

[\[Back to Index\]](#)

Fudge TransHuman Space

Fudge THS is an adaptation of the [GURPS TransHuman Space](#) roleplaying game to the free [FUDGE](#) rules system. See [Legal Stuffs](#).

Updates:

- 01/07/03: Small changes to the vehicles rules, and moved it to [another page](#).
- 21/06/03: More Cosmetic changes, designer's notes. Tweaked again the [Damage](#) rules.
- 19/06/03: Cosmetic changes. Tweaked a bit [Damage](#) rules. Added ITW Vehicles, Vehicle Weapons. Added Very Rapid Burst (VRB)
- 18/06/03: First version. To Do: Gremlin Swarm, Vehicle Repair Time, Spaceship Rules, more Templates, Character Sheet.

Table of content

- 0. Introduction : Why Fudge THS ?
- 1. Game System
 - 1.1 Characters
 - 1.1.1 Attributes
 - 1.1.2 Gifts & Faults
 - 1.1.3 Skills
 - 1.2 Gaming Rules
 - 1.2.1 Action Resolution
 - 1.2.2 Combat
 - 1.2.2.1 Initiative Rolls
 - 1.2.2.2 Actions
 - 1.2.2.3 Melee Attacks
 - 1.2.2.4 Ranged Attacks
 - 1.2.3 Damage
 - 1.2.8 Other Rules
 - 1.2.9 GTHS Specific Rules
 - 1.3 Material
 - 1.3.1 Weapons
 - 1.3.2 Ammunitions
 - 1.3.3 Armors
- 2. Character creation
 - 2.1 Creation procedure
 - 2.2 Skills List
 - 2.3 Gifts List
 - 2.4 Faults List
- 3. Conversion from Gurps THS material
 - 3.1 Character conversion
 - 3.1.1 Attributes conversion
 - 3.1.2 Gifts & Faults conversion
 - 3.1.3 Skills conversion
 - 3.2 Other conversions
- 4. Sample Conversions
 - 4.1 Sample characters
 - 4.2 Templates
- 5. Additional Rules
 - 5.1 Quick Skills
 - 5.2 Fatigue
 - 5.3 Stress
 - 5.4 Vehicles
 - 5.4.1 Rules Principle
 - 5.4.2 Vehicle Attributes
 - 5.4.3 External Elements
 - 5.4.4 Combat Turns
 - 5.4.5 Vehicle Damage
 - 5.4.6 Detailed Example
- Designer's Notes
- Legal Stuffs
- Detailed Lists
 - Skills
 - Gifts
 - Faults
 - Gifts & Faults in GURPS

NB: to come back to the Table of content, click on the ^ sign.

^ 0. Introduction : Why Fudge THS ?

Why Fudge THS ? Mainly because I don't like GURPS as a game system, although I love the THS setting. So I needed to adapt it to a system I prefer. I chose Fudge because I like Fudge :-). I know it can sound stupid to try to adapt a crunchy system like GURPS with a Hard-Science setting like THS to a dumb-stupid system like Fudge. But I wanted to see if this was doable. I let you judge.

A complete system: I wanted not just to adapt GTHS to Fudge, where basically you have GTHS running in the background and Fudge as a front layer (a bit like DOS running behind Win98). I wanted to have a complete independent system, and I designed my own way, which is not necessarily the Fudge way or the GURPS way. Therefore I don't simply use the GURPS Attributes, Skills and Advantages/Disadvantages system, I chose to design my own list of Attributes, Skills and Gifts & Faults. Of course FTTHS is strongly inspired by GTHS - through the [free GURPS Lite \(pdf\)](#) ruleset, so the GTHS aficionados won't be totally lost. Complete [GTHS to FTTHS Conversion guidelines](#) are provided. I also mixed the THS setting with some personal ideas & adaptations which are clearly signalled by the **OWN** sign.

Warning: you cannot play Fudge THS without having the GURPS THS books for the setting, and lots of terms from GTHS are directly used here without further explanation. But you can always use FTTHS stand-alone as a set of SF RPG rules to adapt the setting of your choice.

Some credits: thanks to Tim Hall and his [GURPS to Fudge Conversion](#) guidelines, to [David Bruns' various additional rules](#).

Some conventions: THS mean "TransHuman Space", GTHS means "GURPS TransHuman Space", FTTHS means "Fudge TransHuman Space". PC means Player Character, NPC means Non-Player Character, GM means Game Master, ODF means Offensive Damage Factor, DDF means Defensive Damage Factor, PD means Passive Defence. Page reference like "TSXX" refer to the soft-cover GTHS mainbook; FW is for Fifth Wave, DB for Deep Beyond, ITW for In The Well, PF for Personnal Files.

Oh, and sorry for Americans: all units are converted to Metric System...

^ 1. Game System

For a description of Fudge, please refer to [The official Fudge page](#) or my own personal [Fudge summary in one page](#). Note that you don't need much more than my summary to understand what is written here. From here I'll assume you know the game principles of Fudge (4dF, 7 levels, opposed/unopposed actions, etc.). Other rules will be borrowed from here and there when noted.

^ 1.1 Characters

^ 1.1.1 Attributes

All characters are defined by the following attributes :

- **Strength:** Physical strength; lifting/carrying capacity; ability to deal damage
- **Resistance:** Fitness; resistance to disease and injury; physical stamina
- **Perception :** Awareness of the environment; raw ability to notice things; sense of direction
- **Agility:** Physical dexterity; adroitness; native talent for physical skills
- **Reasoning :** Thinking ability; puzzle-solving; intelligence; mental acuity
- **Willpower:** Strength of will; psychic stamina; determination; guts
- **Empathy:** Feel the others reaction, understand their motives
- **Charisma:** Attract, Impress, Seduce

You will recognize Fudge 5-points attributes, plus the last 2 new ones. I like to present those attributes using this small table:

	<i>Body</i>	<i>Mind</i>
Act	Strength	Reasoning
Resist	Resistance	Willpower
Observe	Perception	Empathy
Bend	Agility	Charisma

Attributes are used to evaluate a character "raw level" for tasks where there is no need for training and knowledge. They are often used in opposed actions for resisting to someone else skill (e.g. in Influence skills). When a character doesn't have the skill for a specific action, the GM can grant him a higher level than the default "Terrible" if the character has a high attribute value (Great or more) which can be related to the skill.

Rule of thumb for Attributes vs Skills: For a specific action, there should always be one unique attribute or skill used to rate character capacity. If you find that a specific action can reasonably be related to two or more skills/attributes, choose one as the major which represents the base level of success, and possibly add one level for each minor, related skill/attribute which are two levels above the major skill/attribute.

Size is a specific racial attribute related to both Strength and Resistance. Human Size is normally 0. Each additional level

in Size give +1 to Strength and +1 to Resistance; but Size can also be negative, acting as a Malus to Strength & Resistance. Size is normally used for non-humanoid characters (animals, monsters, etc...).

^ 1.1.2 Gifts & Faults

Characters may have gifts & faults. Please refer to the [Gifts List](#) and the [Faults List](#) sections for more complete list.

Racial Gifts & Faults are in general linked to a Racial Template (Upgrade, Bioroid, etc...). See [Templates](#) for a partial list of converted Templates, and refer to the GTHS books. But the GM or the player can also imagine other racial templates, new versions, etc...

Note that the origin of mental & physical gifts & faults should be specified for role-playing purposes - although they have no game effect. Possible origins are:

- **Personal:** the most evident way. You were born with this gift or fault and although it's not that common it falls into your race standards (if there still exists such standards)
- **Gene:** you were born with this gift or fault because your genes differ from the standard human genes, either because you were personally geeneerated before your birth or because you inherited altered genes from your genitors. These modifications or mutations can lead to many bizarre features. These features can be unique, or can relate to the standard genetic package you belong to. See TS115-120 for standard genetic packages, and the [Templates Section](#) here.
 - *Gene Upgrade* is selection and emphasis of human genes. See TS116-117
 - *Parahuman Gene* is incorporation of nonhuman DNA sequences. See TS117-118
 - *Uplifted Gene* is incorporation of human DNA sequences in a nonhuman (animal) base. See TS118
- **Implanted:** this gift was added after your birth through surgery when you had enough money to buy it. Several technologies are available for these grafts, including:
 - *Biomod:* transplant of tissue-engineered genemod organs. See TS161-162
 - *Cybernetic implants:* usually Brain Implant. Implant of other electronic or mechanical device (limbs, weapons,...) is something of the past. See TS64
 - *Nanosymbiot (Nanomods):* graft or injection of a self-sufficient or parasitic nano-organism, which biochemistry is totally alien to yours, and which can grant you certain advantages. See TS164-165
 - *Nanodrugs:* use of a drug to alter your biochemistry (with temporary or permanent effects). A drug-distributor can be implanted for repeated use of temporary drug. See TS163-164
 - *Proteus Nanovirus:* use of nano-organism to alter your genetic code (bone sculpting, muscle enhancement...) See TS165-166
 - **OWN** *Uncontrolled Gene Alteration:* alteration of genetic features through uncontrolled process (exposition to radiations, cosmic rays, etc...). Mutants. (NB: there are no "mutants" in standard THS setting)
- **Manufactured:** You are not biological, you are mostly electro-mechanical.
 - *Infomorph:* You are an AI, or a Ghost. See TS120-121
 - *Cybershell:* Your body is a robot. See TS121-125
 - *Bioshell:* Your body is human/parahuman/animal, but your brain is electronic. See TS126

Note that this list is quite generic. GM must check that gift or fault origin makes sense and falls within the THS (or your own) setting.

^ 1.1.3 Skills

Characters have skills, which are not linked to Attributes. Please refer to the [Skills](#) section for the complete list. GTHS readers will note that I don't use the standard GURPS skill list, because I find it inadequate for the setting. So instead I developed my own skill list, and the Specialisation/Area rules described below.

OWN In 2100, science and techniques have obviously expand their field greatly compared to early 21st century level. However the human brain learning capacity has not been increased at the same rate, and it's impossible for an expert to know everything about his field - even with the help of specialized LAI. FTHS therefore use a "area of knowledge / specialisation" rule.

Each skill MUST have a **specialisation** specified, where the character gets a +1 bonus. As the skills are quite broad, the default level for normal skills is Terrible (compared to Fudge's "Poor" standard). You can also consider that the specialisation is the base of the skill level (with a "Poor" default level), and all other related specialisations within the skill field have a -1 malus.

Skills usually have an **area of knowledge** defined or implied - usually a geographic or historical area where the skill was learned. This means that outside the specified area the character gets a -1 malus to his actions. For example a character takes the "Guns" skill, with the "Pistols" specialisation; it means he's been taught how to handle guns at large, and pistols in particular, where he gets a +1 bonus. However he obviously has been taught about 2100-type weapons, which is his area of knowledge. If he was to use a 2030 rifle he found in a museum he would get a -1 malus due to his lack of experience with such crude old weapons. If he had chosen a 1950 pistol, his +1 "pistol" specialisation would cancel out the -1 "out of area" malus.

See also [Quick Skills](#) for an optional rule on Quick-Skills.

^ 1.2 Gaming Rules

^ 1.2.1 Action Resolution

The GM must set a difficulty for each action. When no specific rule are provided, evaluate action difficulty using the "expertise & difficulty" level table (thanks to David Bruns' [Micro Fudge](#)) and the probability level below :

lvl	Fudge Level	Expertise level	Difficulty level
-3	Terrible	Zero	n.a.
-2	Poor	Beginner	Easy
-1	Mediocre	Amateur	Simple
0	Fair	Qualified	Average
+1	Good	Professional	Hard
+2	Great	Expert	Daunting
+3	Superb	Master	Extreme

4dF Result	-4	-3	-2	-1	+0	+1	+2	+3	+4
Odds of rolling exactly	1%	5%	12%	20%	24%	20%	12%	5%	1%
Odds of rolling at least	100%	99%	94%	82%	62%	38%	19%	6%	1%

Examples: an action which is almost surely accomplished (at 95% = -2) by a Professional (Good level) can be rated to Mediocre level (Good-2), and it would be a quite probable success (62%) for an Amateur (Mediocre Level). Another action which is challenging (38% = +1) for an Expert (Great) will be rated to level Superb (Great+1), and will be almost impossible (6%) for a Qualified (Fair).

