

## 課題 1 ▽ 設問 2

『ゼルダの伝説』シリーズにおける、いずれかのソフトに登場するボスとの戦闘について、逆仕様書を作成してください。

# Zelda Boss Battle

## REVERSE DESIGN ASSIGNMENT

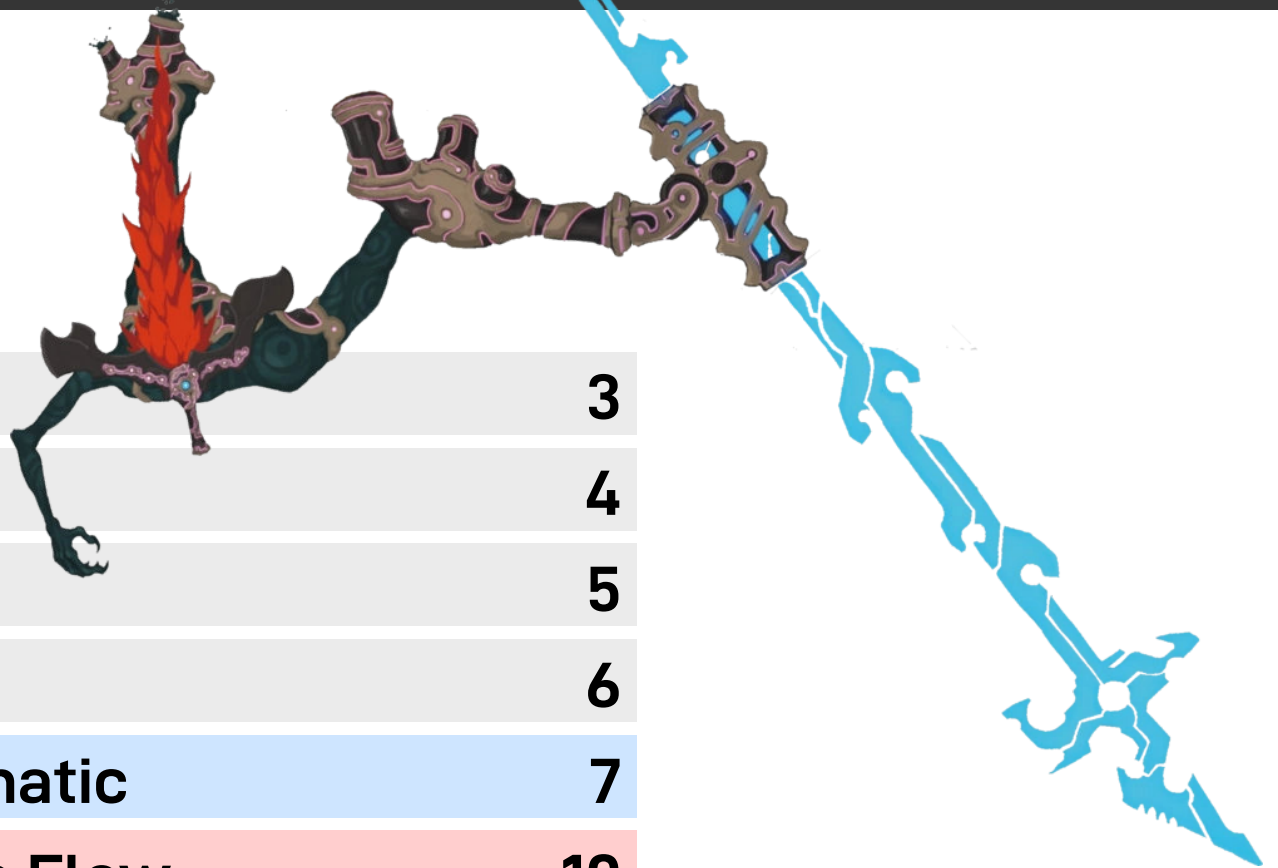
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# Overview

