

Idleon Formulas v0.1

on Legends of Idleon v1.21

21/05/2021

Sacrezar

Contents

1	Introduction	5
1.1	Special thanks	5
1.2	Last modifications	5
2	Global	6
2.1	XP needed to lvl up	6
2.2	Fighting Formulas	7
2.2.1	Damage done	7
2.2.2	Damage taken per hit	7
2.2.3	AFK damage cap	7
2.2.4	Food Consumption	7
2.2.5	Hourly Kill Cap	7
2.2.6	% chance to hit depending on the accuracy	7
2.2.7	Multikill	8
2.2.8	Sampling	8
2.3	Family Bonuses	9
3	Guilds	10
4	Talents	11
4.1	Shaman	11
4.1.1	Bubble Breakthrough	11
4.1.2	Virile Vials	12
4.2	Star Talents	13
4.2.1	Stonks!	13
4.2.2	Tick Tock	13
4.2.3	Just EXP	14
4.2.4	Printer Sampling	14
4.2.5	Shrine Architect	14
5	Alchemy	15
5.1	Liquid & Cauldron	16
5.1.1	Liquid	16
5.1.2	Cauldron	16
5.2	Bubble	17
5.3	P2W tab	18
5.3.1	Cauldron	18
5.3.2	Vials	18
5.3.3	Player	18
5.3.4	Liquid	19
6	Post Office	20
6.1	Simple Shippin Orders	20
6.2	Plan-it Express Orders	20
6.3	Dudes Next Door	20
6.4	Shipments	21
6.4.1	Civil War Memory	21
6.4.2	Locally Sourced Organs	21
6.4.3	Magician Starterpack	21

6.4.4	Bolvl of Unwanted Stats	21
6.4.5	Dwarven Supplies	21
6.4.6	Blacksmith Box	21
6.4.7	Taped Up Timber	22
6.4.8	Carepack From Mum	22
6.4.9	Sealed Fishheads	22
6.4.10	Potion Package	22
6.4.11	Bug Hunting Supplies	22
6.4.12	Non Predatory Loot Box	22

7 Construction 23

7.1	Refinery	23
7.2	Cost	23
7.3	Cogs generation	23
7.4	Shrine	23
7.5	Buildings	24
7.5.1	Salt lick upgrade	24

8 Worship 25

9 Other 26

9.1	Teleportation Cap	26
9.2	Statues	26
9.3	Stamps	26
9.4	Forge	26

List of Figures

Figure 2.1.1	XP needed per level	6
Figure 2.3.1	Bonuses scaling per character lvl	9
Figure 4.1.1	Bubble Breakthrough Effect	11
Figure 4.1.2	Virile Vials effect	12
Figure 4.2.1	Where to stop leveling up Stonks! (with/out logarithmic scaling)	13
Figure 4.2.2	Tick Tock Effect	13
Figure 4.2.3	Just EXP Effect	14
Figure 4.2.4	Shrine Architect Effect considering afk claim time	14
Figure 5.1.1	Gain per cost based comparison of P2W Regen and Drippy Drop	16
Figure 5.3.1	How much regen you gain with p2w	19

1 Introduction

This PDF is interactive if you download it, which might be more comfortable to use.

TODO:

Note:

- **BUG NOTE:** in game bug note.
- **TODO:** todo note, it's for me or for those who want to contribute.
- **Note:** information note, general information.
- **Bold red text** important.

1.1 Special thanks

Xores, LiuLangZhe, Rockangelz, Sonnenlicht and the wiki team as well as discord's mods!
and LavaFlame2 obviously.

1.2 Last modifications

2021/06/06 - Add:

- family bonuses;
- construction and worship xp formulas;
- some Shaman Skills formulas and graphs;
- % chance to hit depending on the accuracy;
- some star talents;
- food consumption;
- Shrine time lvl up;
- refinery cap/combustion/power.

2021/05/25 Add cauldron new bubble cost formula + some typo.

2021/05/24 Add cost formula for p2w tab (thx LiuLangZhe).

2021/05/23 Add Stamps, Statues and others formulas + some references.

2021/05/22 Init.

2 Global

2.1 XP needed to lvl up

Every skills use the same formula except Smithing, Alchemy, Construction and Worship.

TODO: I have to verify this; might be wrong now

$$\begin{aligned}
 XP_{\text{Class}} &= \left[\left(15 + \text{lvl}^{1.9} + 11 \times \text{lvl} \right) \times \left(1.208 - \min \left\{ 0.164, \frac{0.215 \times \text{lvl}}{\text{lvl} + 100} \right\} \right)^{\text{lvl}} - 15 \right] \\
 XP_{\text{Skill}} &= \left[\left(15 + \text{lvl}^2 + 15 \times \text{lvl} \right) \times \left(1.225 - \min \left\{ 0.164, \frac{0.135 \times \text{lvl}}{\text{lvl} + 50} \right\} \right)^{\text{lvl}} - 30 \right] \\
 XP_{\text{Smithing}} &= \left[\left(15 + \text{lvl}^2 + 13 \times \text{lvl} \right) \times \left(1.225 - \min \left\{ 0.164, \frac{0.135 \times \text{lvl}}{\text{lvl} + 50} \right\} \right)^{\text{lvl}} - 30 \right] \\
 XP_{\text{Alchemy}} &= \left[\left(15 + \text{lvl}^2 + 15 \times \text{lvl} \right) \times \left(1.225 - \min \left\{ 0.18, \frac{0.135 \times \text{lvl}}{\text{lvl} + 50} \right\} \right)^{\text{lvl}} - 30 \right] \\
 XP_{\text{Construction}} &= \left[\left(10 + \text{lvl}^{2.81} + 4 \times \text{lvl} \right) \times \left(1.117 - \frac{0.135 \times \text{lvl}}{\text{lvl} + 5} \right)^{\text{lvl}} - 6 \right] \\
 XP_{\text{Worship}} &= \left[\left(15 + \text{lvl}^{1.3} + 6 \times \text{lvl} \right) \times \left(1.17 - \min \left\{ 0.07, \frac{0.135 \times \text{lvl}}{\text{lvl} + 50} \right\} \right)^{\text{lvl}} - 26 \right]
 \end{aligned}$$