Actions are resolved by comparing the character skill or attribute level modified with 4dF (called Rolled Performance), with the difficulty of action. If the Rolled Performance is greater than the set difficulty, it's a success. If the Rolled Performance is lower, it's a failure. A tie either means limited success for non-opposed rolls (margin 0), or stand-off in case of opposed action (see below).

Opposed actions (when the difficulty depends on another character's action) are resolved by comparing the respective opponents' level, modified each with 2dF. Tie means Stand-Off.

Margin of success or failure (difference between set difficulty and rolled performance) help defining the quality of success - or the extent of the failure. **Critical Success** occurs when the 4dF roll +4, or when the margin of success is equal or greater than 4 levels. **Critical Failure** occurs when the 4dF roll -4, or when the margin of failure is equal or greater than 4 levels.

OWN The number of rolled dice is minimized to 1dF, both for Non-Opposed or Opposed actions, if you use a [Quick Skills](#) (optional rule)

The GM may use the "Minimize Rolls" option (thanks again to David Bruns' [Micro Fudge](#)) for Non-Opposed Actions: the player may chose the number of dice he rolls for each action - from 0 to 4. This means that he will automatically be successful for every action where his level is at least the difficulty, although without "panache" (low success margin). This rule shouldn't be used for Opposed rolls, neither for any Combat situation (Ranged Combat), because the opposition with a living being introduces a lot more randomness in the outcome.

Characters can act more than once per turn; however they must declare their intention at the beginning of the turn, and each action gets a (Total number of actions in turn - 1) malus. See [Actions](#).

Preparation/Concentration time give modifiers to actions :

mod. base duration	Skill Modifier
1 / 4	-2
1 / 2	-1
x 1	0
x 2	+1
x 10	+2

Repeated Attempts: Depending on the situation, a GM can allow characters to attempt a second time an action that they know has been failed; usually each new attempt must have a -1 cumulative skill malus.

^ 1.2.2 Combat

Each combat turn is divided in 3 phases :

- Initiative rolls
- Action Declarations
- Action Resolutions: hit rolls and damage rolls

A combat turn duration is 3 seconds.

^ 1.2.2.1 Initiative Rolls

Each opponent rolls Agility+4dF. The highest level declares last and acts first, then the level below, etc... In case of tie, attacks are simultaneous; declarations should be first written down then revealed simultaneously.

Initiative roll can be modified by:

- Reflex gifts or faults
- Character or vehicle condition (hurt, etc...)
- Character Tactic : before the roll, any character can decide to modify his initiative roll to influence actions :
 - Prepared action: -2 on initiative roll gives +1 to the first attack in the turn
 - Hasty action: +2 on initiative roll gives -1 to all attacks in the turn.
- Previous turn actions results (feint)

^ 1.2.2.2 Actions

Each opponent, starting with the **lowest** initiative roll, declares what he will do this turn. Once all declarations are made, each opponent, starting with the **highest** initiative roll, execute one action at a time. In case of initiative ties, actions are simultaneous and resolved simultaneously; this can for example lead to situations where the two opponents hit each other at the same time, in which case the damage effect (malus, death, etc...) is NOT taken into consideration for these simultaneous actions, and will only have consequences on the next actions.

You can act more than once in the turn. All actions must be declared simultaneously. Each additional action gives you a -1 malus to each action in the turn. The second action takes place at (initiative roll -2), the third action at (initiative roll -4), etc... Multiple attacks on one or more opponent is considered as additional action.

Actions can be:

- **Melee Attack**, against one designated opponent. Any tactical choice must be specified then (see below).
- **Range Attack**, against one designated opponent (or more if burst)
- Any other (non-offensive) action :
 - **Drawing a weapon**: usually take one turn. to draw a weapon and shoot it in the same turn, you must first have the weapon ready to draw easily. A "quick-draw" contest is then essentially an Initiative contest, and shooting is at -1 (2 actions).
 - **Reloading**: fully reloading a weapon takes 1 full turn for weapons with magazines or battery, and 3 full turns for revolvers or shotguns. Reloading just one bullet in a revolver or shotgun can be done in one turn. 1-turn Reloading can be done along with another action in the same turn (like shooting), with a malus of -1 to the other action, and you must manage a Fair Agility or a Fair [Weapon Skill] roll to reload correctly (if failed, you take the whole turn and cannot shoot before next turn; critical failure means you dropped the magazine, and lose the turn picking it up).
 - **Running**: see **Other Rules** for Movement definitions. Running at Speed Level 2 (double your walking speed) gives -1 to all other actions while running; at Speed Level 3 (triple your walking speed): -2, etc... up to Speed Level 6: -5 (don't try and do something else while sprinting...).
 - **Using a skill**: with multiple action malus if any
 - **Jumping**: jumping counts as 2 actions. Another action would therefore be at -2.
 - Doing anything else that you're not supposed to roll for in normal conditions. Doing more than one trivial action at the same time could be trickier than usual. The GM can ask you to roll (under Agility, Reasoning,...) for trivial actions (See Reloading above for one example)

Walking, Talking, ... are not actions and can be made as wished during the turn.

Defend is not an action. The first defence roll has no "multiple actions" malus, no matter how many times the character acts in the turn. Any subsequent defence roll in that same turn gets a cumulative -1 malus (i.e. the second defence roll is at -1, the third at -2, etc...)

If you cannot act as declared due to external factors (e.g. your opponent flees or dies before you hit him), you lose your action for this turn due to the surprise.

^ 1.2.2.3 Melee Attacks

Melee attacks require you to be in contact with your opponent at the start of the turn. If it's not the case, you can run or walk to him, to attack him next turn if you are in contact.

The character tries to hit his opponent with a hand weapon or bare hands. He uses the appropriate combat skill + 2dF. The difficulty is either Poor (-2) if the opponent doesn't try to avoid the blow, or the defenders appropriate combat skill roll (Skill+2dF) if he tries to parry the blow (Hand Weapon) or dodge (Hand-to-Hand) .

The attack can be modified by the following factors:

- **More than one action**: see above specifications for acting more than once, or defending more than once in the turn.
- **Different Weapon Size**: if the difference between the weapons' Damage is greater than 1, the smaller Damage gets a -1 Malus on Defence AND attack Skill.
- **Called Hit**: An Called Hit attempt gives a malus to the attacker's Skill level depending on the target: hitting the Torso or the legs give a -1; Arm, Head : -2 ; Throat, Hand, Foot : -3 ; Wrist, Eye, Finger, Toe : -4.
- **Wound Condition**: don't forget the Hurt (-1) and Very Hurt (-2) malus for a wounded fighter.
- **Passive Defence**: Armors and Shield can offer their wearer a Passive Defence (representing deflecting power), to add to the Defender Skill; e.g. a PD of 2 gives the defender a +2 to its skill.

- **Tactical choice** (declared at turn start):
 - An *Offensive Stance* gives you a +1 bonus to one attack, and a -1 malus to defend against all attacks.
 - A *Defensive Stance* gives you a +1 bonus to defend against all attacks, and -1 malus to all your attacks.
 - An *All-Out Attack* gives you a +2 bonus to one attack, or no malus for two attacks, and no possibility to defend on that turn (the opponent difficulty to hit you is Poor, possibly modified by Passive Defence).
 - A *Defence Only* gives you a +2 bonus to defend against all attacks, but you cannot make any attack in the turn. A successful Defence Only (you were not hit) and a successful Fair Tactics or Perception roll gives the opponent a -1 for the next turn (you had time to look around and find a better spot)
 - A *Hasty Action* or *Prepared Action* (see **Initiative Rolls**) gives you a bonus or a malus on your attacks.

Feint: If your melee attack is successful, you can choose not to deal damage, and instead you win a +1 to skill and +1 to initiative if you attack the same opponent next turn (you feint).

^ 1.2.2.4 Ranged Attacks

In normal conditions, Ranged weapons are aimed. This takes one whole turn. Base Difficulty for Aimed Ranged Combat is Range of the target. Compare distance to target with weapon Base Range (possibly modified by **Snapshot** or **Shooter Level**, see below), and report Ratio in the table below :

Ratio	Range	Difficulty	Level
0 to 1/4	Point Blank	Easy	Poor
1/4 to 1/2	Short	Simple	Mediocre
1/2 to x1.5	Normal	Average	Fair
x1.5 to x3	Long	Hard	Good
x3 to x5	Far	Daunting	Great
x5 to x10	Extreme	Extreme	Superb

(NB: the Table can be expanded beyond Rangex10 - But beware of weapon Max Range).

The Difficulty of the shot can be modified by the following factors :

- **Snapshot:** If the shooter doesn't take at least one whole undisturbed turn to aim, then the weapon Base Range is **10m**, no matter what its original Base Range was. By "Undisturbed", understand: no movement, no talking, not being hit, no disturbance. If there are disturbances (people shouting at you, bullet ricocheting around, being shot at and missed), one Fair Willpower roll is mandatory to stay focused (NB: characters with *Focused*, *Unshakable* or *Combat Reflexes* Gift don't care about disturbances).
- **Long Aim:** as for normal actions; Skill+1 for 2 whole undisturbed turns to aim, Skill+2 for 10 whole undisturbed turns to aim.
- A **Hasty Action** or **Prepared Action** (see **Initiative Rolls**) gives you a bonus or a malus on you shot (NB: a Long Aim of 2 turns and a Hasty Action gives you 0 bonus on the skill, but +2 to initiative on the third turn when you finally shoot).
- **Long Shot:** if Distance is above Max Range/2, the bullet loses strength and precision; Difficulty is +1 and Damage -1. If Distance is above Max Range x .75, Difficulty is +2 and Damage -2.
- **Shooter Level:** The Base Range is limited by the skill level: .

Level	Max Base Range
Terrible	10m
Poor	50m
Mediocre	100m
Fair	200m
Good	500m
Great	not limited

- **Targeting Device:** Scopes reduce Difficulty by -1 for x4, -2 for x16. Laser Sight reduce Difficulty by -1. See also other Targeting Device or special Gifts.
- **Burst:** Weapons with "B" Rate of Fire can fire short burst (3 bullets) or a long burst (15 bullets). Bursts give -2 to Difficulty. Long Burst also are Damage+2 . Long Burst offer the possibility to fire at 2 or 3 different targets a few meters apart in the same turn: roll as single shot (with no bonus/malus to skill or Damage) for each target. Bursts should not be used for Long Shots.
- **Very Rapid Burst:** Weapons with "VRB" Rate of Fire (usually Vehicle Weapons) can fire Very Rapid Bursts of 50 bullets: -2 to Difficulty, Damage+4, offers the possibility to fire different targets up to 25 meters apart in the same turn: roll as single shot (with no bonus/malus to skill or Damage) for each target. Cannot be used for Long Shots.
- **Called Shot:** Shooting at the Torso is Difficulty+1 ; at Arm, Leg, Head : Difficulty+2 ; At Throat, Hand, Foot : Difficulty+3 ; At Wrist, Eye, Finger, Toe : Difficulty+4. If the shooter misses only by 1 for +3 or +4 Called Shot additional Difficulty, he still hits the target, but in another location.
- **Target Cover:** Find out which area are visible, then apply the same modifiers as for Called Shot. However a miss is missed - no other location hit.
- **Target Movement:** Target running OR jumping OR walking erratically is Difficulty+1. Target Running and zigzagging is Difficulty+2.
- **Target Passive defence:** Target with Armors that offer their wearer a Passive defence (representing deflecting power), to add to the Difficulty of the shot.

- **Shooter Surprised:** Difficulty+1 if the shooter is surprised, didn't know the target location one second ago, and shooting by instinct.
- **Shooter Condition:** Shooting from the hip is a Snapshot with an additional malus -1. Don't forget the Hurt (-1) and Very Hurt (-2) malus if the shooter is wounded
- **External Conditions:** -2 if wind & darkness, -1 in darkness OR high wind, +1 if target is well lit. IR- or Night-Vision cancel out darkness.
- **Smart Ammunition:** see [Ammunitions](#).

Missed: If you didn't hit, the shot missed the target by (Failure Margin x Distance /100) meters, or by (Failure Margin x Distance /10) meters for an indirect shot (grenades, etc...). Direction is random (Throw 1dF for -1=Left - 0=Center - +1=Right, 1dF for -1=Before/Below, 0=Center, +1=After/Above - reroll if both are Centered)

^ 1.2.3 Damage

Damage is determined by Offensive Damage Factor (ODF) versus Defensive Damage Factor (DDF). They are determined as follows:

$$\text{ODF} = \text{Maximum of (Weapon Damage OR Attacker Strength+Attacker Size *)} + \text{Tweak}$$

(*) Attacker Strength and Attacker Size are considered only if the Weapon is hand-wielded (knife, sword) or hand-thrown (arc, spear).