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## Boss Name

Waterblight Ganon

## Game

The Legend of Zelda: Breath of the Wild

## Location

Main Control Room, Divine Beast Vah Ruta, Zora Domain

## Rewards

- Heart Container
- Mipha's Grace

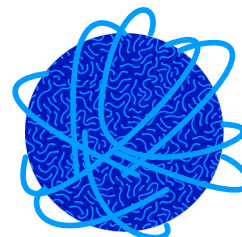
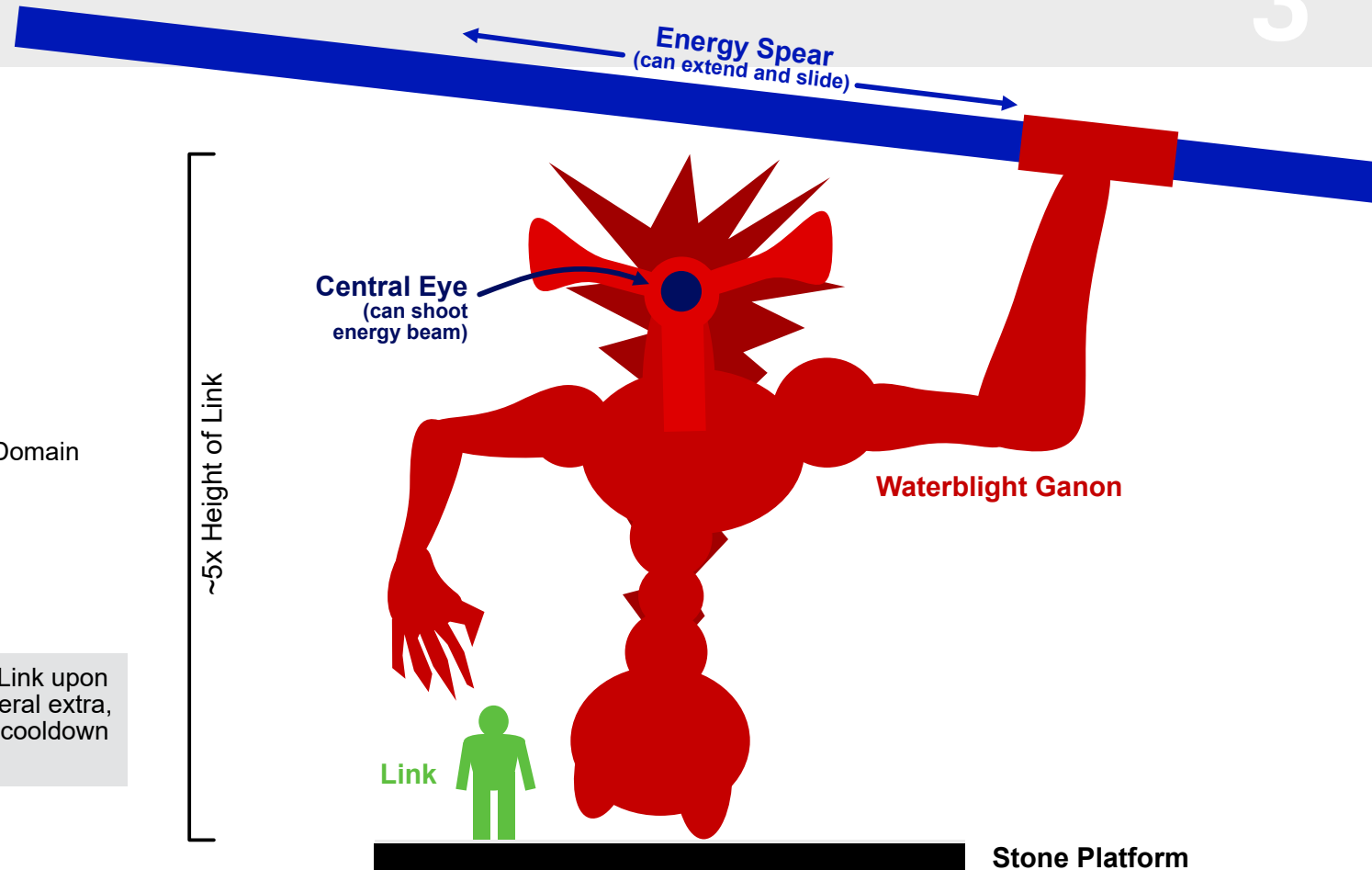
Mipha's Grace is a passive ability that resurrects Link upon death, restores Link's hearts, and grants Link several extra, temporary hearts. After being activated there is a cooldown period before Mipha's Grace can be used again.