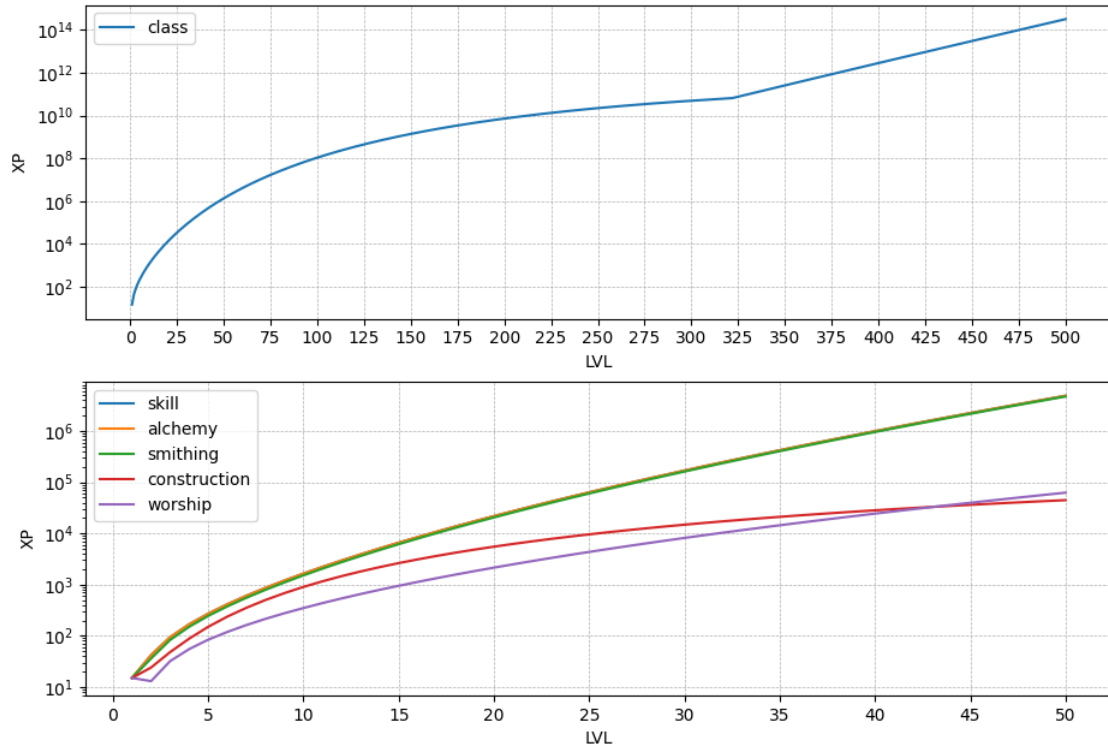


Figure 2.1.1: XP needed per level

2.2 Fighting Formulas

2.2.1 Damage done

$$\begin{aligned}\text{Damage}_{\max} &= \\ \text{Damage}_{\min} &= \text{Damage}_{\max} \times \text{Mastery}\end{aligned}$$

Note: Mastery caps at 80%.

2.2.2 Damage taken per hit

$$\text{dmgPerHit} = \left[\frac{\text{attack}_{\text{enemy}} - 2.5 \times \text{defense}^{0.8}}{\max \left\{ 1, 1 + \frac{\text{defense}^{1.5}}{100} \times \frac{\text{defense}}{\max\{1, \text{attack}_{\text{enemy}}\}} \right\}} \right]$$

2.2.3 AFK damage cap

TODO:

2.2.4 Food Consumption

$$\text{Grasslands} = \frac{\text{dmgPerHit} * 300}{\min\{\text{foodHeal}, \text{maxhp}\}}$$

$$\text{Desert} = \frac{\text{dmgPerHit} * 500}{\min\{\text{foodHeal}, \text{maxhp}\}}$$

$$\text{Tundra} = \frac{\text{dmgPerHit} * 600}{\min\{\text{foodHeal}, \text{maxhp}\}}$$

2.2.5 Hourly Kill Cap

TODO:

2.2.6 % chance to hit depending on the accuracy

$$\text{hitChance} = 100 \times \left(0.95 \times \frac{3 \times \text{yourAcc}}{2 \times \text{acc}} - 0.425 \right)$$

- acc is the accuracy needed to have a 100% chance to hit.

2.2.7 Multikill

TODO:

2.2.8 Sampling

TODO:

Just a guess as of now but it might be $\text{nbKills} \times \text{baseDropChance} \times \text{sampling\%}$ where BaseDropchance is unaffected by drop rate.

