashed by 1.

Killing Damage : Note, some attacks are designated as Killing Attacks. These include HKA and RKA (Hand-to-Hand Killing Attack & Ranged Killing Attack). These types of attacks are only stopped by Resistant defenses, normal defenses are completely bypassed. These attacks can also be bought with the 'Mental Attack' bonus, which makes them go up against Mental Defense instead, or as AVL D. If they are so bought, then only resistant versions of the defense will protect against them (Mental Defense, Power Defense, and Flash Defense can all be bought as resistant for additional points, in addition to normal PD/ED). The Armor and Forcefield powers are always resistant.

To apply damage, the following formula is used :

Normal Attack (Energy Blast, HTH attack, Ego Blast)

STUN : (Effect roll on dice (Multiplied for any vulnerabilities target has) - Applicable Defense) * Location Modifier if location specific * Damage Reduction Modifier (if present).

Example :

Exeter fires his Petawatt laser (Energy Blast) at Galactian. Exeter has 20D6 of laser (Energy Blast). Galactian is vulnerable to light based attacks, and has 100 ED, 30 CON, and 25% damage reduction vs energy.

Exeter hits (for our example) and rolls location. He rolls location : Head. He fires it right between Galactian's eyes. He rolls his 20 dice, and get's an exactly average 70 Stun.

To determine how much Galactian takes, we use the following numbers...

$(70 * 2 \text{ (Galactian's vulnerability Modifier)} - 100) * 2 \text{ (Head shot doubles normal stun that penetrates armor)} * 0.75 \text{ (Galactian's 25\% damage reduction)}$

$$140 - 100 = 40$$

$$40 * 2 = 80$$

$$80 * 0.75 = 60$$

Galactian took 60 stun from the head shot, and is Con Stunned (he took more stun than he has Con).

If Galactian had been hit in the chest, he'd have taken 40 stun, and still been con stunned.

If he'd been hit in the hand, he'd have taken 20 stun (Location modifier of ½ stun).

BODY : Each 1 rolled on the dice counts for 0 body, each 2 to 5 counts as 1 body, and each 6 counts as 2 body. Use the same formula to determine if body is done.

Example :

From our earlier example, let us assume that Exeter rolled only 3's & 4's on his dice, giving him his average damage. His attack would therefore have done 20 body (1 body per die). The 20 body would not penetrate Galactian's 100 defense, even after it was doubled to 40 for his vulnerability, so therefore Galactian took no body damage.

Killing Attack (HKA, RKA)

BODY : Total up the effect roll of the dice.

Example :

Nova fires her .40 caliber pistol at Captain Obvious. She hits, and rolls a 3, a 4, and a 5. Her total then is 12, and she hit Nova for 12 body. This is then applied to the RESISTANT defenses of the target only, to determine if body is taken. This process is the same as for Normal Attacks. Only the method of determining the base body is different.

STUN : Roll a random die, 1d6-1 for non-targeted attacks, or use the multiplier for the location if it's targeted.

Example :

If Nova shot Captain Obvious in the head, then the stun effect would be the body multiplied by 5 (The head has a stun X of 5). If instead, she shot him in the hand, it would be 1 (the hand has a stun X of 1). Once the base stun is calculated, apply the same formula as for Normal Damage stun to determine how much penetrated.

Effect Attack (Telepathy, Mind Scan, Mental Illusion, Mind Control)

To calculate the effect, roll the dice, and count the pips on the dice. Most forms of effect attack require a minimum effect to trigger them to work. They get bonuses for extra effect.

Example :

Mentalo is trying to generate Mental Illusions in Polar Star's mind. Her Ego is 18, and she has 10 pts of Mental defense. Mentalo wants her to stop reacting with the real world at all. This is a +30 EGO effect, so he must exceed her EGO by 40 pts with his effect roll (30 for the effect level, and 10 for the mental defense). This means he needs to roll 58 on his mental illusion attack. If a character has a vulnerability to the effect, the results of the effect roll are multiplied BEFORE checking for success. Thus, if Polar Star had a 1.5 x effect vulnerability to Mental Illusion, then Mentalo would multiply his effect by 1.5 before seeing if he had reached the 58 he needed. For every full 5 points the effect threshold is exceeded by, the victim acquires a -1 to their will saves to break the effect.

Adjustments (Suppress, Dispel, Transform, Drain)

To calculate the effect, roll the dice, and count the pips on the dice. If the victim has Power Defense, reduce the amount of effect by the points of PwD. Basically, treat it like the Normal Attack formula, but there are no location modifiers, and no damage reduction.