Tweak: If Weapon Damage and Attacker Strength+Attacker Size are within 4 levels of each other, add 1 to ODF. If Weapon Damage and Attacker Strength+Attacker Size are equal, add 2 to ODF [\[Note 02\]](#).

$$\text{DDF} = \text{Maximum of (Armor Level OR Target Resistance+Target Size)} + \text{Tweak}$$

Tweak: If Armor Level and Target Resistance+Target Size are within 4 levels of each other, add 1 to DDF. If Armor Level and Target Resistance+Target Size are equal, add 2 to DDF [\[Note 02\]](#).

e.g. A Size 0 human wearing an Armor 3 Arachnoweave has DDF 3. A Size 6 cybershell wearing an Armor Level 1 has DDF 6 - the armor doesn't count. A Size 6 cybershell wearing an Armor Level 2 has DDF 7 - the armor and the size are within 4 levels, so DDF is Size+1.

Damage is determined by :

$$\text{Damage} = \text{ODF} - \text{DDF} + \text{Success Margin} + 2\text{dF}$$

In some cases (see [Weapons](#) and [Ammunitions](#)), it's important to know if the hit has penetrated the armor. Penetration is calculated by :

$$\text{Penetration} = \text{ODF} - \text{Armor Level} + \text{Success Margin}$$

If Penetration is greater than Zero, then the hit has penetrated the armor [\[Note 01\]](#).

The calculated Damage is then matched against the following table :

Damage	Wound	Effect	Number of checkbox	First Aid	Base Healing time	Healing roll
0-	Unhurt	-	-	-	-	-
1,2	Scratch	-	3	-	1 hour	-
3,4	Hurt	-1 to all actions	1	-	3 days	Physician: Fair
5,6	Very Hurt	-2 to all actions	1	Fair	6 days	Physician: Good
7,8	Incapacited	-	1	Good	12 days	Physician: Great or Surgery: Good
9,10	Near Death	-	1	Great	20 days	Physician: Superb or Surgery: Great
11,12	Dead	-	1...	-	-	brainpeeling is still possible
13+	Annihilated	-	1!!!	-	-	no workable remains

Location: if the hit is not a successful Called Hit/Shot, you can add "flavor" by specifying the location of the hit. Note that in general this should not have a real impact on the game, except for scars or hindrance specifications. Roll as many dF as you Success Margin (maximum 4dF), or 4dF for a complete random location, and read the result on the following table:

Roll	Location	More details
-4	Groin	ouch.
-3	Lower Head/Neck	1dF : -1=Mouth/Cheeks, 0=Upper Neck, +1=Lower Neck. 1dF for Left/Center/Right
-2	Right Arm	1dF : -1=Shoulder/Upper Arm, 0=Elbow/Lower Arm, +1=Wrist/Hand. Roll 1dF: +1=Articulation
-1	Right Leg	1dF : -1=Thigh, 0=Knee/Lower Leg, +1=Ankle/Foot. 1dF: +1=Articulation
0	Torso	1dF for Upper/Middle/Lower, 1dF for Left/Center/Right (e.g. +1/+1=Right Chest, lung)
+1	Left Leg	1dF : -1=Thigh, 0=Knee/Lower Leg, +1=Ankle/Foot. 1dF: +1=Articulation
+2	Left Arm	1dF : -1=Upper Arm, 0=Elbow/Lower Arm, +1=Wrist/Hand. 1dF: +1=Articulation

+3	Face/Upper Head	1dF: -1=Upper Cranium, 0=Forehead, +1=Nose/Eyes. 1dF for Left/Center/Right
+4	Hearth	-

Knockout: each time you are wounded (Hurt or Very Hurt), you must pass a Mediocre Resistance or Willpower (whichever is highest) roll, modified by wound effects (-1 or -2), or fall unconscious for (10-Resistance) minutes. Some weapons may have a stronger "Stun" effect, increasing the roll difficulty.

First Aid: a First Aid roll can be required (see First Aid column) to stabilize the wound. Failure requires then a Patient Resistance Roll of the same difficulty, or the wound is worsened one level after one hour.

Healing: the indicated Base Healing Time is the average amount of time needed for the wound to heal naturally under medical care and to be reduced of one level. Without Medical care, add 50% to time; in the worst conditions, a Resistance roll of the same level as for First Aid is required, failure means the wound has degraded one level. A Physician or a Surgeon can divide Healing Time by 2 if the requested Healing Roll is successful (by 3 if Critical Success). In all rolls, a Critical Failure means the patient will stay crippled (Choose 1 Fault for Very Hurt, 2 Faults for Incapacitated, 3 Faults for Near Death)

^ 1.2.8 Other Rules

- **Choking:** take one "Out of Breath" **Fatigue** per turn until unconscious; then your brain runs out of oxygen in 4 minutes if you're not rescued. Rescue requires one Fair First Aid roll.
- **Explosion Concussion damage:** Full Damage on impact, then Damage is reduced by (2xdistance in meter). Sealed Armor have Armorx2 against Concussion.
- **Fragmentation damage:** Consider it a Fair Skill Ranged attack, with Base Range of 10m and Max Range of 15x"Concussion Damage Multiplier" meters (to find "Multiplier", look up the concussion Damage in the **Size Conversion Table**; e.g. Concussion Damage 5 gives Multiplier 1.5, hence Max Range of 22.5m). Look up difficulty in the **Ranged Combat Table**. Add Passive Defence to the difficulty. Difficulty can never be above Superb. Damage is usually 1, or Damage 3 for Fragmentation Grenades.
- **Falling:** for falls from more than 4 meters, divide the Height in meters by two, and lookup the figure in the **Size Conversion Table** in the "Multiplier" column, then pick-up the corresponding Damage. Damage is maximum 12. Damage is reduced by 1 if you fall on a soft surface. Catfall Gift and/or successful Fair Acrobatics roll reduce Height by 5 meters.
- **Aging:** each year after 70 year old (50yo in reality), make a Fair Resistance roll. If missed, you lose one level on one random attribute. If one attribute reaches level Non-Existent (-4), you die. Roll every 6 month after 90yo (70yo in reality) and every 3 month after 110yo (90yo in reality).
- **Movement:** Your base, walking speed is **3.5+(Strength+Agility)/4** meters per 3-second turn. (e.g. a Good Strength and Superb Agility give 4.5m/turn, i.e. 1.5m/s, i.e. 5.4 km/h). You can run up to 6 times your walking speed, i.e. Speed Level 6. (e.g. 6 x 4.5m/turn, i.e. 9m/s, you run 100m in 11.1 sec). Usually you can only change your Speed Level by +/- 3 maximum in one turn. Check the following table for speed level equivalent in m/turn, m/second, km/h, function of Strength+Agility.

Speed Level	1			1,5			2			3			4			5			6		
	m/t	m/s	km/h	m/t	m/s	km/h	m/t	m/s	km/h	m/t	m/s	km/h	m/t	m/s	km/h	m/t	m/s	km/h	m/t	m/s	km/h
-6	2,0	0,7	2,4	3,0	1,0	3,6	4,0	1,3	4,8	6,0	2,0	7,2	8,0	2,7	9,6	10	3,3	12	12	4,0	14
-5	2,3	0,8	2,7	3,4	1,1	4,1	4,5	1,5	5,4	6,8	2,3	8,1	9,0	3,0	11	11	3,8	14	14	4,5	16
-4	2,5	0,8	3,0	3,8	1,3	4,5	5,0	1,7	6,0	7,5	2,5	9,0	10	3,3	12	13	4,2	15	15	5,0	18
-3	2,8	0,9	3,3	4,1	1,4	5,0	5,5	1,8	6,6	8,3	2,8	9,9	11	3,7	13	14	4,6	17	17	5,5	20
-2	3,0	1,0	3,6	4,5	1,5	5,4	6,0	2,0	7,2	9,0	3,0	11	12	4,0	14	15	5,0	18	18	6,0	22
-1	3,3	1,1	3,9	4,9	1,6	5,9	6,5	2,2	7,8	9,8	3,3	12	13	4,3	16	16	5,4	20	20	6,5	23
0	3,5	1,2	4,2	5,3	1,8	6,3	7,0	2,3	8,4	11	3,5	13	14	4,7	17	18	5,8	21	21	7,0	25
1	3,8	1,3	4,5	5,6	1,9	6,8	7,5	2,5	9,0	11	3,8	14	15	5,0	18	19	6,3	23	23	7,5	27
2	4,0	1,3	4,8	6,0	2,0	7,2	8,0	2,7	9,6	12	4,0	14	16	5,3	19	20	6,7	24	24	8,0	29
3	4,3	1,4	5,1	6,4	2,1	7,7	8,5	2,8	10	13	4,3	15	17	5,7	20	21	7,1	26	26	8,5	31
4	4,5	1,5	5,4	6,8	2,3	8,1	9,0	3,0	11	14	4,5	16	18	6,0	22	23	7,5	27	27	9,0	32
5	4,8	1,6	5,7	7,1	2,4	8,6	9,5	3,2	11	14	4,8	17	19	6,3	23	24	7,9	29	29	9,5	34
6	5,0	1,7	6,0	7,5	2,5	9,0	10	3,3	12	15	5,0	18	20	6,7	24	25	8,3	30	30	10	36

If your speed level is A (speed = A x walking speed), you take one "Out of Breath" **Fatigue** level every **30 x (4+Resistance) / (2^A)** minutes... check on the following table:

Speed Level \ Resistance	-3	-2	-1	0	1	2	3
1 x walking speed	15'	30'	45'	1h	1h15	1h30	1h45
1,5 x walking speed	10'	20'	30'	40'	55'	1h05'	1h15'
2 x walking speed	8'	15'	23'	30'	38'	45'	53'
3 x walking speed	4'	8'	11'	15'	19'	23'	26'
4 x walking speed	2'	4'	6'	8'	9'	11'	13'

5 x walking speed	1'	2'	3'	4'	5'	6'	7'
6 x walking speed	30"	1'	1'30"	2'	2'20"	2'50"	3'20"

- **Jumping:** Based on Agi+Str. Take the "Speed 2 in m/s" column on the Speed Level table above to determine your Standing Broad Jump max distance in meters. Double the distance or Take the "Speed 4 in m/s" column for Running Broad Jump distance.
- **Carrying:** for each (5+Strength)x3kg you carry up to (4+Strength)x40kg, your get a malus of -1 on your (Agi+Str) level for movement calculation, i.e. your speed is one line up on the Speed Level table above
- **Lifting:** You can lift and carry up to (4+Strength)x40 kg on a few meter, and shift up to (4+Strength)x120 kg.
- **Throwing:** You can throw a 1kg object up to (5+Strength)x5 meters. Smaller objects can be thrown up to twice that distance; for bigger objets divide the distance by the weight in kg.
- **Swimming:** Your max swimming speed is (4+Swimming Skill)x0.3 m/s.

^ 1.2.9 GTHS Specific Rules

The following list are notes related to GTHS specific rules.