2.3 Family Bonuses

$$\text{Archer} = 1 + \left\lfloor \frac{\text{lvl} - 9}{5} \right\rfloor$$

$$\text{Hunter} = \frac{(\text{lvl} - 29) \times 30}{\text{lvl} + 71}$$

$$\text{Bowman} = \frac{(\text{lvl} - 29) \times 38}{\text{lvl} + 71}$$

$$\text{Mage} = 1 + \left\lfloor \frac{\text{lvl} - 9}{5} \right\rfloor$$

$$\text{Wizard} = 1 + \left\lfloor \frac{\text{lvl} - 29}{8} \right\rfloor$$

$$\text{Shaman} = 1 + \frac{(\text{lvl} - 29) \times 0.4}{\text{lvl} + 71}$$

$$\text{Warrior} = 1 + \left\lfloor \frac{\text{lvl} - 9}{5} \right\rfloor$$

$$\text{Barbarian} = \frac{(\text{lvl} - 29) \times 25}{\text{lvl} + 71}$$

$$\text{Squire} = \frac{(\text{lvl} - 29) \times 40}{\text{lvl} + 71}$$

$$\text{Journeyman} = 1 + \left\lfloor \frac{\text{lvl} - 9}{5} \right\rfloor$$

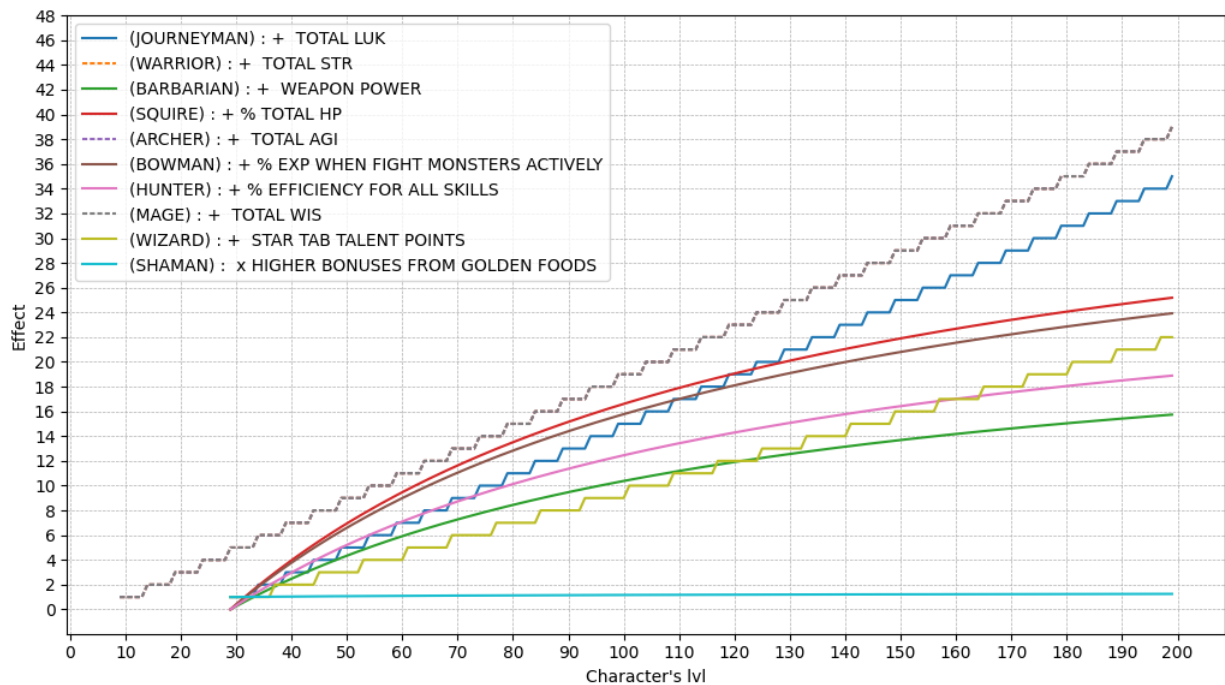


Figure 2.3.1: Bonuses scaling per character lvl

3 Guilds

TODO:

4 Talents

4.1 Shaman

4.1.1 Bubble Breakthrough

BUG NOTE: XP doesn't work (v1.21)

$$\begin{aligned} \text{xp}_{\%} &= \text{lvl} \\ \text{odds}_{\%} &= \frac{51 + 0.5(\text{lvl} - 1)}{50} \times \text{lvl} \end{aligned}$$

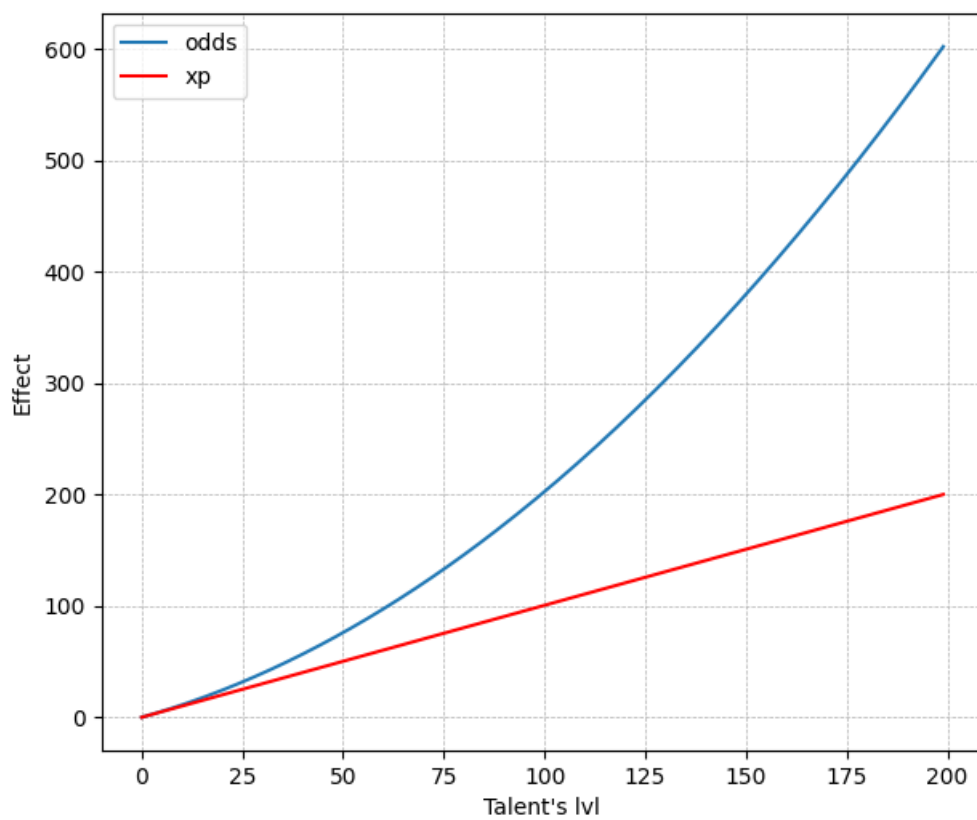


Figure 4.1.1: Bubble Breakthrough Effect

4.1.2 Virile Vials

$$\text{damage}_{\%} = \text{nbVials} \times \frac{12 * \text{lvl}}{\text{lvl} + 100}$$