Mental Attack (Ego Blast, any other attack power bought as a Mental Power).

Treat this as a normal attack (or killing attack, if bought for an RKA/HKA), but the relevant defense of Mental Defense applies, rather than PD or ED. Otherwise, use the same rules for normal attacks (or killing attacks if it's an RKA/HKA). A non-mental attack that is bought as a mental attack normally does no body or knockback.

Flash Attack (Flash)

For a flash attack, total up the body rolled on the flash dice, as if you were rolling a Normal Attack. That is, 1 = 0, 2 to 5 = 1, and 6 = 2. The final 'body' count is the number of *segments* that the target is flashed. There are no locations for flash attacks. Flash Defense defends against a flash attack. If there is more defense than flash phases rolled, the target is not flashed.

Other Attacks (Entangles)

Entangles are a bit of a unique animal. They have two components, DEFense and BODY. The Defense is constant and based on the level of power when purchased. The body is determined at the time the attack hits. To determine the Body of the entangle, count the Body on the entangle effect roll, as if calculating Body for a Normal Attack. That is, 1 = 0, 2 to 5 = 1, and 6 = 2. To escape an entangle, a character must exert enough damage on the entangle to bypass its defense, and destroy its body.

Example :

Spider Lass spins a web and entangles Rhino Lad. She rolls 5D6 and gets 1, 2, 3, 5, 6. Her entangle has 5 Defense to start. So the entangle affecting Rhino Lad is 5 DEF 5 Body. Rhino Lad has 60 Str, and uses casual strength to attempt to break free. He rolls 6D6 (half his strength dice) and gets 4, 4, 5, 6, 6. That's 7 body. So the entangle takes 2 body, and has 5 DEF and 3 Body left. Vulture Girl, seeing her friend Rhino Lad in trouble, unleashes a sonic scream that does 30 stun and 8 body to both Rhino Lad and the Entangle, because it's area of effect. Rhino Lad gains an additional 5 defense against the scream, because of the entangle. The entangle takes another 3 body, and falls off Rhino Lad.

Knockback

To determine how much Knockback a character suffers from being hit, the attacker rolls 2d6 and subtracts the total from the amount of BODY rolled for the attack. Use the total amount of BODY rolled on the attack dice, regardless of the target's defenses, how much damage the character takes after applying defenses, Vulnerabilities, Hit Location modifiers, or the like. The one exception is if the damage has to first penetrate a barrier, such as a wall or Force Wall. In that case, base the Knockback on the BODY damage that gets through the barrier; if none gets through, there's no Knockback. (If some does get through, the amount that gets through would be doubled for Double Knockback purposes.)

If the result is negative, no Knockback occurs — the defender remains where he was standing before the attack.

If the result is 0, the defender is Knocked Down. A character who is Knocked Down must spend a Half Phase in his next Phase getting to his feet (or reorient himself if he were in mid-air or mid-water).

If the result is positive, the target is Knocked Back that many inches. He ends up lying on the ground (or embedded in a wall or other object), and must spend a Half Phase to get up (or getting out of whatever he hit).

If a character is hit by an Autofire attack that does Knockback, the Knockback equals the highest Knockback rolled for any of the attacks that hit, +1" for each additional attack that hit. For multiple-power attacks, and Rapid Fire and Sweep used to hit a single target multiple times, roll the Knockback separately for each hit, and use only the highest result.

If the attack was a Killing Attack, the Reduction Dice are increased by 1D6.

If the defender is flying or gliding, the Reduction Dice are decreased by 1D6.

If knockback occurs, the knocked back character may take additional damage. If they impact nothing on their travels, they then take an ND6 normal attack, where N is half the number of Inches they moved back. Thus if someone took 10" of knockback, then they'd take a 5d6 normal attack as they bounce and skid along the ground.

If they DO hit some object, then they instead take an attack that is ND6, where N is the lesser of the number of Inches of Knockback remaining when they impacted the object, or the objects DEF + Body, whichever is less.

For example, if Jinxman was hit for 20 inches of knockback by Cannon Boy, and he flew back 5 inches and hit a brick wall that had 10 Body and 2 DEF, then he'd receive a 12D6 normal attack from slamming into the wall. After taking the damage, Jinxman would blow through the wall, and continue flying for 2" (taking 1d6 damage, but probably not bothered to roll).

Breakfall can reduce the damage from knockback, if it's not too far.