## Weakness

- Vulnerable to all attacks.
- Extra sensitive to attacks to their eye.
- Electricity attacks.

## Abilities

- Melee: Blue energy spear attacks.
- Laser: A blue energy beam shoots from its eye.
- Ice Cubes: Generates and throws giant ice cubes.



Energy Ball Transformation

## Visual Description

Waterblight Ganon is a giant magical creature made of machine parts and dark pink corrupted energy. Its height is about 5 times that of Link. It has a long snout, one eye, and two horns on its head. Dark red hair runs down its head and back. It has a long skinny waist and wide hips. Because it has no proper legs, it moves around by transforming into a blue ball of energy that can float to a new location. One of its arms is bigger than the other, and it holds a blue energy spear in that hand.

# Setting

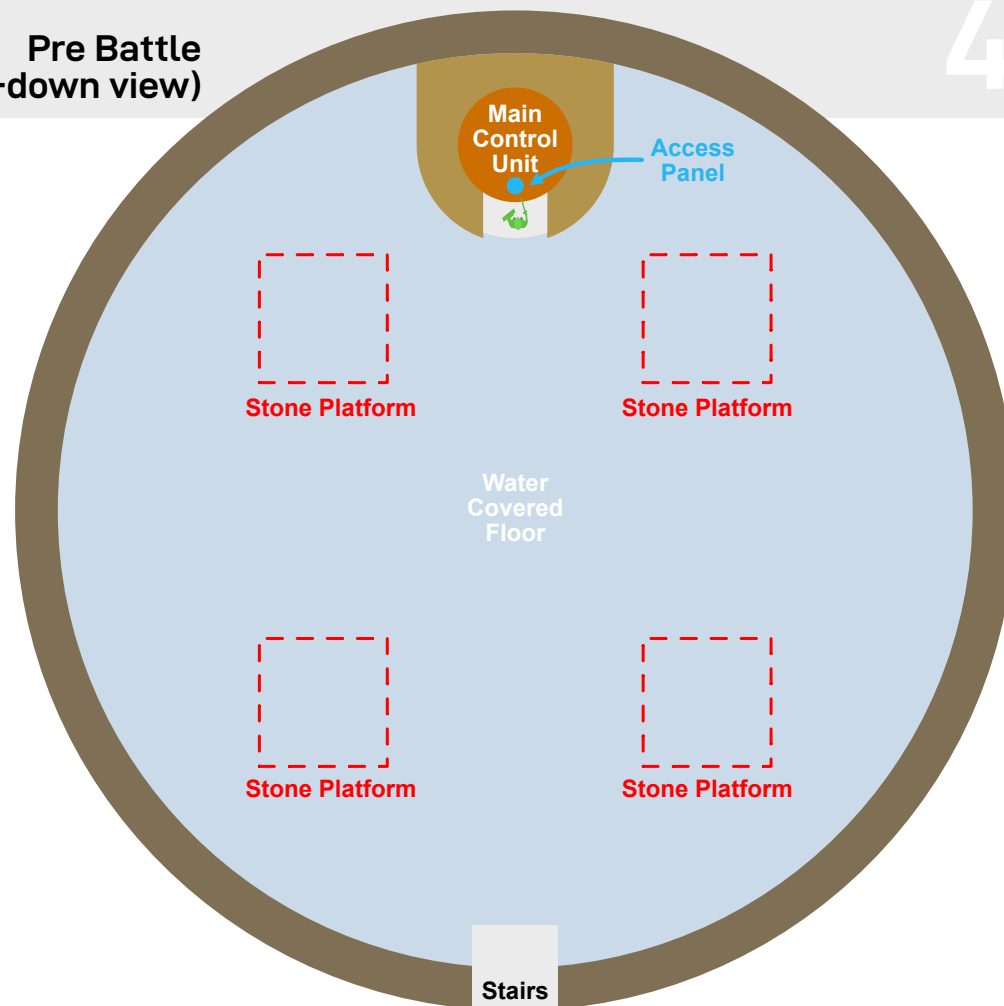
4

## Pre Battle (top-down view)

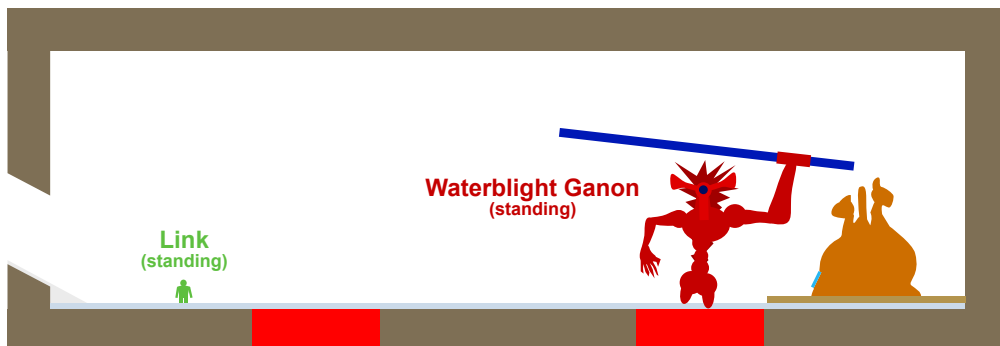
This boss battle takes place inside the Main Control Room of the Divine Beast Vah Ruta. After solving all of the puzzles of the Divine Beast Vah Ruta, the formerly locked door to the Main Control Room is opened.