- **Gravity (TS55):** consider -1 to Agility and physical skills per full 0.5G increments, and no change to IQ & HT. *G-Experience* Gift gives -1 to Agility per full 1G increment, *G-Intolerance* Gift gives -1 to Agility per full 0.2G increment.
- **Free Fall (TS56):** any movement in 0-G (push off a surface, land on something, catch an object) requires a Fair 0-G Acrobatics roll. Failure means either 1 lost turn, or 1 Scratch (or 1 "Out Of Breath" **Fatigue**). Remember your 0-G Acrobatics level limits all physical skills.
- **Space Sickness (TS56):** any character entering 0-G must roll a Mediocre 0-G Acrobatics roll; failure means Space Sickness, -1 to all actions, one Fair Resistance or 0-G Acrobatics roll per day to recover. Critical failure means you're choking. Characters with *Space Sickness* Fault are at -1 to all actions all the time, and must roll Fair Resistance once per day or start choking.
- **Vacuum (TS57):** you can stay active for (10+Resistancex2) seconds, modified as indicated in the rules, then you choke. Rapid decompression is a **Stress Factor** of 1. Explosive decompression gives an automatic Hurt.
- **Other Environmental Dangers (TS58):** just consider you'll die very quickly if you're not properly protected.
- **Radiation (TS59):** Use the Radiation Effects Table, adapted to FTFS using the **Modifiers Table**.
- **Swarms (TS168):** 1 sqm (1hex) of swarms has a Health of Fair (0). Skill are at Health level. One turn spent fighting the swarm (clapping, stomping) reduce Health by one level up to Non-Existent (-4) level, where the swarm dies. A *Construction* swarm digs 0.5 cubic meter per hour in soft soil, 0.15 cubic meter per hour in hard soil. A *Devourer* swarm deals Damage 6 per turn or reduces Armor by 1 every (Armor Level Multiplier x 2) turn (to find "Multiplier", look up the Armor Level in the **Size Conversion Table**; e.g. Armor 8 gives Multiplier of 5, hence reduced to Armor 7 in 10 turns). *Gremlin* swarm... I dunno. *Sentry* swarm destroys one 1sqm of swarm per turn. *Stinger* swarm deals Damage 1 per turn.
For *Devourer* and *Stinger* swarms, note that the damage doesn't simply add-up by augmenting the number of swarm; lookup the number of swarm in the Multiplier column of the **Size Conversion Table**, and the Size gives you the added factor. Example: 5 swarms is Size 4, so 5 Devourer Swarms deal Damage 6+4=10. Use the same rule if you calculate the slow impact of a swarm on big vehicles - Example: a Devourer swarm is Damage 6, and shouldn't inflict much damage to a Size 18 Megasaurus. Yet, in 10 turns the real Damage is 6 + 6 (for multiplier 10)=12, getting better... in 100 turns, it's 6+12=18, matching the Megasaurus size ! in 1000 turns (1 hour) it inflicts Damage 24, enough to Badly Hurt the Megasaurus... etc...
- **Spaceships :** just use the GTHS creation & combat rules for now. Burn Points Bonus is halved in FTFS.

^ 1.3 Material

^ 1.3.1 Weapons

See TS155-156 for weapons descriptions.

Weapon	Base Range (m)	Max Range (m)	Damage	RoF	Shots	Strength	Cost	LC	Notes
Pistol Electrolaser	10	120	3	S	200	-	1200\$	4	see Electrolasers below
Rifle Electrolaser	200	300	4	S	100	-	1800\$	4	see Electrolasers below
4mm Pistol	10	250	4	S	50	Mediocre	560\$	3	-
10mm Pistol	10	200	4+	S	20	Fair	610\$	3	-
Micro-missile Pod	70	500	6++	S	4	-	380\$	3	-
Mini-missile Pod	100	500	8++	S	3	-	410\$	3	-
4mm PDW	50	2700	4	S,B	100	Mediocre	560\$	2	-
10mm PDW	30	1900	4+	S,B	60	Mediocre	685\$	2	-
Police Armgun							2000\$	2	
- Electrolaser	200	100	4	S	200	-			see Electrolasers below
- 15mm missile	100	500	6++	S	4	-	-		
15mm Recoilless Rifle	50	1900	4++	S	10	Poor	790\$	2	-

Assault Pod							690\$	1		
- 4mm Light Auto	50	2700	4	S,B	100	Poor	-			
- 15mm missile	100	500	6++	S	4	-	-			
Battle Rifle							890\$	1		
- 5.6mm Light Auto	70	3300	6	S,B	100	Fair	-			
- 30mm missile	100	500	8++	S	3	-	-			
15mm Anti-Material Rifle	100	4100	8++	S	10	Good	2500\$	1	-	
60mm Recoilless Rifle	1500	2850	7++	S/3turns	1	Good	2050\$	0	-	
Emag Cannon	1000	9400	11++	S,B	750	(Tripod)	80000\$	0	-	

- **Electrolasers:** No real damage. Roll Fair Resistance-damage/2; failed = Incapacitated for 10-Resistance minutes, and actions at -2 for another 10-Resistance minutes.
- **Damage with "+":** Medium Caliber Weapon; if there is Penetration, ODF is increased it by 1.
- **Damage with "++":** Large Caliber Weapon; if there is Penetration, ODF is increased it by 2.
- **RoF:** Available Rate of Fire; "S" for Single Shot, "B" for Burst.
- **Strength:** Minimum Strength. If the shooter Strength is lower, Skill is decreased by the difference.

Vehicular Weapons (ITW129 for weapons descriptions)

Weapon	Base Range (m)	Max Range (m)	Damage	RoF	Shots	Strength	Cost	LC	Notes
4mm Emag w/APS	450	7200	8	S,B,VRB	58'200	Vehicle	18'000\$	-	-
7,5mm Machine Gun (AP)	300	4600	7	S,B	1730	Vehicle	1'200\$	-	-
10mm Emag w/APS	700	9600	10	S,B	3730	Vehicle	33'000\$	-	-
15mm Heavy MG w/APS	450	5600	9	S,B	240	Vehicle	4'300\$	-	-
25mm Chaingun w/APDS	450	5900	11	S,B	240	Vehicle	12'600\$	-	-
30mm Emag Grenade Launcher	150	2400	(see 30mm Smart Warheads)	S,B	240	Vehicle	12'300\$	-	-
45mm Emag w/APFSDS	4500	32000	23	S	55	Vehicle	550'000\$	-	-
80mm E-Mortar	700	6900	(see 80mm Smart Warheads)	S	10	Vehicle	91'000\$	-	-

- **HP = High Penetration:** decrease Target Armor Level by 2.
- **APS = Armor Piercing Saboted:** decrease Target Armor Level by 2. If there is Penetration, decrease ODF by 2.
- **APFSDS & APDS = Armor Piercing Fin Stabilized Discarding Sabot:** decrease Target Armor Level by 2.

NB: Max Range on Mars: Multiply by 2.6

Lasers

Weapon	Base Range (m)	Max Range (m)	Damage	RoF	Shots	Strength	Cost	LC	Notes
2.5 KJ Laser	3000	2000	4	S,B	-	vehicle	7100\$	-	-
2.5 KJ Rapid Laser	10000	6300	4	S,B,VRB	-	vehicle	67'100\$	-	-
25 KJ Laser	24000	11000	7	S,B	-	vehicle	71'000\$	-	-
25 KJ Rapid Laser	72000	35000	7	S,B,VRB	-	vehicle	670'000\$	-	-
250 KJ Laser	140km	94km	10	S,B	-	vehicle	711'000\$	-	-
Light Laser, 2.5 MJ	225km	160km	19	S	-	vehicle	M\$2	0	-
Heavy Laser, 10 MJ	300km	140km	21++	S	-	vehicle	M\$4.7	-1	-

OWN Older Ranged Weapons

Weapon	Base Range (m)	Max Range (m)	Damage	RoF	Shots	Strength	Cost	LC	Notes
Medium Revolver (Colt Python, .357M, 1955 USA)	10	370	4	S	6	Fair	-	3	-
Medium Pistol (Glock-17, 9mmP, 1982 Austria)	10	300	4	S	17+1	Mediocre	-	3	-
Heavy Pistol (IMI Desert Eagle, .50AE, 1991 Israel)	10	500	4+	S	8+1	Good	-	2	-
Shotgun (SPAS 12, 12G, 1975 Italy)	15	150	5	S	7+1	Fair	-	3	after 15m, Damage-1 every 10m

Sub Machine Gun (Thompson M1, .45, 1922 USA)	30	380	3	B	20/30	Fair	-	1	-
Sub Machine Gun (IMI Uzi, 9mmP, 1952 Israel)	30	320	3	B	30	Fair	-	1	-
Assault Rifle (AK47, 7.62mm, 1949 USSR)	30	800	6	S,B	30+1	Fair	-	1	-
Assault Rifle (M16A2, 5.56mm, 1964 USA)	150	800	6	S,B	20+1	Mediocre	-	1	-
Assault Rifle (AK74, 5.56mm, 1974 USSR)	30	1000	6	S,B	30+1	Fair	-	1	-
Precision Rifle (Dragunov SVD, 7.62mm, 1962 USSR)	500	1800	6	S	10+1	Fair	-	1	-
Anti-material Rifle (Barret M82A1, .50, 1982 USA)	1000	4400	8+	S	11+1	Good	-	0	-
Bow (2050)	10	120	3	S/2turns	(12)	Fair	150\$	4	-
Crossbow (2050)	30	300	4	S/3turns	(12)	Poor	250\$	4	-

Price may vary a lot for such antique weapons... Note that they could very well be in bad shape and malfunctioning; a roll of -3 or -4 when shooting could indicate malfunction.

OWN Hand Weapons

Weapon	Damage	Strength	Cost	LC	Notes
Punch, Kick	-1	-	-	-	-
Brass Knuckles, Iron Kick	0	-	5\$	6	-
Claws	1	-	-	-	-
Knife, Dagger	1	Poor	40\$	4	-
Axe	2	Mediocre	100\$	4	-
Sword, Katana	3	Fair	150\$	3	-
2-Handed Sword, 2-H Axe	4	Good	250\$	3	-

Value is given for modern steel imitations. Very old weapons (from museums...) can be Damage-1 or -2, cost x 10 or more, and have a risk to break when used...

OWN Knife, Axe, Swords can have an additional +1 to Damage if they are nano-sharpened (Double Cost, LC-1), and +1 to Damage if they have vibroblades (Double Cost again, LC-1, requires a powercell).

^ 1.3.2 Ammunitions

See TS156-157 for ammo descriptions.

Smart Ammo:

- **Stabilized:** There is no Long Shot Difficulty penalty (but Damage is still reduced).
- **Homing or Laser-Homing:** As Stabilized, and Difficulty-1
- **Gestalt:** As Stabilized, and Bursts has an additional Difficulty-1

Bullet Types:

- **Armor Piercing:** decrease Target Armor Level by 2. If there is Penetration, decrease ODF by 2.
- **Armor Piercing Saboted (APS):** As Armor Piercing, plus increase Base and Max Range by 50%, and increase Base Damage by 1.
- **Hollow Point:** increase Target Armor Level (if any) by 2. If there is Penetration, increase ODF by 1.
- **Plastic:** Reduce Damage by 2 and divide Max Range by 2.
- **Medium Caliber Weapon** (Damage with "+"): if there is Penetration, ODF is increased it by 1.
- **Large Caliber Weapon** (Damage with "+ +"): if there is Penetration, ODF is increased it by 2.
- **OWN High Explosive** (for bullets only, not missiles): if there is Penetration, ODF is increased it by 2. Price x2.

Smart Warheads, only for missiles 15mm or more.

- **HEMP:** See Explosions in **Other Rules**. If Direct Hit, decrease Target Armor Level by 6, or by 4 for laminate armor, or by 3 for electromagnetic armor.
 - **15mm:** Concussion Damage 1, Fragmentation Damage 1, Direct Hit Damage 4.
 - **30mm:** Concussion Damage 6, Fragmentation Damage 3, Direct Hit Damage 6.
 - **60mm:** Concussion Damage 11, Fragmentation Damage 6, Direct Hit Damage 12.
 - **80mm:** Concussion Damage 13, Fragmentation Damage 6, Direct Hit Damage 13.
- **SEFOP:** See Explosions in **Other Rules**. If Direct Hit, decrease Target Armor Level by 4 and take the "Direct Hit" Damage; if missed, take the "Fragmentation" damage.
 - **15mm:** Concussion Damage 3, Direct Hit Damage 6 OR Fragmentation Damage 1.
 - **30mm:** Concussion Damage 6, Direct Hit Damage 8 OR Fragmentation Damage 3.
 - **60mm:** Concussion Damage 12, Direct Hit Damage 14 OR Fragmentation Damage 6.

- *80mm*: Concussion Damage 14, Direct Hit Damage 15 OR Fragmentation Damage 6.
- **MBC**: Cloud radius is : 1m (15mm), 6m (30mm), 13m (60mm), 24m (80mm) or 1m (60mm cyberswarm), 2m (80mm cyberswarm) for 5 minutes if there is no wind.
 - *Biochemical*: drug.
 - *Nanoburn*: Superb Resistance roll to avoid paralysis for (20-Resistance) minutes; if Paralyzed, take one Hurt every (6+Resistance+2dF) minutes.
 - *Prismatic smoke*: -2 to all visually aimed or sighting attacks, blocks laser.
 - *Hot Prismatic smoke*: -2 to all infrared, radar, visually aimed or sighting attacks, blocks laser; 1 Scratch per (4+resistance) turn if breathed unfiltered.
 - *Swarm*: host a cyberswarm.
 - *Tear Gas*: Fair Resistance Roll; if failed, 1 Scratch per (4+resistance) turn (stops when uncounscious), and -2 to all actions.