Attacks that don't do body generally do not do knockback (such as mental attacks, NNDs, etc). Powers can be purchased to do knockback anyway, with an advantage. Additionally, there is an advantage that doubles knockback. If this advantage is on a power, the body is doubled *before* the reduction dice are rolled, to determine the knockback.

Knockback can be reduced by Knockback Reduction. This is a power, but is also granted by some other powers (specifically, Density Increase and Growth). Some powers *increase* knockback, like shrinking.

Clinging characters can use clinging to reduce knockback, rolling casual strength and adding up the body to reduce the knockback by that amount. Clinging also increases the number of reduction dice by 1.

If the attack was a martial maneuver (martial strike, fast strike, etc) then the reduction dice are also increased by 1D6.

How does movement work? I don't understand what 4" vs 12" means for my leaping! And my non-combat leaping doesn't have two numbers, is that because I can't non-combat when I'm densed? Is 1" 2 meters?

No, the program just has a bug with non-combat secondary bonuses.

Yes, 1" is one hex on the map.

When Densed up...

You can leap 12" using Combat Movement as a full phase action. That's 12 hexes, and is equivalent to 24 meters.

You can leap straight up 6" using combat movement as a full phase action. That's 6 hexes and equivalent to 12 meters.

When not metal...

You can leap 4" using Combat Movement as a full phase action. That's 4 hexes, and is equivalent to 8 meters.

You can leap 2" straight up using combat movement as a full phase action. That's 2 hexes, and equivalent to 4 meters.

The difference between combat and noncombat movement isn't that you can do one in combat and the other out of combat. You can use either method at any time.

However, non-combat movement halves your OCV and DCV.

Rules'splainer Questions!

Rules'Splainer! I have a question! I have a flash that's 2d6+1, what good is the +1? Is it just there to mock me? Or is attacking me with Math? or what?

Answer : Shut up! *Sounds of hurried whispers off camera* What do you mean it's in my contract? Fine.. .whatever...

Ok, so, let's look at the power in question.

Electromagnetic Starburst!: (Total: 48 Active Cost, 48 Real Cost) Energy Blast 2d6+1, Does BODY to Electronic Devices (+3/4), NND - Grounded, EM Shielded, or having no electrical nervous system ([Standard]; +1) (33 Active Points) (Real Cost: 33) **plus** Sight and Radio Groups Flash 2d6 (Real Cost: 15)

First off, the flash isn't 2d6+1, it's a 2D6 Flash. What this is is what's called a Compound Power. A Compound Power is a mix of two *different* powers that's treated as one power.

Bwah! Confusion!

Settle down. In this case, the starburst is a 2d6+1 Energy Blast NND, that does body (but only to electronic devices) and also a 2d6 Flash against the sight and radio groups.

So, if you fire it at a security camera, it does 2d6+1 damage, like this : 3, 5, +1 = 9, or 9 stun. Camera's don't take stun, so that's useless. However, the 3 and 5 are worth 2 body (one each) so the camera takes 2 body as you fry the circuits. If it was shielded, it would have taken nothing.

At the same time the NND hits, a 2D6 flash hits. If you rolled a 1 and 5 on the flash dice, the camera would be flashed for 1 phase. Typically, a camera has the same speed as the computer it's attached to. If it's not, and it's just recording to a VCR, it has a speed of 1.

Then why do I need the +1 if cameras can't take stun?

Because, it's not limited to cameras. You can hit a person with it too. They then take 2d6+1 stun, and are flashed.

Oh, that's simple!

I thought it was... However, if you did somehow manage to have a flash that had 2D6+1, then it would still be useful. Because that +1 would increase the active point costs. That would make it harder to dispel or suppress or drain the power.

Oh!

Very minor point to complicate this further: If you *did* have 2d6+1 Flash, you would want to make sure not to use the power at full power because you'd be needlessly doubling your END cost. See, 2d6 Flash (Sight+Radio) has an AP of 15. You divide that by 10 to get the END cost. Hero Games lets you round .5 in your favor (up or down) so your current END cost is 1. If you made the power 2d6+1 your AP would be at least 16 and so your END cost would rise to 2.

Rules'Splainer! My sense doesn't work through walls? But I wanted it to!

You have to have N-Ray vision to sense through walls. That would be 25 more experience points. It's something that can be worked toward, but under normal rules, physical matter stops senses.

Rules'Splainer! How do actions work, I don't understand. Can you explain it assuming I only know Pathfinder?

In one turn, there are 12 phases. You act on the phases that have circles on your character sheet (3, 6, 9, 12 for a speed 4 character).