- The Main Control Room is a round room with tall ceilings.
- There is a staircase leading down into the room.
- The floor is covered in a 50 cm layer of water but Link can still walk through it.\*
- Glowing red outlines indicate four platforms hidden below the water.
- An island in the center-back of the room houses the Main Control Unit. It looks similar to a shrine, glowing in orange, and with a Shika Slate Access Panel in the front.

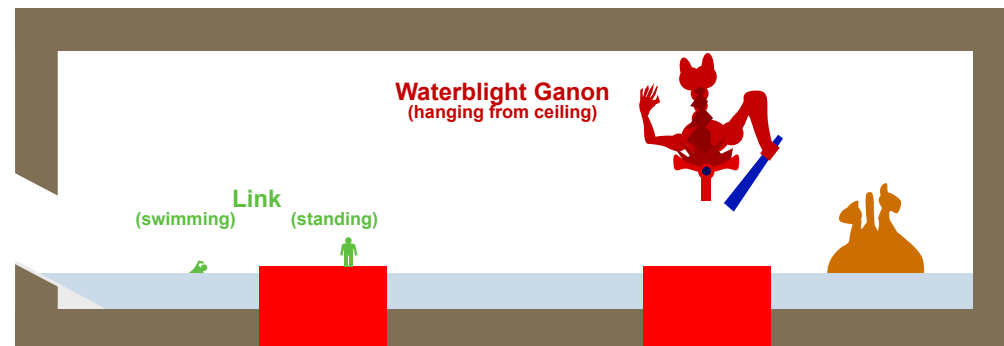
During Phase 2, the water level rises. Now the water is too deep to walk through and Link will have to swim through the water. The four platforms also rise and are now slightly above water level.



## Phase 1 (side view)



## Phase 2 (side view)



# Variables

These are some of the variables that I expect to be able to adjust during tuning of the boss battle.

## Script Variables

Variables controlled by numerical values in script or spreadsheet files:

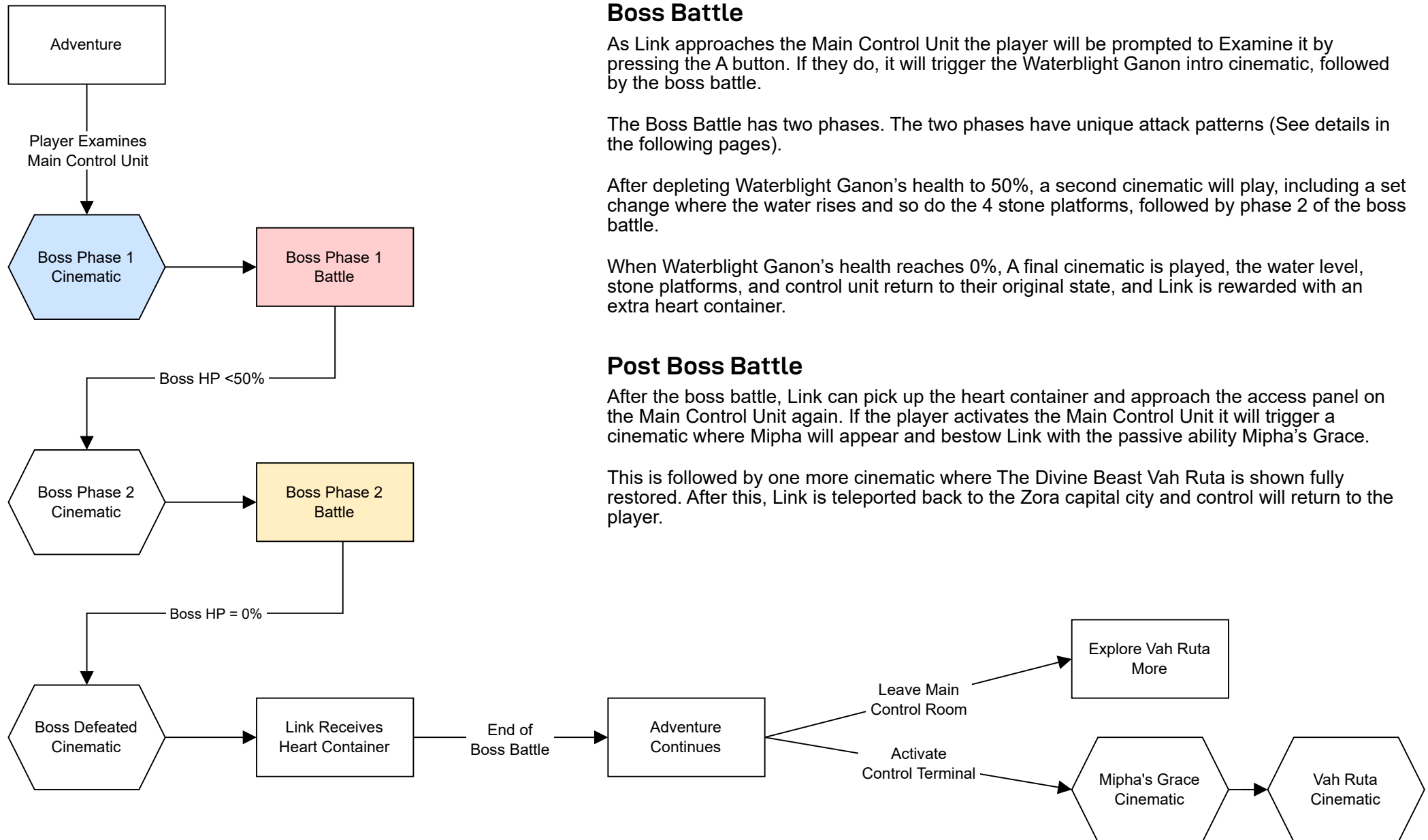
- BaseHP = 800 (example value)
- TotalHP = BaseHP + (# of previous Blight \* BaseHP/2)
- CurrentHP = TotalHP - Damage from Link's Attacks
- IdleTimeMax (Time until next attack attempt)
- IdleTimeCurrent (Time since last attack attempt or damage received)
- StunTime (Time to stay stunned)
- StunnedTime (Time since stun began)
- PlayerDistance (Distance between Boss and Link)
- PlayerDistanceClose (Distance that will trigger close range attacks)
- PlayerDistanceFar (Distance that triggers long range attacks)
- AttackPowerSpearForwardThrust (Damage that the thrust attack will do)
- AttackPowerSpearGroundPound (Damage that the AoE attack will do)
- AttackPowerSpearHorizontalSlash (Damage that the horizontal slash attack will do)
- AttackPowerSpearThrow (Damage that the ranged spear attack will do)
- AttackTimingMelee (Ideal time between melee attacks)
- AttackPowerIceCube (Damage that each ice cube will do)
- AttackTimingIceCube (Time between launching of each ice cube)
- AttackSpeedIceCube (Velocity that ice cubes move towards Link)
- AttackTrackingSpeedIceCube (How quickly ice can change direction)

## Art Variables

Variables controlled by adjusting art assets using visual tools:

- Room Size
- Platform Size
- Spear Visual Length
- Attack Anticipation Time (determined by animation files)
- AoE Attack Collision Size
- AoE Attack Collision Active Frames
- Thrust Attack Collision Size
- Thrust Attack Collision Active Frames
- Horizontal Attack Collision Size
- Horizontal Attack Collision Active Frames
- Ice Cube Collision Size

# Overall Flow



## Boss Battle

As Link approaches the Main Control Unit the player will be prompted to Examine it by pressing the A button. If they do, it will trigger the Waterblight Ganon intro cinematic, followed by the boss battle.