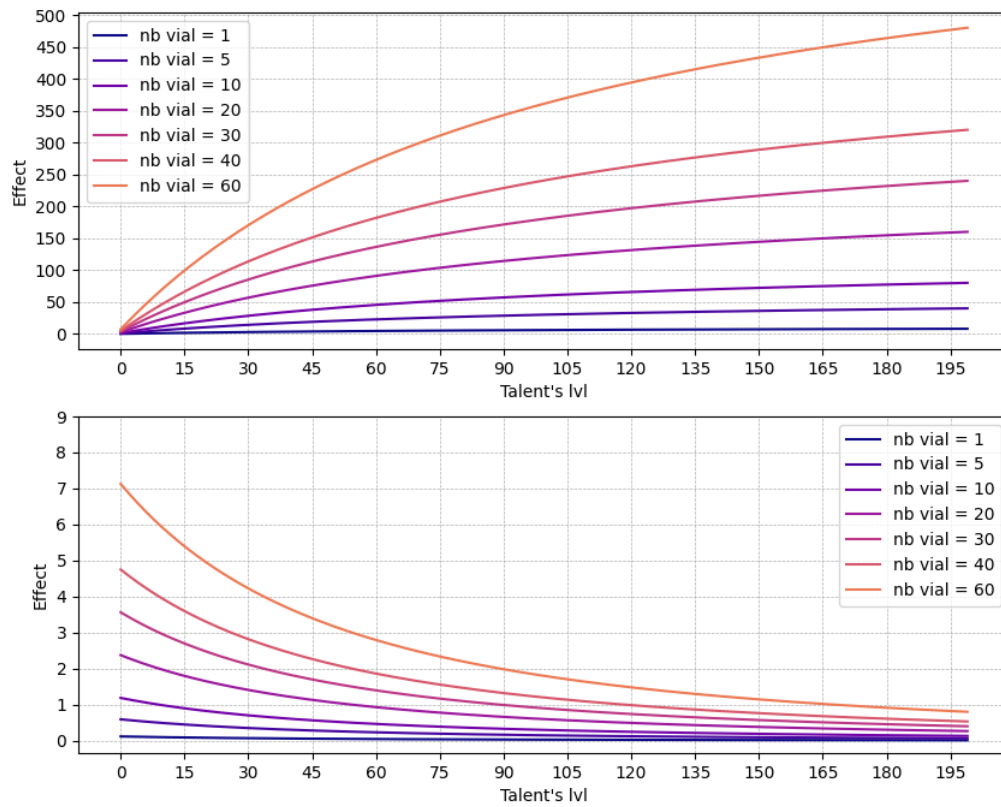


Figure 4.1.2: Virile Vials effect

4.2 Star Talents

4.2.1 Stonks!

$$\text{Points} = \frac{130 \times x}{x + 50}$$

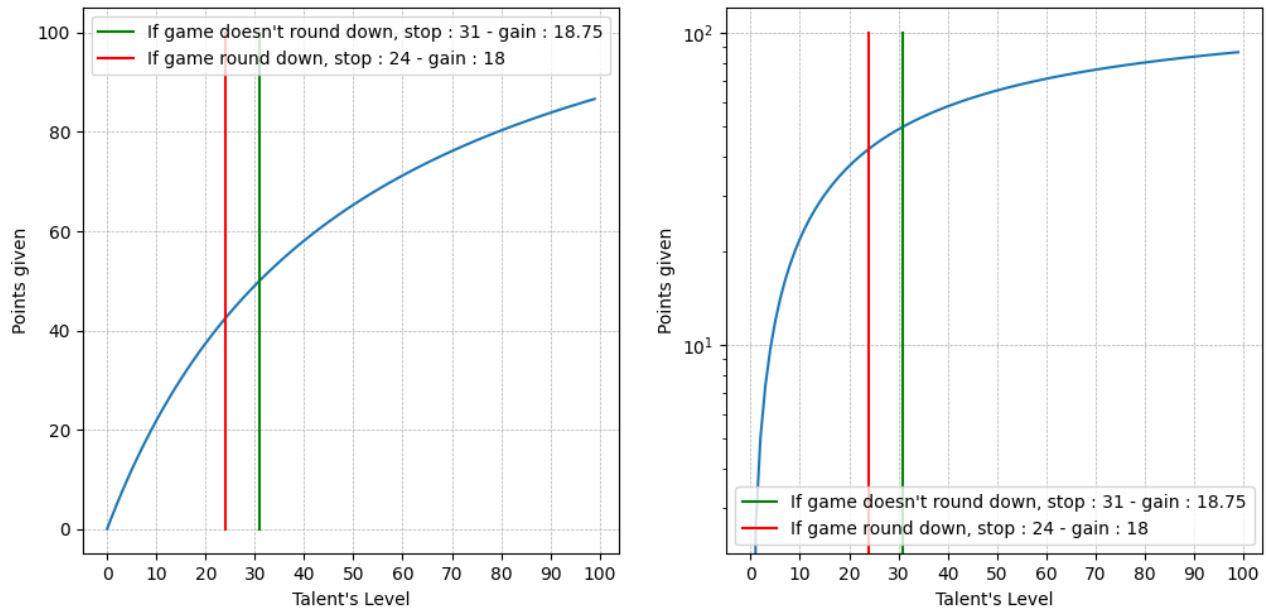


Figure 4.2.1: Where to stop leveling up Stonks! (with/out logarithmic scaling)