^ 1.3.3 Armors

See TS159-160 for Armor Description. Price & Armor Level for full armor; for partial (vest, pant), price x50%.

Name	Armor	PD	Price	LC	Note
Arachnoweave	3	1	200\$	5	Doesn't cover Head
Nanoweave Light	4	1	750\$	5	Doesn't cover Head
Nanoweave Medium	6	1	1500\$	4	Doesn't cover Head
Nanoweave Heavy	8	1	3000\$	3	Doesn't cover Head
Nanoweave Vacc Light	4	1	2000\$	4	Doesn't cover Head
Nanoweave Vacc Medium	6	1	3000\$	3	Doesn't cover Head
Nanoweave Vacc Heavy	8	1	3500\$	2	Doesn't cover Head
Clamshell Cuirass Light	6	2	280\$?	Upper Body Only
Clamshell Cuirass Medium	7	3	400\$?	Upper Body Only
Clamshell Cuirass Heavy	8	3	600\$?	Upper Body Only
Helmet Light Infantry	6	1	30\$?	Upper Head Only (x0.1)
Helmet Full Light	6	2	50\$?	Head Only
Helmet Full Medium	8	2	70\$?	Head Only
Helmet Full Heavy	9	2	100\$?	Head Only
SmartSuit			x10	-	Powered (D,16/12/8hrs), based on Nanoweave Vacc
BattleSuit Shenyang H-23	9	2	50000\$?	Powered (E;4hrs), laminated; Strength Legendary+1 (Size 3, Strength Great)
BattleSuit Vosper-Babbage	9	2	60000\$?	Powered (E;4hrs), laminated; Strength Legendary+3 (Size 3, Strength Legendary)

NB: if armor is Partial and if you don't use Localization or if damage is global (Concussion), use a Composed Armor & Composed PD:

Composed Armor = Lower Body Armorx0.4 + Upper Body Armorx0.4 + Head Armorx0.2 (Rounded)
Composed PD = Lower Body PDx0.4 + Upper Body PDx0.4 + Head PDx0.2 (Rounded)

Armor Accessories:

- **CBR Filter**: provides *Filter Lung* Gift
- **Chameleon**: provides *Chameleon* Gift
- **IFF Transponder**: no effect
- **IR Cloaking**: +1 Difficulty to IR spotting & targeting, and +5 Difficulty to IR-homing projectiles
- **Laser Sensors**: warns of laser targeting; just allow user to become a Moving Target.
- **Near Miss Indicator**: Detect attacks missed by 1 or 2; +1 to Perception roll to pinpoint the source.
- **Radar Detector**: alert user of radar beam.
- **Reactive Armor Paste**: Wearer takes 1 Damage explosive concussion damage per attack. Check new Armor on the table below:

Initial Armor	0-2	3-5	6,7	8	9	10	11+
New Armor against beam or projectile	6	7	9	10	10	11	no effect
Initial Armor	0	1	2,3	4	5	6	7+
New Armor against melee or thrown weapon	2	3	4	5	6	7	no effect

^ 2. Character creation

^ 2.1 Creation procedure

Characters are defined by Attributes, Skills, Gifts & Faults. Characters are defined using an objective method (allocating

points). Note that I ruled out the "5-point Fudge" approach because of the complexity of 2100-era characters, where it's in my view very difficult to define broad types of competences.

The number of points available to create characters may vary depending on GM's decision. After converting GTHS NPCs to FTTHS I saw that GURPS 100-pts characters are valued around 100 fudge creation points, so the range of FTTHS characters is the same as in GTHS. I advise to give 200 creation points to create 200 GURPS pts-like characters. The GM can also impose some limitations in character creation, like the maximum number of points to be used in Gifts (I would suggest 5 gifts, or 50 points), or the maximum number of "Great" and "Superb" skills (I would suggest: 3 "Great" and 0 "Superb").

Racial Gifts & Faults are in general linked to a Racial Template (Upgrade, Bioroid, etc...). See [Templates](#) for a partial list of converted Templates, and refer to the GTHS books. But the GM or the player can also imagine other racial templates, new versions, etc...

Points are assigned using the following rules:

- **Attributes** have a default value of Fair, except when modified by Gifts or Faults. Change of one level represent 5 points (i.e. it cost 5 points to move an Attribute up one level, and you gain 5 points to moving it down one level). Accepted deviation from default value is -3 to +3.
- **Size** is normally 0 for Humanoid. Size is normally used for non-humanoid characters (animals, monsters, etc...). Each Size level is valued 10 points.
- **Skills** have a default value of Terrible when they are Normal, Non-Existent (Terrible-1) when they are Hard, Poor when they are Easy, and Fair when they are "Natural" (i.e. when a "Natural Skill" racial gift is taken). Moving a skill up one level cost 2 points up to Fair, then 4 points from Fair to Good, 8 points from Good to Great, 16 points from Great to Superb (Note that this rule is also the same during the game, for progression through experience points). You may use the following table for cumulated cost :

lvl	Level	Easy	Normal	Hard	Natural	"Expertise" level
-4	Non-existent	-	-	0	-	duh...
-3	Terrible	-	0	2	-	Zero
-2	Poor	0	2	4	-	Beginner
-1	Mediocre	2	4	6	-	Amateur
0	Fair	4	6	8	0	Qualified
+1	Good	8	10	12	4	Professional
+2	Great	16	18	20	12	Expert
+3	Superb	32	34	36	28	Master

See also [5.1 Quick Skills](#) for an optional rule on **Quick-Skills**

- **Gifts** base cost is 10 points, **Faults** base cost is -10 points. Some gifts or faults may be taken more than once for cumulated effect, some others cost two or three times the base cost (20 or 30 points).

Simplified Creation: For more simplicity, divide the number of available points by 10 (e.g. 20pts for 200pts characters). You can then apply the following rules:

- **Gifts & Faults** cost +/- 1 points, except when specified or taken more than once
- Each **Size** level cost +/- 1 points
- **Attribute level** cost +/- 0.5 points, i.e. 1 point allow you the upgrade 2 attributes of one level, or one attribute of two level
- **Skills:** 1 point allow you to take one skill at level Mediocre and one at level Fair, OR one skill at level Good; 2 points allow you to take one skill at level Great.

^ 2.2 Skills List

All skills are Normal by default, except (E) Easy or (H) Hard.

See [Detailed List](#) for more details.

- **Physical** : 0-G Acrobatics, 1-G Acrobatics, Aquatic activities (E), Climbing (E), Animal Riding & Handling (E), Sport, Contortionist (H)
- **Weapon (use & maintenance)** : Hand-To-Hand (E), Hand Weapon (E), Archery, Thrown weapon, Guns, Heavy Weapons, Gunnery
- **Pilot** : Wheeled (E), Power armor (E), Boat (E), Submarines, Aircraft, Light spacecraft (H), Heavy spacecraft (H), Space Station Handling (H)
- **Environment** : Space, Desert (Hot/Cold), Mountain, Biosphere, Urban, At Sea, Underwater, Area Knowledge [...]
- **Social** : High Society, Politics, Business, Administration, Military, Science, Media / Stardom, Street, Crime, Xeno [...] (H), Partying (E)
- **Administration** : Bureaucracy, Business, Official Documents (H), Law (H), Trade, Politics
- **Technique** : Communications, Computers Software, Information processing, Electronics Hardware, Mobile Mechanics & Robotics, Navigation (specific) , Media processing, CyberTech, Life Support Systems, Structures, Logistics, Conceal, Microtechnology, Materials Fabrication
- **Police / Military** : Military Tactics (E), Military Strategy, Security systems, Mass-destruction, Investigation, Infiltration, Intelligence, Information extraction, Demolition, Electronical Warfare
- **Artistic** : Cooking (E), Circus Clown, Dancing, Writing, Musical instrument (H), Craft [...], Grooming (E), Sleight of Hand, Theater / Acting, Visual Art, SimSense, Games

- **Science** : Biology (H), Chemistry (H), Artificial Intelligence (H), Physics (H), Mathematics (H), Planetology (H), Economics (H), Memetics (H)
- **Humanities** : Criminology, Psychology, Philosophy, Theology, History, literature, Musicology
- **Influence** : Diplomacy, Fast-Talk (E), Intimidation (E), Oratory (E), Persuade (E), Seduction (E), Leadership (E), Barter (E)
- **Medicine** : First Aid (E), Physician (H), Pathology (H), Toxicology (H), Surgery (H), Cyber-Surgery (H), Symbiots (H), Genengineering (H), Forensics (H)
- **Language** : Human [...] (E), Symbolic [...] (H), Alien [...] (H)

^ 2.3 Gifts List

The "Racial" Gifts usually are part of your **Racial Template**. The ² sign means: can be taken more than once for cumulated effects. Figures in **0** give the base cost if it's not +1

See **Detailed List** for more details.

- **Friends & Foes** : Ally ², Contacts ², Favor due, Patron ² (+2), Security Clearance ²
- **Internal** : Combat Reflexes, G-Experience, Hard to Kill, High Pain Threshold, Immunity to Disease, Immunity to Poison, Rapid Healing, Weaponry (Built-in) ²
- **Limb** : ambidexterity
- **Mental** : Absolute Timing, Collected, Common Sense, Emotion Control, Focused, Intuition, Less Sleep, Lightening Calculator, Lucky, Total Memory, Unshakeable, Versatile
- **Sense** : Peripheral Vision
- **Social** : Alternate Identity, Clerical Rank ², Good reputation ², High Status ², Legal Power ², Military Rank ², Wealthy ², Zeroed
- **Template** : Bioroid Body (0), Genefixed Human (0), Machine Body (+4), Mars-Adapted
- **Attribute Racial**: Attribute [...] +1 ²
- **External Racial**: Armored ², Chameleon, Claws, Fur, Hermaphromorph (0), Horns (0), Morph (+2), Passive defence ² (+3), Sharp Teeth, Shock, Spear, Spines (0), Talons, Vessel (+2)
- **Internal Racial**: Acceleration Tolerance, Cold Support ², Decreased Life Support, Digestion Tolerance, Doesn't Breathe, Doesn't Eat or Drink, Drug Factory ², Early Maturation ², Extended Lifespan ², Extra Life (+2), Filter Lungs, Gills, G-Tolerance, Heat Support ², Hibernation, Hyper-Metabolism (+2), Injury Tolerance, Longevity, Natural Skill [...] (+0.5), No Degeneration in Zero-G (0), Oxygen Storage, Penetrating Call, Perfect Balance, Pheromones Control, Pressure Support, Radiation Regeneration, Radiation Tolerance ², Recovery, Regeneration (+2), Regrowth, Sanitized Metabolism, Unaging, Vacuum Support (+2)
- **Limb Racial**: Amphibious, Catfall, Clinging (+2), Contortionist, Enhanced Move ², Extra Arms, Extra Flexibility, Extra Legs, Extra Reach, Flexible Tail, Flight ² (+2), Increased Speed, Low-G Flight ², Micromanipulators, Move through Ice, Prehensile Toes, Silence, Tunnel (+2)
- **Mental Racial**: Compartmentalized Mind ² (+3), Digital Mind (0), Doesn't Sleep (+2), Enhanced Time Sense (+3), Mindshare (+3), Racial Memory, Radio Speech ² (+2), Secret Communication, Special Rapport ², Visualization
- **Sense Racial**: 360 Vision (+2), Acute [Sense], Additional Eye, Faz Sense, independently focusable eyes, Infravision, Internal State Monitor, Microscopic Vision, Never Gets Lost, Nictating Membrane, Night Vision, Penetrating Vision, Perfect Eye-Hand coordination, Polarized Eyes, Radar Sense (+2), Sensitive Touch, Sonar Vision (+2), Spectrum Vision (+2), Telescopic Vision

^ 2.4 Faults List

The "Racial" Faults usually are part of your **Racial Template**. The ² sign means: can be taken more than once for cumulated effects. Figures in **0** give the base cost if it's not -1

See **Detailed List** for more details.