Each phase, you have one full phase action, or two half-phase actions (think of them as Move Action/Standard action or full round action from Pathfinder). You can move and then attack in champions, but not the reverse. Or you can do a Full Move, which is your maximum move, or you can use a full phase action (activating a power that's limited to full phase, for example).

Rules'Splainer! How does Missile Deflection/Reflection work!

Don't feel like it now, figure it out yourself...

You have to! It's in the contract!

sound of grumbling

Fine, here goes...

Missile Deflection/Reflection works exactly like Blocking does. In fact, it's blocking but vs ranged attacks. So, I'm going to explain Blocking, and segue into Deflection.

To Block a melee attack, you have to do one of two things.

- 1) Hold a half-action in reserve, and declare a block when you are attacked.
- 2) Abort a future action to block.

If you want to block an attack, and it's your turn, you have to do 1. If it's not your turn, you have to do 2. Where it gets hinky is, you can't abort if you've already had an action that phase. So, if someone slower than you (like a brick) goes on the same phase as you, you should probably hold a half-phase action to use to block. If they go before you, no worries, you can abort your future action to block.

When you declare a block, you make an attack check. However, instead of using the enemies DCV as normal, you use their OCV instead!

Example : Martian Mole, the shapeshifting mole from Mars is about to be attacked by Jumping Jupiter Jane, the brick from Jupiter! He aborts his next action to block her punch.

Jane has an OCV of 5, and +2 with punches. Martian Mole has a 7 OCV/DCV, and +3 levels with Martian Man-jutsu, the Martian Martial Art. He also knows the maneuver Martian Parry, which is a +2/+2 Maneuver. So, Martian Mole has some decisions to make. He has an automatic +2/+2 with his abort to block, so his OCV/DCV become +9/+9. He has 3 levels he can spread around. Putting them into OCV makes it more likely he'll block, but, it means he's more likely to get hit if he fails. So Mole puts +1 into OCV and +2 into DCV, giving him a +10/+11 total.

Mole now rolls. His OCV is 10, and Jane's OCV is 7. Mole needs $11 + 10 - 7 = 14$ or less to block. He rolls his 3d6 and...

- 1) ...gets a 15. He fails to block, and Jane's damage is applied normally.
- 2) ...gets a 10. He blocks, and Jane's attack is blocked, and no damage is done.
- 3) ...gets a 14. He blocks, and Jane's attack is blocked, and no damage is done.

Mole is not out of the woods yet though! Mercury Mouse, Jane's bosom buddy and speedster pal, races in to attack Mole. Mercury has an autofire punch he wants to attack Mole with!

Mole may attempt to block Mercury's attacks, because he's already blocking. His OCV/DCV levels are fixed now, and apply to everyone. Mercury has a 9 OCV. Unlike before, Mole must wait for Mercury to attack before he can Block. This is because it is an autofire attack, and Mercury may hit multiple times. So we need to know how many times Mercury hit.

Mercury has 9 OCV, and Mole has 11 DCV, so Mercury needs $11 + 9 - 11 = 9$ or less to hit. For every 2 he makes it by, he gets an extra attack, up to 5 attacks.

Mercury rolls 3d6, and rolls 4! Normally this would be a critical success, but because it's an

autofire attack, it's not. Therefore, Mercury gets 1 hit for the 9 or less, and another at 7 or less, another at 5 or less. So he gets 3 out of 5 hits.

Mole must now attempt to block 3 hits. But, Mole has already blocked one hit while blocking. Every additional attempt is at -2! So, his first attempt to block Mercury is at $11 + 10 - 2 - 9 = 8$ or less! The second shot from Mercury is blocked on a 6 or less, and the last on a 4 or less.

Mole rolls and gets 7, 10, and 5. Mole blocks the first punch from Mercury, but the second and third hit.

Note, some attacks simply can't be blocked due to special effects. For example, being run down by a car is a move-through attack. However, it can't be blocked by a normal sized person (although a giant might be able to, or someone who could lift the car with casual strength probably could). The GM is the final arbiter of what attacks can and can't be blocked.

Missile Deflection works exactly the same way as blocking, but only works on ranged attacks. The deflector holds a half-phase or aborts an action to declare a deflection attempt. They can deflect multiple attacks with one deflection declaration.

Missile Reflection works like Deflection, but after deflecting the attack, the deflector may make a ranged attack against a valid target (depending on how they bought the power, it may be only at the attacker, or at anyone). Each additional attempt to reflect an attack takes a cumulative -2 penalty on the attack roll (just like blocking or deflecting does).