4.2.2 Tick Tock

$$\text{AFKGainRate}_{\%} = \frac{8\text{lvl}}{\text{lvl} + 50}$$

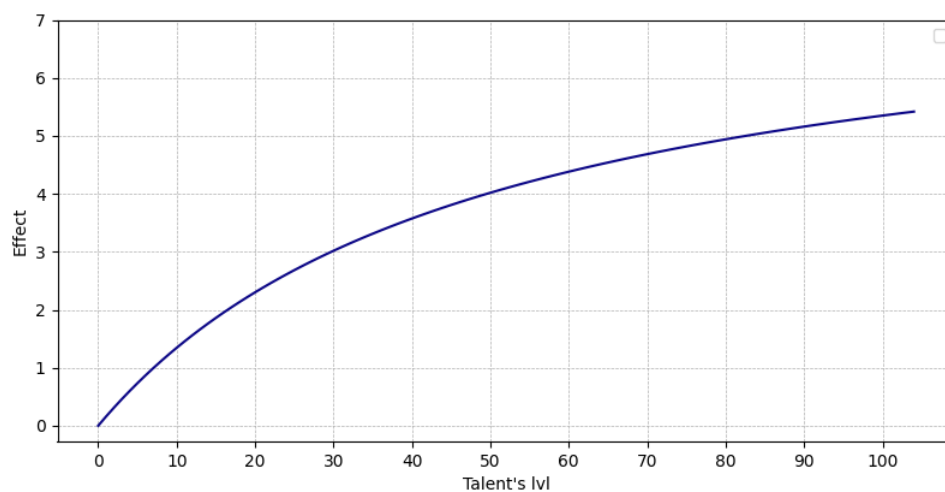


Figure 4.2.2: Tick Tock Effect

4.2.3 Just EXP

$$\text{AFKGainRate}_{\%} = \frac{10\text{lvl}}{\text{lvl} + 50}$$

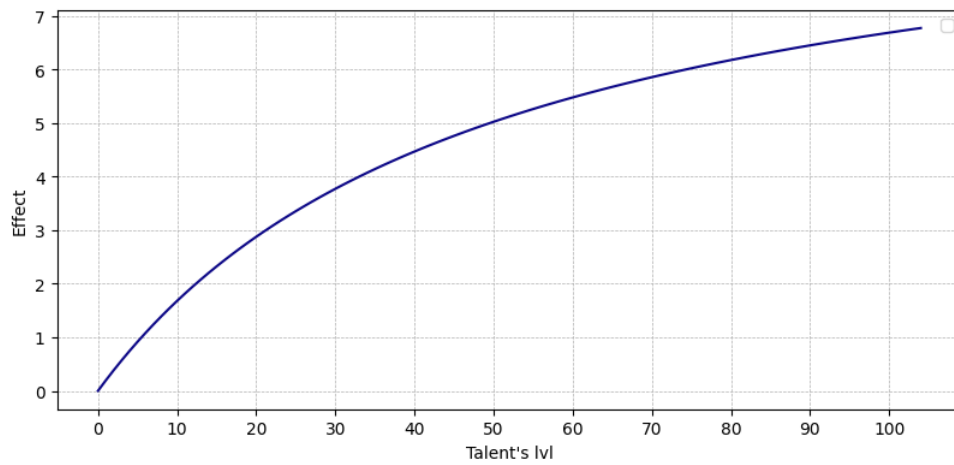


Figure 4.2.3: Just EXP Effect

4.2.4 Printer Sampling

$$\text{Sampled} = 10 + 0.075 * \text{lvl}$$

4.2.5 Shrine Architect

$$\text{AFKGainRate}_{\%} = \frac{50\text{lvl}}{\text{lvl} + 50}$$

So for each afk claim, shrines would gain $\text{afkTime} \times \text{AFKGainRate}_{\%}$:

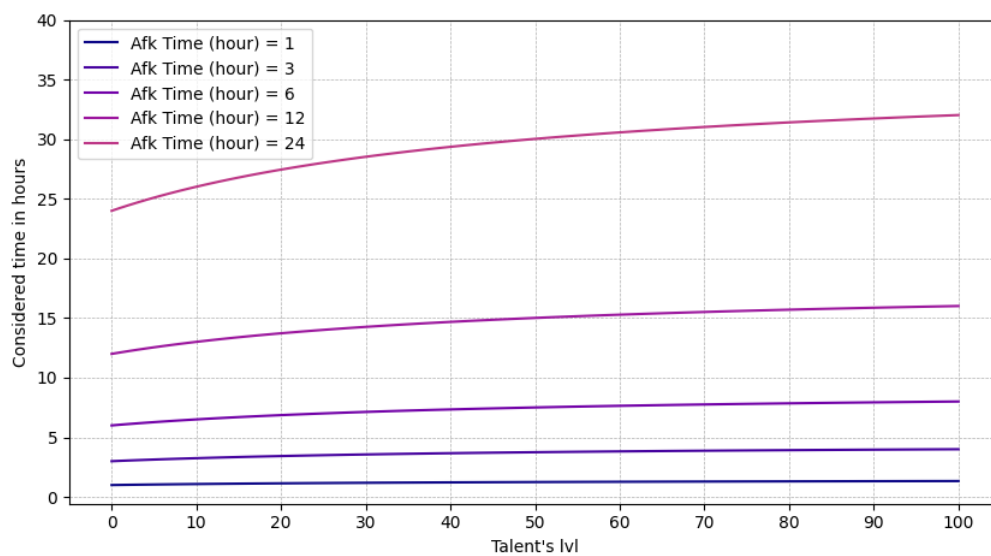


Figure 4.2.4: Shrine Architect Effect considering afk claim time

5 Alchemy

Here is your base brewspeed, as well as your xp/hour:

$$p2wBonus = AlchSpeedP2W \times AlchLvl$$

$$talentBonus = BusyBrewing + BrokenTime + GuildPerk + StarSigns$$

$$\text{IF } WIS < 1000 : wisBonus = \frac{(WIS + 1)^{0.37} - 1}{40}$$

$$\text{ELSE : } wisBonus = 0.5 \times \frac{(WIS - 1000)}{WIS + 2500} + 0.255$$

$$Bonus = p2wBonus \times \left(1 + \frac{wisBonus}{0.6}\right) \times \left(1 + \frac{talentBonus}{100}\right)$$

$$brewSpeed = \left\lfloor AlchLvl^{0.8} \right\rfloor \times \left(1 + \frac{stamp + Bubble + Box}{100}\right) \times \left(1 + \frac{Bonus}{100}\right)$$

$$xp_{/hour} = brewSpeed \times alchExpMultiplier$$

Multiply $xp_{/hour}$ by 15 if you are in a cauldron, by 30 if you are in liquid.

BUG NOTE: GuildPerk doesn't work as of version 1.20b but it should be fixed with the next patch.

Note: $xp_{/hour}$ on AFK seems to misbehave. When testing I got some weird results : As if my character was in Cauldron whereas it was in liquid.

5.1 Liquid & Cauldron

5.1.1 Liquid

$$\text{liquid}_{/\text{hour}} = \left(1 + \frac{\text{decant}_{\%} + \text{RLP2W}_{\%} + \text{vial}_{\%}}{100}\right) \times \left(1 + \frac{\text{stamp}_{\%} + \sum ((\text{alchLvl} * 2 + 4)^{0.65})}{100}\right)$$

TODO: ADD SALT LICK FACTOR

- $\text{RLP2W}_{\%}$ is P2W Liquid Regen, see 5.3.
- $\text{stamp}_{\%}$ is Drippy Drop Stamp.
- $\text{decant}_{\%}$ is regen decanting.

Multiply $\text{liquid}_{/\text{hour}}$ by 1.5 if you bought the gem upgrade.

As you can see, the vial effect is rather insignificant. Characters lvl can't be bought, you just have to wait. So it lets us with $\text{decant}_{\%}$, $\text{RLP2W}_{\%}$ and $\text{stamp}_{\%}$. Whether or not to "waste" water is up to you, but do know that in the long run $\text{decant}_{\%}$ is at the moment the most powerful upgrade.