- **Friends & Foes** : Dependants ², Depending, Enemies ², Owe Favor, Wanted ²
- **Internal** : Delicate Metabolism, Getting Old, Low Pain Threshold, Old ², Space Sickness, Weak Immune System
- **Limb** : Reduced Move
- **Mental** : Absent Minded, Addiction [...], Amnesia, Bad Temper, Blood Lust, Bully, Code Of Honor [...], Combat Paralysis, Compulsive (...), Coward, Easy to Read, Fanaticism, Flashbacks, Greed, Gregarious, Hidebound, Honesty, Impulsiveness, Indecisive, Intolerance, Jealousy, laziness, Lecherousness, Miserliness, Nervous, Overconfidence, Pacifism, panicked, Phobia, Proud, Psychopath [...] (-2), Self-Centered, Sense of Duty, Solipsist, Stress Atavism, Stubbornness, Truthfulness, Twisted Childhood, Vow, VR Addiction (-2), Workaholic, Xenophilia, Youth
- **Social** : Bad reputation ², Duty, Low Status, Off-The-Shelf Look, Poor ², Secret ², Social Stigma
- **Attribute Racial**: Attribute [...] -1 ²
- **Internal Racial**: Acceleration-Intolerance, Alternate Breathing, Dependency [...] ², Fragile, G-Intolerance, Horizontal, Inconvenient Size [...], Increased Life Support [...] ², Limited Endurance, Mute, Parasite (-2), Self-Destruct, Short Lifespan ², Slow Healing, Standard product, Sterile (0), Unhealing (-2), Unusual Biochemistry, Weakness, Wearable (-2)
- **Limb Racial**: Bad Grip, No Manipulators (-3), One Fine Manipulator, Sessile (-3), Short Arms
- **Mental Racial**: Extra Sleep ², Innumerate, Reprogrammable Duty ², Slave Mentality (-2)
- **Sense Racial**: Bad [Sense]

^ 3. Conversion from Gurps THS material

^ 3.1 Character conversion

I used elements from Tim Hall's [GURPS to Fudge Conversion](#).

To be able to transform GTHS characters to FTFS, you may apply the following guidelines [\[Note 03\]](#):

^ 3.1.1 Attributes conversion

For Strength (=Strength), Dexterity (=Agility), Intelligence (=Reasoning) and Health (=Resistance), transform their score directly in Fudge terms using the following table :

GURPS	Fudge
4-5	Terrible
6-7	Poor
8-9	Mediocre
10-11	Fair
12-13	Good
14-15	Great
16-17	Superb
18+	Legendary

- **Reasoning** (=IQ) stays pretty much as listed.
- **Strength** (=ST) is modified down *two* levels for each Disadvantage *Invertebrate*.
- **Agility** (=DX) is modified up one level of each Advantage *Manual Dexterity (3+)*, *Double Jointed*, *Flexibility*.
- **Resistance** (=HT) is modified up one level of each Advantage *Fit*, *Damage Resistance*, *Extra Hit Points*, *Extra Fatigue*, and down one level for each Disadvantage *Reduced Hit Point*.
- **Willpower** is at fair default value, plus one level for each Advantage *Strong Will*, or minus one level for each Disadvantage *Weak Will*, *Selfless*.
- **Perception** is at fair default value, plus one level for each Advantage *Absolute Direction*, *3D Spatial Sense*, *Alertness*, and down one level for *Incurious*. If unique, particular sensory Advantage (*Discriminatory Smell*, *Acute Senses*) or Disadvantage (*Color Blindness*, *No Depth Perception*, *Bad Sight*, etc...) can be converted to *Acute [Sense] Gift* or *Bad [Sense] Fault*, but if there are more than 2, consider them part of global Perception Attribute.
- **Charisma** is based on Appearance (*Average* appearance is Fair; *Attractive & Handsome* is Good; *Very Handsome* is Great; *Ugly & Unattractive* is Mediocre; *Hideous* is Poor), plus one level for each Advantage *Charisma*, *Voice*, and minus one level for Disadvantage *Odious personal Habit*, *Stuttering*, *Disturbing Voice*.
- **Empathy** is at fair default value, plus one level for each Advantage *Sensitive/Empathy*, and minus one level for each Disadvantage *Low Empathy*, *Oblivious*, *Clueless*, *Gullibility* [\[Note 04\]](#).

Size is normally 0 for humanoids. However for Uplifted Animals or Cybershell, Size can be used instead of similar Strength & Resistance Bonus or Malus, when the actual size of the character is different from humanoid norm.

^ 3.1.2 Gifts & Faults conversion

Normally, Gifts & Faults in FTFS have the same name as the Advantages / Disadvantages in GTHS. Exceptions are listed **there**. For more roleplay, don't forget to specify the origin of the Gift/Fault as stated in [Gifts & Faults](#). See [Templates](#) for a partial list of converted Racial Templates.

Note: Due to the simplifications, Gifts & Faults tend to be a little more affirmed than in GURPS - there is less subtlety available. If you feel that the converted characters are a little too powerful or colorful, just simplify them by eliminating some minor Gifts & Faults.

If the Gift/Fault is not listed in the list, use the following guideline for costs:

- from 1 to 4 GURPS points, you can forget it, or try to group it with other related low-cost Gifts/Faults to build up a bigger one;
- from 5 to 20 GURPS points, count 1 Gift/Fault;
- from 21 to 40 GURPS points, count 2 Gift/Fault;
- from 41 to 60 GURPS points, count 3 Gift/Fault, etc...

^ 3.1.3 Skills conversion

Convert the GURPS Skills to Fudge scale using the following table [\[Note 05\]](#):

GURPS	Fudge	Notes
7 or lower	Terrible	
8-9	Poor	A typical GURPS PC with attributes in the 12-13 range will have defaults at this level
10-11	Mediocre	
12-13	Fair	Defined in GURPS as the level needed to earn a living using a skill
14-15	Good	Defined in GURPS as the level recommended use in life-and-death situations.
16-17	Great	Defined in GURPS as the level for an 'expert'.

18-19	Superb	
20+	Legendary	

Modification due to Specialisation: (See [Skills](#) for an explanation of Specialisation) when a FTTHS skill is obviously broader than it's GTHS equivalent, lower the score of one whole level, and use the FTTHS skill name as a specialisation definition for the FTTHS skill. Therefore the specialisation itself will have the score listed in the above table, and other specialities within the FTTHS skill will be one level lower.

^ 3.2 Other conversions

For all other rules, takes these simple guidelines :

- **Rule of thumb:** GURPS scale (3D6=16 levels) is almost twice the size of Fudge scale (7 levels). Most of GURPS stats, modifiers, etc... can be easily converted to Fudge by dividing them by 2, except for Size, Weapons Damage and Armor - see the [Size Conversion Table](#) below.
- **Attribute & Skills modifiers:** use the following table:

GURPS modifier	FTTHS modifier
-6,-5	-3
-4,-3	-2
-2,-1	-1
0,+1	0
+2,+3	+1
+4,+5	+2
+6,+7	+3

- **Size, Weapons, Armor:** Racial Size is determined by average HP. Damage is linked to Weapons Damage. The conversion is given by the [Size Conversion Table](#) *[Note 06]*:

Size	Multiplier	GURPS HP/DR	Damage/Armor	GURPS Damage
-6	0.1	0,83-1,21	-2	1
-5	0.15	1,22-1,77	-1	1D2
-4	0.2	2	0	2, 1D-1
-3	0.3	3	1	1D
-2	0.5	4-5	2	1D+1 - 1D+2
-1	0.7	6-8	3	2D-1 - 2D+1
0	1	9-12	4	2D+2 - 3D+2
1	1.5	13-17	5	4D-1 - 5D-1
2	2	18-26	6	5D - 7D+2
3	3	27-38	7	8D-1 - 11D-1
4	5	39-56	8	11D - 16D-1
5	7	57-82	9	16D - 24D-1
6	10	83-121	10	24D - 35D-1
7	15	122-177	11	35D - 51D-1
8	22	178-261	12	51D - 75D-1
9	32	262-383	13	75D - 110D-1
10	46	384-562	14	110D - 161D-1
11	68	563-825	15	161D - 236D-1
12	100	826-1211	16	236D - 346D-1
13	147	1212-1778	17	346D - 508D-1
14	215	1779-2610	18	508D - 8cD-1
15	316	2611-3831	19	8cD - 11cD-1
16	464	3832-5623	20	11cD - 16cD-1
17	681	5624-8254	21	16cD - 24cD-1
18	1000	8255-12115	22	24cD - 35cD-1
19	1468	12116-17782	23	35cD - 51cD-1
20	2154	17783-26101	24	51cD - 75cD-1
21	3162	26102-38311	25	75cD - 109cD-1
22	4642	38312-56234	26	109cD - 161cD-1
23	6813	56235-82540	27	161cD - 236cD-1
24	10000	82541-121152	28	236cD - 346cD-1

25	14678	121153-177827	29	346cD - 508cD-1
26	21544	177828-261015	30	508cD - 746cD-1
27	31623	261016-383118	31	746cD - 1095cD-1
28	46416	383119-562341	32	1095cD - 1607cD-1
29	68129	562342-825404	33	1607cD - 2358cD-1
30	100000	825405-1211527	34	2358cD - 3462cD-1

The table above can be used for a number of calculation regarding Damage and Armor, especially for size or time factor - see the Swarm special rule in [GTHS Specific Rules](#) for an example.

- **Armors:** Lookup DR on the "GURPS HP/DR" column in the table above, then cross to "Damage/Armor". **Passive defence** is equal to PD/2, rounded down (ex: PD5 = malus -2 on attacker's skill); same rule for shields.
- **Armor Penetration:** In GURPS, some weapons reduce DR before making damage, which is indicated as such : 2D(10) means divide DR by 10, then 2D damage. In FTGS, convert as such : (2) means Armor-2, (5) means Armor-4, (10) means Armor-6.
- **Gun Range:** Range is linked to Accuracy looked up on the GURPS Range Table, and Max Range is either the listed range for THS weapons, or twice the 1/2D range for older weapons (somehow it makes more sense...)
- **Movement:** just remember that in GURPS, Move is Running Speed in meter per second. Multiply by 3 to see how many meters this gives in one 3-seconds turn; it's equivalent to Speed Factor 5.
- **OWN Units:** Ah, American Standards... Here are guidelines to convert it all to metric system if you want to.
 - **Feet (ft):** 1 Foot is 0.3048 meter (3,28 feet in one meter) - Quick: divide Feet by 3, or multiply by 3 and divide by 10.
 - **Square Feet (sqf):** 1 Square Foot is 0.09290304 square meter (10,76 square feet in one square meter) - Quick: divide sqf by 10.
 - **Cubic Feet:** 1 Cubic Foot is 0.028317 cubic meter (35,31 cubic feet in one cubic meter) - Quick: multiply cbf by 3, and divide by 100. The Spaceship Space Volume in GURPS (500 cubic feet) is around 15 cubic meter (a cube of 2.5m height - as high as most ceilings).
 - **Yards (yd):** 1 Yard is 0.9144 meter (1,09 yards in one meter). Quick: one Yard is one meter.
 - **Miles (mi):** 1 Mile is 1.60934 kilometre (0.62 miles in one km). Quick: none... add 60%, or 2/3 to Miles to get km.
 - **Gallons (gal):** 1 gallon is 4.55 litres (0.22 gallon in one litre). Quick: multiply Gallons by 5
 - **Pounds (lb):** 1 Pound is 0.453592 kilogram (2.20 Pounds in one kilogram). Quick: divide Pounds by 2.
 - **Degrees Fahrenheit (°F):** well... °C = (°F - 32) x 5/9 . Quick: 0°F=-20°C, 30°F=0°C, 50°F=10°C, 75°F=25°C, 100°F=40°C, 200°F=90°C, 300°F=150°C.