Mixing Blocks and Deflections is possible. If you have deflection, you can also block melee attacks. Penalties for cumulative blocks and deflections stack. So if you deflect attack one, and block attack 2, the block on attack 2 is made at -2. Deflection of attack 3 is at a -4, and blocking attack 4 and 5 are at -6 and -8 respectively.

Note that no matter how many attacks you block, a 3 always succeeds on the block.

Damage Shields may still do damage to you, even if you block, depending on special effects. For example, if you are blocking with your hands and feet, the damage shield will damage you if you block someone's melee attack! If you block with a focus (such as a big shield), then it will take the damage instead.

Hey Rules'Splainer! What the frag is Long Term Endurance?

Ok, so, this is complicated, if you don't like math. But basically, it's to prevent you from basically constantly doing push ups all day just because it only takes 4 end per turn to do them. Eventually you get really tired from continually expending End.

LONG TERM ENDURANCE	
(END in Turn)/REC	END lost to Long Term
less than ½ REC	None
½	1 per 5 Minutes
1	1 per Minute
2	1 per Turn
3	2 per Turn
4	4 per Turn
5	8 per Turn

So how does this work? It's not too hard. Total up the Endurance you are spending in a turn, and divide it by your recovery.

Example : If your Recovery is 10, and you are spending 4 end per turn, your LTE ratio is 4/10ths (or, 2/5ths). 2/5ths is less than ½, so you have no LTE issues.

Example : If your Recovery is 10, and you are spending 8 end per turn, your LTE ratio is 8/10ths, or 4/5ths. 4/5ths is Greater than or Equal to ½, so you lose 1 LTE per 5 minutes.

Example : If your Recovery is 10, and you are spending 20 end per turn, your LTE ratio is 20/10ths', or 2. 2 results in 1 LTE per turn.

Ok, so what does that mean?

Let's say we are in example 2, where you are losing 1 LTE per 5 minutes. If you have 40 endurance, you can keep that up for $40 \times 5 = 200$ minutes (about 2 hours and 20 minutes). Each 5 minutes, your END goes down by 1 (your Maximum END!). It takes 5 hours of rest to get your Recovery back to your END for Long Term loss.

Example, you have 40 Endurance and 10 Recovery. You spend Long Term Endurance until you pass out. (Literally reduced to 0 END max). It will be 5 hours before you can move again, and you will have 10 END max. It will take several days to recover.

I have regeneration! Does that help?!?!

It's entirely up to the GM, but generally, the GM will take that into account, perhaps speeding it up one level on the time chart per die of regen you have (5 minutes -> 1 minute -> 1 turn).

How can I be spending 20 endurance if I have 10 recovery? Why would you even keep track of LTE?

Think of it like this, if you've got 100 endurance, and you have 15 recovery, and you burn through 90 endurance in 3 turns, you're going to do some serious damage to your endurance reserves. So, doing that would likely reduce your top end for a bit.

Normally, we don't bother keeping track of it because you're doing it in combat, and then resting after combat. However, if you're doing something out of combat, such as burning a power to burn out your endurance, spending a turn doing nothing but recoveries, and then burning it out all over again, you'll still hit your LTE issues.

HEY YOU! YOU MESSED UP THE 'WHAT YOU CAN DO IN A PHASE!'

Yep, sure did. Got 2-3 versions of champions floating around in my head. Here's the latest.

Each phase is broken up into 3 standard types of actions, and two special types :

Standard Actions

Zero-Phase Actions : You may do as many Zero-Phase actions on your turn as you wish, as long as it's before any full phase actions, or before your second Half-Phase Action.

Half-Phase Actions : You may take up to 2 half-phase actions per phase, but may not combine them with a full-phase action.

Full-Phase Actions : You may take 1 full phase action per phase, if you have not taken any half-phase actions.

Special Actions

Attack Action : An attack action is any action (Zero, Half, or Full) that you take that requires a to-hit roll. An attack action ends your turn, even if you have actions left unused.

No Time Actions : A No Time action can be performed at any time, before, during, or after your actions on your phase, or even on a segment you don't normally have a phase on.