As for $\text{RLP2W}_{\%}$ and $\text{stamp}_{\%}$, it's up to you to know which one will have the most impact, but here is a graphic showing % gained based on the cost (doesn't take into account material cost):

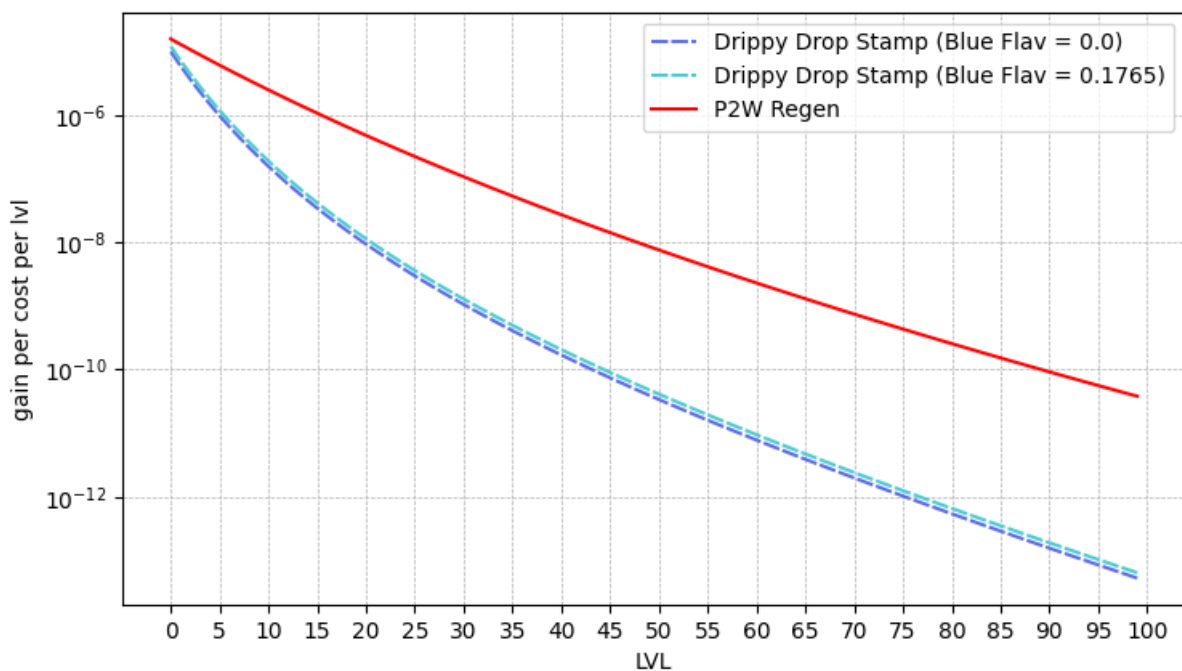


Figure 5.1.1: Gain per cost based comparison of P2W Regen and Drippy Drop

5.1.2 Cauldron

$$\text{newBubbleCost} = 3 + (3n)^{2.2} \times 1.3^n$$

- n is your number of bubbles unlocked.

TODO:

5.2 Bubble

TODO:

5.3 P2W tab

Every p2w related formulas

5.3.1 Cauldron

$$\begin{aligned}\text{regen}_{\%} &= \frac{16 + 0.5 \times (\text{regenLvl} - 1)}{15} \times \text{regenLvl} \times 3 \\ \text{regen}_{\text{Cost}} &= \left\lceil 2500 \left(1.15 - \frac{0.117 \text{regenLvl}}{100 + \text{regenLvl}} \right)^{\text{regenLvl}} \right\rceil \\ \\ \text{newBubble} &= 1 + \frac{\text{newBubbleLvl} \times 2.5}{\text{newBubbleLvl} + 100} \\ \text{newBubble}_{\text{Cost}} &= \left\lceil 3200 \left(1.18 - \frac{0.145}{100 + \text{newBubbleLvl}} \right)^{\text{newBubbleLvl}} \right\rceil \\ \\ \text{boostReqLow}_{\%} &= \frac{70 \times \text{boostLvl}}{100 + \text{boostLvl}} \\ \text{boostReqLow}_{\text{Cost}} &= \left\lceil 3750 \left(1.2 - \frac{0.14 \text{boostLvl}}{100 + \text{boostLvl}} \right)^{\text{boostLvl}} \right\rceil\end{aligned}$$

5.3.2 Vials

$$\begin{aligned}\text{cap} &= \text{capLvl} \\ \text{cap}_{\text{Cost}} &= \left\lceil 10000 \times 2^{\text{capLvl}} \right\rceil \\ \\ \text{rng} &= \frac{250 \times \text{rngLvl}}{100 + \text{rngLvl}} \\ \text{rng}_{\text{Cost}} &= \left\lceil 5000 \times 1.25^{\text{rngLvl}} \right\rceil\end{aligned}$$

BUG NOTE: rng doesn't work at the moment (v1.14).

5.3.3 Player

$$\begin{aligned}\text{AlchSpeed}_{\%} &= \frac{35 \times \text{AlchSpeedLvl}}{100 + \text{AlchSpeedLvl}} \\ \text{AlchSpeed}_{\text{Cost}} &= \left\lceil 4000 \left(1.15 - \frac{0.1 \text{AlchSpeedLvl}}{100 + \text{AlchSpeedLvl}} \right)^{\text{AlchSpeedLvl}} \right\rceil \\ \\ \text{ExtraXP}_{\%} &= \frac{11 + 0.5 \times (\text{ExtraXPLvl} - 1)}{10} \times \text{ExtraXPLvl} \\ \text{ExtraXP}_{\text{Cost}} &= \left\lceil 6000 \left(1.15 - \frac{0.09 \text{AlchSpeedLvl}}{100 + \text{AlchSpeedLvl}} \right)^{\text{AlchSpeedLvl}} \right\rceil\end{aligned}$$

5.3.4 Liquid

$$\text{regen}_{\%} = \frac{400 \times \text{regenLvl}}{100 + \text{regenLvl}}$$
$$\text{regen}_{\text{Cost}} = \left\lceil 2500 \left(1.19 - \frac{0.135 \text{regenLvl}}{100 + \text{regenLvl}} \right)^{\text{regenLvl}} \right\rceil$$

$$\text{cap} = \text{capLvl}$$
$$\text{cap}_{\text{Cost}} = \left\lceil 3500 \left(1.2 - \frac{0.13 \text{capLvl}}{100 + \text{capLvl}} \right)^{\text{capLvl}} \right\rceil$$