^ 4. Sample Conversions

^ 4.1 Sample characters

- **Sandra Chou** (PF16-17). Tennen Spacer. GTHS Value : 152. *Notes: Example of 150 pts Character. I reduced her Free-Fall level from Legendary (20!!!) to Great.*
 - **ATTRIBUTES:** Strength -1 Resistance 0 Perception 0 Agility +2 Reasoning 0 Willpower 0 Empathy 0 Charisma +1
 - **SKILLS - Physical:** 0-G Acrobatics +2 (/sp Vacc Suits), 1-G Acrobatics 0 (/sp Leaps & Jumps) - **Weapon:** Hand-To-Hand +1 (/sp karate), Guns 0 (/sp Electrolaser) - **Pilot:** Light spacecraft 0 (/sp Steptoe DRV) - **Environment:** Area Knowledge [...] -1 (HEO), Area Knowledge [...] 0 (L5 Stations) - **Social:** Street -2 (/sp Etiquette), Partying -1 - **Technique:** Communications -1, Computers Software 0, Mobile Mechanics & Robotics -2 (/sp Space Drives), Navigation (specific) -1 (Space) - **Police / Military:** Electrical Warfare -2 (/sp Sensors) - **Language:** Human [...] 0 (Cantonese), Human [...] -1 (English), Human [...] -1 (German), Human [...] -1 (Mandarin)
 - **GIFTS/FAULTS - Racial Attributes Mod:** Charisma Mod (+1) (Tennen), Strength Mod (-1) (Tennen), Resistance Mod (-1) (Tennen) - **Internal:** Natural Skill (Tennen - 0-G Acrobatics) - **Friends & Foes:** Ally (Patelsoft "Friend K") - **Internal:** Immunity to Disease (Tennen), Longevity (Tennen), No Degeneration in Zero-G (Tennen), Radiation Tolerance (Tennen) - **Limb:** Prehensile Toes (Tennen) - **Mental:** Easy to Read, Sense of Duty (Friends & Crew) - **Sense:** Acute [Sense] (Vision), Never Gets Lost (Tennen)
- **Klaus Godot** (PF50-51). Citizen SAI-7 in a Cyberdoll. GTHS Value : 396. *Notes: Example of 500 pts Character. This is where the differences between GTHS and FTGS show. The cyberdoll gifts value are underevaluated, as well as the Ally costs in Klaus. In general, Gifts-Heavy characters tend to be underevaluated due to the 10pts/gift value where the conversion scale is 20 GURPS pts = 1 gift. On the other hand it's strange to have a 500pts Character with only one Good skill... I guess in FTGS Klaus Godot would be a lot more proficient.*
 - **ATTRIBUTES:** Strength +2 Resistance +2 Perception 0 Agility +1 Reasoning -1 Willpower 0 Empathy 0 Charisma 0
 - **SKILLS - Weapon:** Guns 0 (/sp electrolasers) - **Environment:** Urban 0 (/sp Stealth) - **Social:** Science -1 - **Technique:** Computers Software +1 (/sp hacking), Electronics Hardware -1 (/sp computers), Mobile Mechanics & Robotics 0 (/sp robots) - **Police / Military:** Military Tactics -1, Security systems -1, Infiltration -1, Electrical Warfare -1 (/sp sensors) - **Science:** Artificial Intelligence -1, Mathematics 0, Memetics 0 - **Influence:** Barter -1 - **Language:** Human [...] 0 (English), Human [...] -1 (Spanish)
 - **GIFTS/FAULTS - Racial Attributes Mod:** Intelligence Mod (-1) (SAI-7), Charisma Mod (+1) (Cyberdoll), Strength Mod (+2) (Cyberdoll), Resistance Mod (+2) (Cyberdoll) - **Internal:** Natural Skill (SAI-7 - Memetics), Natural Skill (SAI-7 - Computers Software) - **External:** Armored (Cyberdoll) - **Friends & Foes:** Ally (+4) (enhanced Clockwork Souls "Footman"), Ally (+5) (Tenzan THI-200bis), Ally (+2) (5x Newshawk/7-6), Patron (Charles Godwin) - **Internal:** Doesn't Breathe (Cyberdoll), Doesn't Eat or Drink

(Machine Body), Extra Life (SAI-7 - (Digital Backup)), High Pain Threshold (Machine Body), Immunity to Disease (Machine Body), Immunity to Poison (Machine Body), Injury Tolerance (Machine Body), Sanitized Metabolism (Cyberdoll), Unhealing (Machine Body) - **Mental:** Digital Mind, Doesn't Sleep (SAI-7), Enhanced Time Sense (SAI-7), Lightening Calculator (SAI-7), Radio Speech (+2) (Cyberdoll - IR & Radio), Visualization (+2) (SAI-7 - Willpower+2), Amnesia (Shadow - Shallow Memories + Delusion of Full Memory), Honesty (SAI-7), Indecisive, Reprogrammable Duty (Citizen SAI-7 - no master) - **Sense:** Never Gets Lost (Cyberdoll)

^ 4.2 Templates

Note: Points Value are given in Simplified Creation value. Multiply by 10 for Normal Creation value.

Genetic Upgrades (TS115-116)

- **Floater** (-3.5pt): **Racial Attributes Mod:** Strength Mod (-2), Resistance Mod (-1) - **Internal:** Natural Skill (0-G Acrobatics), Fragile - **Sense:** Never Gets Lost
- **Alpha** (4pt): **Racial Attributes Mod:** Charisma Mod (+1), Resistance Mod (+1) OR Agility Mod (+1) - **Internal:** Immunity to Disease, Longevity
- **Alpha-Olympian** (6pt): **Racial Attributes Mod:** Charisma Mod (+1), Resistance Mod (+1), Agility Mod (+1) - **Internal:** Combat Reflexes, Immunity to Disease, Longevity
- **Ishtar** (2pt): **Racial Attributes Mod:** Charisma Mod (+2), Strength Mod (-1), Resistance Mod (+1), Agility Mod (+1) - **Internal:** Immunity to Disease - **Mental:** Jealousy OR Self-Centered OR Solipsist, Overconfidence
- **Ishtar-Siduri** (4pt): **Racial Attributes Mod:** Charisma Mod (+2), Strength Mod (-1), Resistance Mod (+1), Agility Mod (+1) - **Internal:** Immunity to Disease, Longevity - **Mental:** Overconfidence
- **Metanoia** (4pt): **Racial Attributes Mod:** Intelligence Mod (+1) - **Internal:** Immunity to Disease, Longevity - **Mental:** Versatile

Parahumans & Bioroids (TS116-118)

- **Aquamorph** (6pt): **Racial Attributes Mod:** Intelligence Mod (+1), Resistance Mod (+1) - **Internal:** Immunity to Disease, Oxygen Storage, Pressure Support - **Limb:** Amphibious
- **Aquamorph-Sea Shepherd** (8pt): **Racial Attributes Mod:** Intelligence Mod (+1), Resistance Mod (+1) - **External:** Sharp Teeth - **Internal:** Combat Reflexes, Immunity to Disease, Oxygen Storage, Pressure Support - **Limb:** Amphibious, Enhanced Move - **Mental:** Workaholic - **Template:** Bioroid Body
- **Felicia** (12pt): **Racial Attributes Mod:** Charisma Mod (+1), Strength Mod (-1), Resistance Mod (+1), Perception Mod (+1), Agility Mod (+2) - **External:** Claws, Fur - **Internal:** Combat Reflexes, Hyper-Metabolism, Immunity to Disease, Perfect Balance - **Limb:** Catfall - **Mental:** Overconfidence - **Template:** Bioroid Body
- **Felicia II** (10pt): **Racial Attributes Mod:** Charisma Mod (+1), Strength Mod (-1), Resistance Mod (+1), Perception Mod (+1), Agility Mod (+2) - **External:** Claws, Fur - **Internal:** Combat Reflexes, Immunity to Disease, Perfect Balance - **Limb:** Catfall - **Mental:** Overconfidence - **Template:** Bioroid Body
- **Tennin** (4.5pt): **Racial Attributes Mod:** Charisma Mod (+1), Strength Mod (-1), Resistance Mod (-1) - **Internal:** Natural Skill (0-G Acrobatics), Immunity to Disease, Longevity, No Degeneration in Zero-G, Radiation Tolerance - **Limb:** Prehensile Toes - **Sense:** Never Gets Lost
- **Tennin-Wu Tsao** (5.5pt): **Racial Attributes Mod:** Intelligence Mod (+1), Charisma Mod (+1), Strength Mod (-1), Resistance Mod (-1) - **Internal:** Natural Skill (0-G Acrobatics), Immunity to Disease, Longevity, No Degeneration in Zero-G, Radiation Tolerance - **Limb:** Prehensile Toes - **Sense:** Never Gets Lost
- **Tennin-ZR5** (4.5pt): **Racial Attributes Mod:** Charisma Mod (+1), Strength Mod (-1), Resistance Mod (-1) - **Internal:** Natural Skill (0-G Acrobatics), Immunity to Disease, Radiation Tolerance - **Limb:** Prehensile Toes, Clinging - **Mental:** Workaholic - **Sense:** Never Gets Lost - **Template:** Bioroid Body
- **Tianyi ZR7** (5pt): **Racial Attributes Mod:** Empathy Mod (+1), Charisma Mod (+3), Resistance Mod (+2) - **Internal:** Immunity to Disease, Sanitized Metabolism - **Mental:** Less Sleep, Gregarious, Workaholic, Xenophilia - **Social:** Off-The-Shelf Look - **Template:** Bioroid Body
- **Tianyi-Incubus** (5.5pt): **Racial Attributes Mod:** Empathy Mod (+1), Charisma Mod (+3), Resistance Mod (+2), Agility Mod (+1) - **Internal:** Natural Skill (Craft [Erotic Art]), Immunity to Disease, Sanitized Metabolism - **Mental:** Less Sleep, Gregarious, Lecherousness, Workaholic, Xenophilia - **Social:** Off-The-Shelf Look - **Template:** Bioroid Body
- **Yousheng** (5pt): **Racial Attributes Mod:** Strength Mod (-1), Resistance Mod (+2), Agility Mod (+1) - **Internal:** Immunity to Disease, Longevity - **Template:** Mars-Adapted
- **Yousheng-ZR3** (5pt): **Racial Attributes Mod:** Strength Mod (-1), Resistance Mod (+2), Agility Mod (+1) - **Internal:** Immunity to Disease, Less Sleep, Longevity - **Mental:** Workaholic - **Template:** Bioroid Body, Mars-Adapted
- **Ziusudra** (7pt): **Racial Attributes Mod:** Intelligence Mod (+1), Charisma Mod (+1), Resistance Mod (+1) OR Agility Mod (+1) - **Internal:** Extended Lifespan, Immunity to Disease, Longevity, Rapid Healing, Sanitized Metabolism
- **Ziusudra-Nyx** (7pt): **Racial Attributes Mod:** Intelligence Mod (+1), Charisma Mod (+1) - **Internal:** Extended Lifespan, Immunity to Disease, Rapid Healing, Sanitized Metabolism - **Mental:** Less Sleep

Infomorphs (TS119-120)

- **NAI-4/NAI-5** (-1.5pt): - **Racial Attributes Mod:** Intelligence Mod (-1), Empathy Mod (-2) - **Internal:** Natural Skill (Computers Software), Extra Life - **Mental:** Digital Mind, Doesn't Sleep, Enhanced Time Sense, Focused, Lightening Calculator, Total Memory, Unshakeable, Hidebound, Reprogrammable Duty (-2), Slave Mentality - **Social:** Low Status (-2), Poor (-2)
- **NAI-6/NAI-7** (-0.5pt): Based on NAI-4. Delete Intelligence Mod (-1).
- **NAI-8/NAI-9** (+0.5pt): Based on NAI-4. Delete Intelligence Mod (-1), add Intelligence Mod (+1).
- **NAI-10** (+1.5pt): Based on NAI-4. Delete Intelligence Mod (-1), add Intelligence Mod (+2).