Zero Phase Actions :

Brace

Accelerate/Decelerate while moving (Each inch of movement allows you to accelerate or decelerate by 5" of velocity)

Shift a Multipower Slot (Once per segment)

Shift Skill Levels (Once per segment)

Turn on a Power (Once per segment)

Use Casual Strength

Half Phase Actions :

Find Weakness

Grab* (If successful, free Squeeze or Throw)

Haymaker* (Action completes end of next segment)

Missile Deflection*

Move-By*

Move-Thru*

Any action that requires attack roll*

Draw a Weapon

Get to one's Feet

Make a perception roll with a Non Targeting Sense

Open a Door

Start a Vehicle

Use up to Half-Your Movement in Inches (Half-Move)

Full Phase Actions :

Set

Set & Brace

Change Clothes (Includes Instant Change)

Recover from being Con-Stunned

Take a Recovery (Cannot be done if you delay your action)

Use more than half your inches of Movement (Full Move)

No Time Actions :

Make a Presence Attack

Make a roll at the GMs request

Perform a Soliloquy (AKA Tell the hero the dastardly plan)

* Actions marked with this are considered Attack Actions

Note, they apparently changed a rule between 3rd edition and 5th edition that I missed until just now. Formerly, in 3rd edition, activating a power was a half-phase. However, it is now a 0-phase (although the way I'm reading it, that only applies to that single power, the once per segment). So you can activate any number of powers, then deactivate them before the end of your turn, but can't re-activate them again the same segment you activated them before.

Hey! Rules'Splainer! Splain how Invisibility works in combat!

Ok, can do...

What, no complaints?

I was going to do this anyway.

Oh, darn...

Anyway, any time a character cannot perceive an attacker (because they are invisible, or because the character is blinded or in an area of darkness they can't see through), the following penalties are suffered.

- In HTH Combat, the character is at $\frac{1}{2}$ OCV and $\frac{1}{2}$ DCV. This applies both to when he makes attacks in HTH Combat, and is attacked in HTH Combat.
- In Ranged Combat, the character is at 0 OCV and $\frac{1}{2}$ DCV. This applies both to when he makes attacks in Ranged Combat, and is attacked in Ranged Combat.

Now, if a character can make a PER roll with a Non Targeting Sense (Half phase action) to perceive a particular target (note it's per target!), then, against that target he only suffers the following penalties.

- In HTH Combat, the character is at $\frac{1}{2}$ OCV and -1 DCV. This applies both to when he makes attacks in HTH Combat, and is attacked in HTH Combat.
- In Ranged Combat, the character is at $\frac{1}{2}$ OCV and Full DCV. This applies both to when he makes attacks in Ranged Combat, and is attacked in Ranged Combat.

Once a character has 'locked on' to an opponent he can't see, the character doesn't have to make another perception check as long as he doesn't lose that character. If he tries to find a different character, or if he's con stunned, he loses the 'lock' on that person and must make the perception roll again.

Invisible characters need to be careful of making attacks with visible components. Invisibility only covers the character and his carried gear, not attacking gear. It will cover a punch, or claws, but not swords or ranged attacks that don't have the 'Invisibility Power Effects' advantage.

If an Invisible character makes a visible attack, the target of that attack (and anyone else who succeeds with a PER Roll to spot the attack) only suffers a -1 to his OCV to attack back, even at Range, until the Invisible character moves. Once the Invisible character moves out of the hex where he was standing when he made the visible attack, his Invisibility affects OCVs as normal.

How do Killing attacks, NNDs, half-dice, and Damage Classes relate?

Let's say I have 21/2D6, how do you read that?

Read it as '2 and 1/2 D6' so to roll it, you'd roll it as [dice=NND]2d6+1d3[/dice].

As to Damage classes, Damage Classes are sort of an abstract that tries to equate how much power different types of attacks have. Our game tries to keep DCs (Damage Classes) between 7 and 13.

One Damage Class is equivalent to a single D6 of Normal Damage.

An NND is 2 Damage Classes per die of damage. That is, each 1d6 of NND is worth 2 D6 of Normal damage.

A Killing attack is worth 3 DC's per 1d6 of damage (it's three times better than a d6 of Normal Damage, and equivalent to 3d6 of Normal damage).

Ego Blasts are much like NNDs, and are 2 DC's per 1d6 of damage.

Telepathy, Mind Control, and any other attack power that is 5pts per die are 1 DC per die.

Transformation is 3DC per die.

Martial arts Damage Classes (which are 4pts each) are worth 1 DC each.

You can use some powers to add DC's to other powers. Specifically, you can use STR to add to Killing Attacks, and HTH Attacks to add to STR attacks. You cannot more than double an attack using a second power.