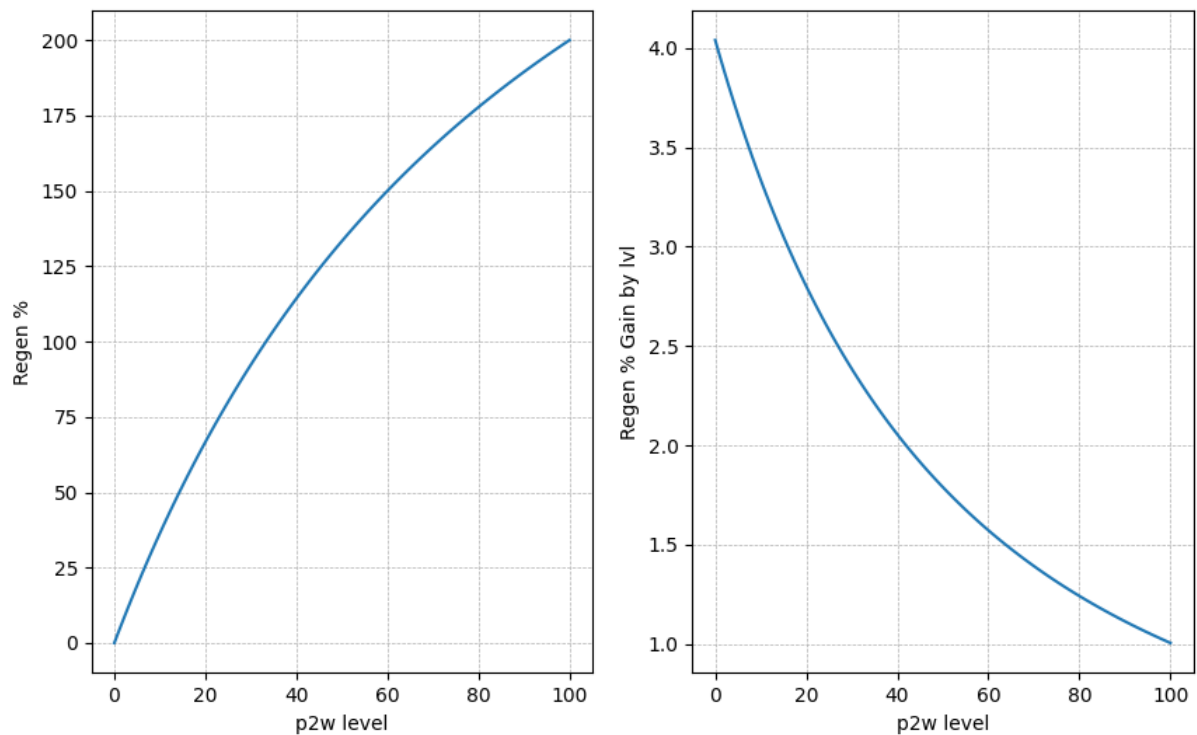


Figure 5.3.1: How much regen you gain with p2w

6 Post Office

6.1 Simple Shippin Orders

TODO:

6.2 Plan-it Express Orders

TODO:

6.3 Dudes Next Door

TODO:

6.4 Shipments

Beware, the prowess effect in each Shipment affect only the concerned skill although it's only written "prowess".

6.4.1 Civil War Memory

$$\begin{aligned}\text{damage}_{\text{base}} &= \text{lvl} \\ \text{fightGain}_{\%} &= 13 \times \frac{\text{lvl} - 25}{\text{lvl} - 25 + 200} \\ \text{crit}_{\%} &= 10 \times \frac{\text{lvl} - 100}{\text{lvl} - 100 + 200}\end{aligned}$$

6.4.2 Locally Sourced Organs

$$\begin{aligned}\text{maxHP} &= 1 + \left\lfloor \frac{\text{lvl}}{2} \right\rfloor \\ \text{maxHP}_{\%} &= 0.1(\text{lvl} - 25) \\ \text{selfHeal}_{\%} &= 25 \times \frac{\text{lvl} - 100}{\text{lvl} - 100 + 200}\end{aligned}$$

6.4.3 Magician Starterpack

$$\begin{aligned}\text{maxMP} &= 1 + \left\lfloor \frac{\text{lvl}}{3} \right\rfloor \\ \text{maxHP}_{\%} &= 0.1(\text{lvl} - 25) \\ \text{fasterCD} &= 17 \times \frac{\text{lvl} - 100}{\text{lvl} - 100 + 200}\end{aligned}$$

6.4.4 Bolvl of Unwanted Stats

$$\begin{aligned}\text{accuracy} &= 0.25\text{lvl} \\ \text{defence} &= 0.3(\text{lvl} - 25) \\ \text{MobExp}_{\%} &= 29 \times \frac{\text{lvl} - 100}{\text{lvl} - 100 + 170}\end{aligned}$$

6.4.5 Dwarven Supplies

$$\begin{aligned}\text{efficiency}_{\text{mining}} &= 50 \times \frac{\text{lvl}}{\text{lvl} + 200} \\ \text{prowess}_{\%} &= 40 \times \frac{\text{lvl} - 25}{\text{lvl} - 25 + 150} \\ \text{AFKGain}_{\text{mining}} &= 15 \times \frac{\text{lvl} - 100}{\text{lvl} - 100 + 175}\end{aligned}$$

6.4.6 Blacksmith Box

$$\begin{aligned}\text{XP}_{\text{smithing}} &= 50 \times \frac{\text{lvl}}{\text{lvl} + 200} \\ \text{prodSpeed}_{\%} &= 75 \times \frac{\text{lvl} - 25}{\text{lvl} - 25 + 200} \\ \text{toCraft}_{\%} &= 30 \times \frac{\text{lvl} - 100}{\text{lvl} - 100 + 150}\end{aligned}$$

6.4.7 Taped Up Timber

$$\begin{aligned}\text{efficiency}_{\text{choppin}} &= 50 \times \frac{\text{lvl}}{\text{lvl} + 200} \\ \text{prowess}_{\%} &= 40 \times \frac{\text{lvl} - 25}{\text{lvl} - 25 + 150} \\ \text{AFKGain}_{\text{choppin}} &= 15 \times \frac{\text{lvl} - 100}{\text{lvl} - 100 + 175}\end{aligned}$$

6.4.8 Carepack From Mum

$$\begin{aligned}\text{notConsume}_{\%} &= 23 \times \frac{\text{lvl}}{\text{lvl} + 200} \\ \text{hFoodEffect}_{\%} &= 30 \times \frac{\text{lvl} - 25}{\text{lvl} - 25 + 150} \\ \text{pFoodEffect}_{\%} &= 30 \times \frac{\text{lvl} - 100}{\text{lvl} - 100 + 175}\end{aligned}$$