- **LAI-6** (3.5pt): **Racial Attributes Mod:** Intelligence Mod (-1), Empathy Mod (-1) - **Internal:** Natural Skill (*Computers Software*), Extra Life - **Mental:** Digital Mind, Doesn't Sleep, Enhanced Time Sense, Lightening Calculator, Total Memory, Unshakeable, Visualization (+2) (*Willpower+2*), Hidebound, Honesty, Reprogrammable Duty (-2) - **Social:** Poor (-2)
- **LAI-7/LAI-8** (4.5pt): Based on LAI-6. Delete Intelligence Mod (-1).
- **LAI-9/LAI-10** (5.5pt): Based on LAI-6. Delete Intelligence Mod (-1), add Intelligence Mod (+1).
- **SAI-7** (5pt): **Racial Attributes Mod:** Intelligence Mod (-1) - **Internal:** Natural Skill (*Memetics*), Natural Skill (*Computers Software*), Extra Life - **Mental:** Digital Mind, Doesn't Sleep, Enhanced Time Sense, Lightening Calculator, Visualization (+2) (*Willpower+2*), Honesty, Reprogrammable Duty (-2)
- **SAI-8/SAI-9** (6pt): Based on SAI-7. Delete Intelligence Mod (-1).
- **SAI-10** (7pt): Based on SAI-7. Delete Intelligence Mod (-1), add Intelligence Mod (+1).
- **Ghost Mind Emulation** (1pt): **Internal:** Extra Life - **Mental:** Digital Mind
- **Fragment Mind Emulation** (0pt): **Internal:** Extra Life - **Mental:** Digital Mind, Amnesia

Cybershells (TS121-125)

- **Cyberdoll** (13pt): **Racial Attributes Mod:** Charisma Mod (+1), Strength Mod (+2), Resistance Mod (+2) - **External:** Armored - **Internal:** Doesn't Breathe, Doesn't Eat or Drink, High Pain Threshold, Immunity to Disease, Immunity to Poison, Injury Tolerance, Sanitized Metabolism, Unhealing - **Mental:** Radio Speech (+2) (*IR & Radio*) - **Sense:** Never Gets Lost

Bioshell (TS126)

- **Bioshell Template** (4pt): **Mental:** Absolute Timing, Radio Speech - **Sense:** Never Gets Lost

^ 5. Additional Rules

^ 5.1 Quick Skills

Standard Skills as specified in the creation rules are learned through classical human learning methods: studying, practicing. The **Hard Way** is an efficient but lengthy process. To cope with the 22nd century people have to learn a lot in a short period. Thus various Quick-Learning technologies were created:

- Sleep-induced knowledge (takes some time - limited to Mediocre level)
- Permanent knowledge chip (requires surgery)
- Removable knowledge chip (requires chip dock and free slot)
- Neural downloading (requires neural interface and free space)

Those methods take a lot less time and are quite efficient. Skills learned the quick way - **Quick Skills** are easier to acquire and cost HALF the normal skills cost in creation points.

Quick Skill level	Cost at creation	Cost during play
Easy at Fair (0) Normal at Mediocre (-1) Hard at Poor (-2)	2 pts	1000 \$
Normal at Fair (0) Hard at Mediocre (-1)	3 pts	2000 \$
Easy at Good (+1) Hard at Fair (0)	4 pts	4000 \$
Normal at Good (+1)	5 pts	8000 \$
Hard at Good (+1)	6 pts	16000 \$

However those skills have limitations :

- They have to be **specialised** with no bonus, and get a -2 malus outside the specialisation.
- They are limited to Professional/Good (+1) level.
- When using them the number of dice thrown is limited to 1 (1dF instead of 4dF), because of the predictability of such skills.
- They cannot be improved through experience or learning, only by buying a more expensive update that will be downloaded in the brain, replacing the previous download. If a character wants to improve that skill level above Good (+1), he has to cancel the Quick skill first, going back to default level +1 level bonus (because he usually still has some traces of knowledge left), and then to learn it the hard way. This is why good professionals usually learn their skill the hard way.

Note that such skills can be temporarily acquired throughout an adventure, using (little) time and (big) money - see the "Cost during play" column.

additional Note: Quick skills are typical for computer-driven skills. A GM could decide that all Infomorphs should only have Quick-skills, due to their nature; Infomorphs could then buy more skills, cheaper than bios, yet be quite specialized, quickly out of their depth, and limited to Professional level (lacking the biological "genius touch" required to become an Expert)

^ 5.2 Fatigue

Fatigue can be tracked on a wounds-like scale system, using the following rules:

For every intense effort, the GM should determine a **Fatigue Factor**. **Fatigue level** is then determined by :

$$\text{Fatigue Level} = \text{Fatigue Factor} - \text{Character's Resistance} + 2dF$$

Match the Fatigue Level against the following table :

Fatigue Level	Result	Effect	(equal wound)	Number of checkbox	Rest
0-	Easy !	-	<i>Unhurt</i>	-	-
1,2	Out of breath	-	<i>Scratch</i>	3	10 minutes
3,4	Tired	-1 to all actions	<i>Hurt</i>	1	1 hour
5,6	Exhausted	-2 to all actions	<i>Very Hurt</i>	1	6 hours
7,8	Passing out	Lying, no actions	<i>Incapacited</i>	1	one day
9+	Drained	Unconscious	<i>Near Death</i>	1	three days

Each character should have a Fatigue Track, much like a wound track, and check boxes corresponding to his Fatigue level. If the fatigue level is already checked, check a box one level higher (but mark it to remember the initial Fatigue level). Penalties should be applied to all actions much like Hurt penalties. The "Rest" column indicates how much rest (possibly sleep) the character should get to un-check a particular fatigue-level. Note that a Drained character is in dangerous condition, requiring medical attention, which could result in more permanent damage or possible death if the character is fatigued again.

Fatigue Factor can also optionally be used as a wound track for non-damaging weapons like shockers, etc...

Examples of Fatigue Factor :

- 1 : 10 turns of active combat (hand-to-hand or shooting)
- 3 : carrying 50kg for 1 hour march, running for 30 minutes, or marching for 4 hours

In case of prolonged effort, rolls must be made regularly. See also the various other rules which implied automatic fatigue at regular intervals (see Choking and Movement in [Other Rules](#), Free Fall in [GTHS Specific Rules](#))

^ 5.3 Stress

Stress is a modern version of the Fear rules by David Bruns, [Gazette #2](#).

Stress can be tracked on a wounds-like scale system, using the following rules:

For every stressful situation the character gets in, the GM should determine a **Stress Factor**. **Stress level** is then determined by :

$$\text{Stress Level} = \text{Stress Factor} - \text{Character's Willpower} + 4dF$$

Match the Stress Level against the following table :

Stress Level	Result	Effect	(equal wound)	Number of checkbox	Duration	Therapy
0-	Easy !	-	<i>Unhurt</i>	-	-	-
1,2	Troubled	-	<i>Scratch</i>	3	1 hour	-
3,4	Stressed	-1 to all actions, Panic?	<i>Hurt</i>	1	1 day	Fair
5,6	Flipping Out	-2 to all actions, Panic?	<i>Very Hurt</i>	1	1 week	Good
7,8	Delusional	acquire one mental fault	<i>Incapacited</i>	1	1 month	Great
9+	Psychotic	drifting	<i>Near Death</i>	1	6 month	Superb

Each character should have a Stress Track, much like a wound track, and check boxes corresponding to his Stress level. If the Stress level is already checked, check a box one level higher (but mark it to remember the initial Stress level). Penalties should be applied to all actions much like Hurt penalties. The "Duration" column indicates how long the effect will last without proper treatment.

Panic: when Stressed or Flipping Out, the character could become panicked. Make a Fair Willpower test modified by Stress effects; if unsuccessful, throw 1dF :

- -1 = **Freeze** : the character is paralysed, he cannot move, speak or act, excepted being shoved around by others.
- 0 = **Run** : the character runs away as fast as possible, not caring about friends or others, dropping everything in hand.
- +1 = **Run & Barf**: the character **Runs**, but also lose its lunch or pees its pants.
- **Delusional**: you acquire one mental Fault (paranoia, phobia, fetish,...). Make a Fair Willpower test after one month, modified by the accumulated Stress; if it is successful, you recover; if not, the fault is permanent, and the Delusional box stays checked for the rest of the character's life.

- **Psychotic:** You are on the edge of permanent insanity. If untreated after 6 month it becomes permanent (the character becomes an NPC)

See also the related Gifts & Faults: *Unshakeable*, *Collected*, *Nervous*, *panicked*.

Treatment: the character can be treated by a specialist for more complete and rapid recovery. after 1/4 of the "Duration", the specialist needs to make a Psychology roll against the difficulty listed in the "Therapy" column. Success means complete recovery.

Drugs can be used to temporary counter stress effects, either before the stress (providing a temporary "Unshakeable" or "Collected" Gift), or after (temporary "Collected" Gift). However drugs cannot cure the stress permanently - you need a specialist for that.

Examples of Stress Factors :

- Experiencing combat for the first time : 0
- Rapid decompression : 1
- Finding a mutilated corpse : 2
- Finding a mutilated walking corpse : 3

Stress Factor Modifiers :

- Total Surprise : +1
- Violent Action : +1
- Extremely violent Action : +2
- Related to the character's phobia : +1
- Involving loved one : +1

^ 5.4 Vehicles

The optional Vehicle Rules can now be found to [this special page](#).

^ Designer's Notes

You'll find here various comments about the design. Click on the note title to go back to the rules.

Note 01 (Damage & Penetration): there is no "Graze" rule compared to Standard Fudge. The Armor Passive Defence takes care of that. The 2dF only for damage is coherent with the way Damage is converted from Fudge, taking the average damage ; a roll of +2 doubles the damage, -2 halves it. Success Margin would represent Hit Location modifiers.

Note 02 (ODF & DDF) : this is a change from Vanilla Fudge where you just add the various factors; this is linked to a proper mathematical approach of the logarithmic scale of Fudge. See [Mass, Armor & Damage](#) on the [FudgeList TWiki](#) for a complete discussion on the subject and more optionnal rules.

Note 03 (Characters Conversion) : Conversion of characters from GTHS to FTGS is a bit tricky due to some name changes (sorry...) and the addition of 4 attributes that invalidate certain gifts/faults. However the result is usually quite pleasing. Conversion is of course not 100% bullet-proof. In particular, the system is optimized for "normal" characters (100/150pts) and the balance between high Gifts & Attributes cost and low Skill cost in GURPS doesn't match the more fair balance in Fudge, which leads to huge evaluation differences in a Gift-Heavy setting like THS. But oh well, Fudge your way out of it...

Note 04 (Attribute Conversion) : Empathy & Willpower could in GURPS theory be based on modified Reasoning; however this gives too much importance to IQ in the conversion. Adjust Empathy and Willpower if they are obviously linked to IQ level in the character's description.

Note 05 (Skills Conversion) : GURPS to Fudge Skill conversion can seem tricky because GURPS skills are attribute-based, and therefore the attributes cost is often higher than the skills cost. In Fudge it's the reverse, skills are independent from attributes, and skills costs are much higher than attributes costs. The apparent contradiction is resolved if you consider that GURPS high attribute cost is in fact an investment on skills-to-come; in Fudge we just decide to switch that cost onward to skills.

Note 06 (Size Conversion Table) : Size, Damage and Armor have a geometrical progression of $10^{(1/6)}$: x1.46 each level (approx. +50%), x10 every 6 levels. HP is calculated accordingly with Size 0 = 10 HP. GURPS Damage is linked to HP, taking 3,5 HP/dice (i.e. in average the weapon does HP damage), and Fudge Damage is calculated as Size+4.

The material presented here is my original creation, intended for use with the [GURPS](#) system from [Steve Jackson Games](#). This material is not official and is not endorsed by Steve Jackson Games.

[GURPS](#) is a registered trademark of Steve Jackson Games, and the art here is copyrighted by Steve Jackson Games. All rights are reserved by SJ Games. This material is used here in accordance with the SJ Games [online policy](#).

ABOUT FUDGE

FUDGE is a role-playing game written by Steffan O'Sullivan, with extensive input from the Usenet community of rec.games.design. The basic rules of FUDGE are available on the internet via anonymous ftp at ftp.csua.berkeley.edu, and in book form or on disk from Grey Ghost Games, P.O. Box 838, Randolph, MA 02368. They may be used with any gaming genre. While an individual work derived from FUDGE may specify certain attributes and skills, many more are possible with FUDGE. Every Game Master using FUDGE is encouraged to add or

ignore any character Traits. Anyone who wishes to distribute such material for free may do so - merely include this ABOUT FUDGE notice and disclaimer (complete with FUDGE copyright notice). If you wish to charge a fee for such material, other than as an article in a magazine or other periodical, you must first obtain a royalty-free license from the author of FUDGE, Steffan O'Sullivan, P.O. Box 465, Plymouth, NH 03264.

DISCLAIMER

The following materials based on FUDGE, entitled Fudge TransHuman Space, are created and made available by Loïc Prot, and are not authorized or endorsed in any way by Steffan O'Sullivan or any publisher of other FUDGE materials. Neither Steffan O'Sullivan or any publisher of other FUDGE material is in any way responsible for the content of these materials. Original FUDGE materials (c) Copyright 1992-1995 Steffan O'Sullivan, All Rights Reserved.

Page maintained by Loïc Prot (loicprot_AT_yahoo.com).

[\[Back To Index\]](#)