To split up a Killing attack into it's Damage Classes, you add either +1, +1/2, or +1d6. You can increase a HTH Killing attack by adding strength DC's to it. For example :

5pts -> 1d6 Normal Damage -> 1 pip Killing -> 1/2D6 NND
 10pts -> 2d6 Normal Damage -> 1/2D6 Killing -> 1D6 NND
 15pts -> 3d6 Normal Damage -> 1D6 Killing -> 1 1/2D6 NND
 20pts -> 4d6 Normal Damage -> 1D6+1 Killing -> 2D6 NND

You can't more than double an HKA with strength. So, if you have 20 str (4d6 of Normal Damage, or 4DCs), and a 1d6 HKA (3 DCs), you can use 15 STR to make your 1D6 HKA a 2D6HKA, and the extra 5STR is worthless.

If a HKA is a real world weapon, it will likely have the STR Minimum limitation on it. This represents that it takes a certain minimum strength to utilize the weapon effectively.

If the weapon also has STR MIN Doesn't Add/Subtract Damage, then the weapon isn't improved by having above average str or below average strength. Think of a bow with a fixed strength rating, if it's pull is 50 lbs, being able to pull 500 lbs doesn't do any extra damage.

Hey! What modifiers affect a Presence Attack?

PRESENCE ATTACK	
MODIFIERS TABLE	
Modifier Situation or Character's Action	
-1d6	Inappropriate setting
-2d6	Very inappropriate setting
-1d6	In combat
-1d6	At a disadvantage
-3d6	Covered
Presence Attack conflicts with target's Psychological Limitation	
-1d6	Moderate Psychological Limitation
-2d6	Strong Psychological Limitation
-3d6	Total Psychological Limitation
Poor Reputation relevant or contrary to Presence Attack	
-1d6	8- Reputation
-2d6	11- Reputation
-3d6	14- Reputation

-4d6	Extreme Reputation
-1 to 3D6	Presence Attack runs against existing moods
Varies	Character has an appropriate Reputation Perk
Presence Attack agrees with target's Psychological Limitation	
+1d6	Moderate Psychological Limitation
+2d6	Strong Psychological Limitation
+3d6	Total Psychological Limitation
+1d6	Character makes appropriate Interaction Skill Roll
+2d6	Character makes appropriate Interaction Skill Roll by Half or More
+1d6	Target is Surprised
+1d6	Exhibiting a Power or superior technology
+1d6	Violent action
+2d6	Extremely violent action
+3d6	Incredibly violent action
+1d6	Good soliloquy
+2d6	Excellent soliloquy
+3d6	Incredible soliloquy
+1d6	Appropriate setting
+2d6	Very appropriate setting
+2d6	Target is in partial retreat
+4d6	Target is in full retreat/has been captured
+1d6	Need (character appealing for help genuinely seems to need it)
+1d6	Logic (statements are extremely logical and well thought out)

Hey! How do Critical Hits work? I didn't see them in the core book!

Critical hits are from the Combat Handbook. They are an optional rule, but one that is a core from 3rd edition.

A "critical hit" is a blow so accurate it does maximum damage. One occurs when a character's roll to hit is less than half of what he needed to hit the target.

Examples: An OCV 6 character shoots at a DCV 5 character. He needs a 12 or less to hit. To make a critical hit, he needs less than a $(12/2)$ 6 to hit — i.e., he must roll a 5 or below.

An OCV 7 character attacks a DCV 5 character. He needs a 13 or less to hit. To make a critical hit, he needs less than a $(13/2)$ 6.5 to hit — he must roll a 6 or less.

If a character makes a critical hit, he does maximum damage for the attack. Therefore, a Killing Attack 2d6 does 12 BODY. An 8d6 Normal Damage attack does 48 STUN, 16 BODY. A 2d6 NND attack does 12 STUN.

If the campaign uses the Hit Location rules, a Killing Attack uses the normal STUN Multiplier for the location — 12 BODY to the Vitals does 48 STUN, for instance. If those rules are not in use, a Killing Attack does the maximum possible STUN; if the STUN Multiplier is 1d6-1, as with most Killing Attacks, then 12 BODY corresponds to 60 STUN.

Characters may only do critical hits to living targets. Ignore critical hit results against targets like doors and walls (it would be far too easy to get a critical hit on a DCV 0 door, for instance).

Hey, Rules'Splainer! How does Velocity work?

Velocity is the speed your character is traveling at, it is not how far you are moving, but how fast. Your maximum velocity is equal to your maximum speed. To increase or decrease velocity requires 1" of movement.

Example : The Human Bullet, a speedster with 50" of movement, is standing on a street corner when a car goes past, and someone accidentally drops their wallet out the window. Being a good samaritan, HB picks up the wallet and takes off after the car.

