

## Definitions:

- Static Substats: These are pre-allocated rolls into all sub-stats that include those that are not desirable, because it's nearly impossible to have perfect distributions.
- Adjustable Substats: These are the substats that are optimally distributed. We set constraints on the number of sub-stats that can be allocated to each stat.

## Artifacts:

- Artifact sets and their stat assumptions have to be stated:
  - Main stats and [energy requirements](#) must be stated.
    - 3 clear particles across 90 seconds.
  - Artifacts with stacks are expected to be calculated dynamically but can be calculated statically **if stated**.
  - Artifacts must be at max level.

## Team Calculation Assumptions:

- 20 static substats should be distributed as 2 rolls of every substat for each character.
- X amount of adjustable substats should be distributed each character.
  - There's a limit on 10 substats distributed into any single substat (excluding the static substats).
  - Each main stat artifact reduces 2 adjustable substats from the limited amount above.
  - *Ex. 20 Adjustable Substats with Triple EM can distribute it as: 4 Elemental Mastery substats with 10 Energy Recharge substats and 6 substats with ATK%.*

- o Ex. 20 Adjustable Substats with a CRIT Rate Circlet can distribute them as: 10 CRIT Damage substats and 8 CRIT Rate substats

20 Adjustable Substats	Max Adjustable CRIT Rate	Max Adjustable CRIT Damage
CRIT Rate Circlet	8	10
CRIT Damage Circlet	10	8

- Adjustable substats should be adjusted in increments of 5 (for simplicity's sake, but this is flexible).
- Allocate 20 adjustable sub-stats optimally.
- KQM uses the average of low and high rolls for substats:

HP%	4.96%
HP	253.94
ATK%	4.96%
ATK	16.54
DEF%	6.20%
DEF	19.68
EM	19.82
ER%	5.51%
CRIT Rate	3.31%
CRIT Damage	6.62%

Note that 4\* artifacts have a 0.8x base roll multiplier.

## Sample Adjustable Substat Distribution: (20 substats)

Base Subs	x2	Dist Subs	Sub Count	Final Stat From Subs
Hp%	4.96%	9.9%	2	9.9%
Hp	253.94	507.88	2	507.88
Atk%	4.96%	9.92%	2	19.8%
Atk	16.54	33.08	2	33.08
Def%	6.20%	12.40%	2	12.4%
Def	19.68	39.36	2	39.36
Em	19.82	39.64	2	39.64
Er%	5.51%	11.02%	2	11.0%
CR%	3.31%	6.62%	8	33.1%
CD%	6.62%	13.24%	10	79.4%

### Weapons:

- Weapons are assumed to be Lv. 90.
- Weapon and refinement must be specified.
- Passive uptime assumptions must be specified.

### Constellations:

- Constellations must be specified.

*This is subject to change as we evaluate whether or not some characters should always be calculated with certain constellations.*

### Character and Talent Levels:

- Characters should be Lv. 90.
- Talents should be at base Lv. 9.

## **Rotations and Enemy Assumptions:**

- Damage is calculated against Lv. 100 Enemies with 10% universal RES.
- All rotations and assumptions should be specified and listed:
  - Rotation length
  - Reaction uptime
  - Passive uptime
  - Buff durations
  - AoE modifications
- Include single target calculations as well as any AoE modifications.

***Deviations from these assumptions must always be stated.***