6.4.9 Sealed Fishheads

$$\begin{aligned}\text{efficiency}_{\text{fishing}} &= 50 \times \frac{\text{lvl}}{\text{lvl} + 200} \\ \text{prowess}_{\%} &= 40 \times \frac{\text{lvl} - 25}{\text{lvl} - 25 + 150} \\ \text{AFKGain}_{\text{fishing}} &= 15 \times \frac{\text{lvl} - 100}{\text{lvl} - 100 + 175}\end{aligned}$$

6.4.10 Potion Package

$$\begin{aligned}\text{brewSpeed}_{\%} &= 70 \times \frac{\text{lvl}}{\text{lvl} + 200} \\ \text{alchXP}_{\%} &= 60 \times \frac{\text{lvl} - 25}{\text{lvl} - 25 + 150} \\ \text{craniumTime} &= 0.1(\text{lvl} - 100)\end{aligned}$$

6.4.11 Bug Hunting Supplies

$$\begin{aligned}\text{efficiency}_{\text{catching}} &= 50 \times \frac{\text{lvl}}{\text{lvl} + 200} \\ \text{prowess}_{\%} &= 40 \times \frac{\text{lvl} - 25}{\text{lvl} - 25 + 150} \\ \text{AFKGain}_{\text{catching}} &= 15 \times \frac{\text{lvl} - 100}{\text{lvl} - 100 + 175}\end{aligned}$$

6.4.12 Non Predatory Loot Box

$$\begin{aligned}\text{dropRate}_{\%} &= 50 \times \frac{\text{lvl}}{\text{lvl} + 200} \\ \text{Luck} &= 0.25(\text{lvl} - 25) \\ \text{crystalSpawn}_{\%} &= 65 \times \frac{\text{lvl} - 100}{\text{lvl} - 100 + 200}\end{aligned}$$

7 Construction

7.1 Refinery

Note: Power Cap is hardcoded

$$\begin{aligned}\text{powerPerCycle} &= \lfloor \text{rank}^{1.3} \rfloor \\ \text{CostsMulti} &= \text{baseMat} \times \lfloor \text{rank}^{1.5} \rfloor\end{aligned}$$

Same but per hour:

$$\begin{aligned}\text{powerPerCycle}_{\text{hour}} &= \frac{1}{\text{baseTime} \times (1 - \text{cycleTimeReduction})} \times \lfloor \text{rank}^{1.3} \rfloor \\ \text{CostsMulti}_{\text{hour}} &= \text{baseMat} \times \frac{1}{\text{baseTime} \times (1 - \text{cycleTimeReduction})} \times \lfloor \text{rank}^{1.5} \rfloor\end{aligned}$$

- `baseMat` : base cost for material (same for salt if you're wondering);
- `baseTime` : Base time - 0.25 for first tab, 1 for second.
- `cycleTimeReduction` : $\frac{\text{SpdBonus}}{100}$
- `SpdBonus` : bonuses affecting cycle speed (salt lick upgrade or vial).

Calculations you may want to do:

$$\begin{aligned}\text{nbCyclesToRankUp} &= \frac{\text{powerCap}}{\lfloor \text{rank}^{1.3} \rfloor} \\ \text{timeToRankUp} &= \text{nbCyclesToRankUp} \times \text{baseTime} \times (1 - \text{cycleTimeReduction})\end{aligned}$$

7.2 Cost

TODO: Add cost (build and resources cost) for every building

7.3 Cogs generation

TODO: Add Xores' explanation about cogs

7.4 Shrine

$$\text{timeToLvlUp} = \lfloor 20(\text{lvl} - 1) + 6\text{lvl} \times 1.63^{\text{lvl}-1} \rfloor$$

TODO: bonus per lvl

7.5 Buildings

7.5.1 Salt lick upgrade

Upgrade	Base cost	x
1	5	1.5
2	100	1.8
3	5	2.2
4	250	1.3
5	5	2.2
6	100	1.2
7	5	2
8	100	1.3
9	5	2.2
10	250	1.1

$$\text{upgrade}_{\text{SaltPrice}} = \left\lfloor x^{\text{lvl}} * \text{baseCost} \right\rfloor$$

8 Worship

TODO:

- tower cost scalability
- points per mob per wave
- hp scalability if there is any
- soul and xp gained

9 Other

9.1 Teleportation Cap

$$TP_{cap} = 21(1 + n)$$

Where n is the number of time you bought Daily Teleports.

9.2 Statues

$$\begin{aligned} \text{Cost} &= \left\lfloor \text{lvl}^{1.17} \times 1.35^{\frac{\text{lvl}}{10}} + 1 \right\rfloor \\ \text{Bonus} &= \lfloor \text{Base} \times \text{lvl} \rfloor \end{aligned}$$

9.3 Stamps

$$\text{baseCost}_{\text{Coin}} = \text{Price}_{\text{base}} \times \left(1 - \frac{\text{bribe}}{100}\right)$$

BUG NOTE: As of v1.14, the bribe effect is 8%, not 5%.

$$\begin{aligned} \text{Cost}_{\text{Coin}} &= \left(1 - \frac{\text{vial}_{\%}}{100}\right) \times \left\lfloor \text{baseCost}_{\text{Coin}} \times \left(i_{10} - \left(\frac{\text{lvl}}{\text{lvl} + 5 * \text{lvlRange}} \times 0.25\right)\right)^{\text{lvl} \times \frac{10}{\text{lvlRange}}} \right\rfloor \\ \text{Cost}_{\text{Material}} &= \left\lfloor \text{baseCost}_{\text{Material}} \times i_8 \left\lfloor \frac{\text{lvl}}{\text{lvlRange} - 1} \right\rfloor^{0.8} \right\rfloor \times \max \left\{ 0.1, 1 - \frac{\text{vial}_{\%}}{100} \right\} \end{aligned}$$

- $\text{vial}_{\%}$ is the Blue Flav vial effect.
- lvlRange is the number of time you can lvl up a stamp before having to pay using materials.
- i_8 and i_{10} are value you can find in the code or in the wiki, look for data-i in the .stampdiv of the stamp you want to know about.

TODO: Skill Stamp cap formula

9.4 Forge

TODO: point cost, xp/speed/capa gained per point used

References

- [1] LavaFlame2. [Legends of Idleon](#).
- [2] [Idleon Wiki](#).
- [3] Jeremy Criquet. [Idleon Calculator](#).
- [4] Zaghrenaut#9386. [Idleon Post Office Calculator](#).
- [5] LiuLangZhe#9086. [Cumulative Cost Calculator](#).