The car is travelling past at a velocity of 40" per phase. HB starts out at a velocity of 0 (He was standing still for a change). The first inch he moves, his velocity increases to 5". The second inch, it increases to 10". The third inch, it's 15". Finally, after moving 10", he has increased his velocity to 50".

Unfortunately, the car turns left unexpectedly, directly in front of HB! He can't go left, there's a brick wall! He can't go right, there's a city bus there! All he can try to do is stop! But the car is 7" in front of him. He can only decelerate by 5" per inch forward. He stops as hard as he can, and slows $7 \times 5 = 35$ ". He is still moving with 15" of velocity when he slams into the side of the car.

If he had been intending to travel at non-combat speed ($\times 8$, or 400" per phase), he would have needed 80" of room to reach that maximum velocity! And, he'd need 80" of room to come to a complete stop!

Yo! Quit being lazy and tell me how Bases work!

I need to read these stupid contracts better...

Ok, here goes...

Bases are purchased using character points. Each point spent on a base grants 5 character points for the base. The base is built just like a character is. That includes advantages, powers, skills, and disadvantages.

Bases have 3 stats...

Size - This is how big the base is. How much area is contained in the base. It also affects the DCV of the base (ballistic missiles, etc).

BODY - This is how robust the base is.

DEF - This is how tough the base is. It is armor for the base.

Size defaults to 8 hexes, body to 2, and DEF to 2.

Each point of additional body costs 1 character point. Each point of DEF costs an additional 3 points.

BASE SIZE TABLE					
	Size	Length	Width	Area	
Cost	Category	(hexes)	(hexes)	(hexes)	DCV
0	0	4	2	8	-4
2	1	5	3	15	-4
4	2	6.4	3.2	20	-5
6	3	8	4	32	-6
8	4	10	5	50	-6
10	5	12.5	6.4	80	-7
12	6	16	8	125	-8
14	7	20	10	200	-8
16	8	25	12.5	320	-9
18	9	32	16	500	-10
20	10	40	20	800	-10

22	11	50	25	1,250	-11
24	12	64	32	2,000	-12
26	13	80	40	3,200	-12
28	14	100	50	5,000	-13
30	15	125	64	8,000	-14
32	16	160	80	12,500	-14
34	17	200	100	20,000	-15
36	18	250	125	32,000	-16

Location of the base affects the cost of the base, it's bought as a perk for the base.

Location	Cost
City	0
Suburb	5
Distant	10

Modifiers	
Floating in water	+5
Deep Wilderness	+5
Airborne	+10
Underwater	+15
Underground	+20
In Space	+25
Another Dimension	+30

Grounds - A base's Size represents a building or similar installation. In addition, a base can have grounds or a yard equal to the size of the base itself. If you want bigger grounds, you can double the area for +1 character point. The grounds don't have walls or rooms, but you can have a 2 Body, 2 DEF fence around it (this can be increased like the body/def of the rest of the base and matches whatever the body/def of the base is).

Visibility - Normally, a base is fully visible to anyone who wants to find it, or even those who don't and just happen to see it. There are two ways to get around this, and they can be combined.

Concealment - You can buy a concealment skill for the base, this represents its ability to hide in plain sight.

Disguise - You can buy a disguise skill for the base, this represents its ability to look like something it isn't.

Powers - Bases can have powers. You don't have to buy area of effect on powers that normally affect a person directly. The base is one 'character'. So life support affects an entire character, therefore, buying life support for the base affects the entire base.

Computers - You can buy a computer for your base. It should be bought separately as a computer, and the computer then lives in the base. It should not be bought within the base's points.

Personnel - You can buy personnel for your base. They are bought separately, and then defined as being in the base. They should not be bought within the base's points.

Vehicles - You can buy a vehicle for your base. It should be bought separately as a vehicle, and the vehicle then is stored in the base. It should not be bought within the base's points.

Labs & Skills - You can buy a skill for a base, this represents a lab. When using a lab, the lab makes a complementary skill check for whatever skill it is for. Acrobatics could represent a Gym, Disguise could represent a costume and makeup room, Research could represent a Library.

Cells - To build a cell, buy additional def/body and apply the partial coverage limitation to the defense to represent a cell or raid room.

Power - Bases can be hooked up to the grid for no cost. Or it's powers can be bought 0 END to represent a contained power source. Or the base can have an endurance reserve and a recovery that has the limitation 'requires fuel'.

Sensors - Bases can have sensors by buying enhanced senses.

Training Facilities - Bases can have training facilities to help the owners train.

Equipment - Bases can have equipment as well. Equipment are immobile foci (as they can't leave the base).