The Boss Battle has two phases. The two phases have unique attack patterns (See details in the following pages).

After depleting Waterblight Ganon's health to 50%, a second cinematic will play, including a set change where the water rises and so do the 4 stone platforms, followed by phase 2 of the boss battle.

When Waterblight Ganon's health reaches 0%, A final cinematic is played, the water level, stone platforms, and control unit return to their original state, and Link is rewarded with an extra heart container.

## Post Boss Battle

After the boss battle, Link can pick up the heart container and approach the access panel on the Main Control Unit again. If the player activates the Main Control Unit it will trigger a cinematic where Mipha will appear and bestow Link with the passive ability Mipha's Grace.

This is followed by one more cinematic where The Divine Beast Vah Ruta is shown fully restored. After this, Link is teleported back to the Zora capital city and control will return to the player.

# Phase 1 Cinematic (PAGE 1/3)

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Link is looking at the Main Control Unit's access panel.



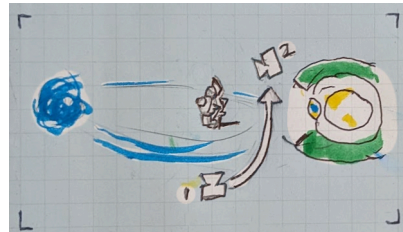
Link pulls out his Shika Slate and places it on the panel.



As soon as the panel is activated there is an explosion of corrupt energy.



Link stumbles back from the Main Control Unit as it becomes enveloped in corrupt energy.



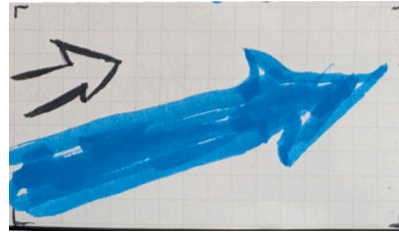
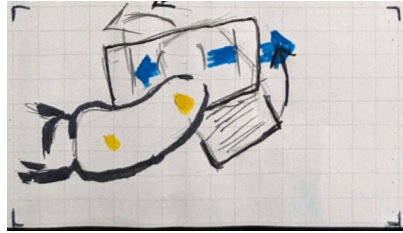
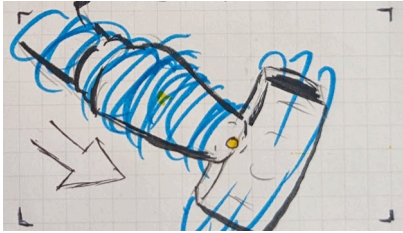
Blue energy shoots past Link from the access panel, towards the entrance behind Link.

The camera orbits 120 degrees to a position behind Link revealing:

The blue energy forming into a ball in front of the entrance.

# Phase 1 Cinematic (PAGE 2/3)

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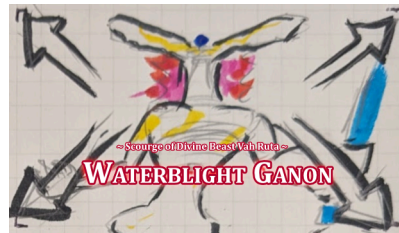
Waterblight Ganon's Left Arm materializes from the blue energy. The camera tracks from the shoulder towards the hand as it materializes.

The rectangular "hand" rotates back with a snap.

A blue energy sword extends from the hand and the camera tracks along with the extension.



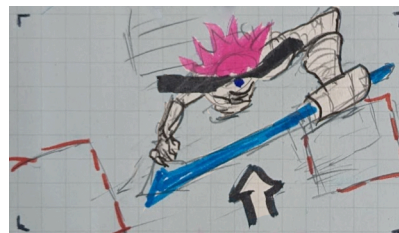
Waterblight Ganon's right shoulder materializes from the blue energy. The camera tracks from the shoulder towards the hand as it materializes.



Waterblight Ganon's Head materializes from blue energy.

Waterblight Ganon's eye emits a circular blast of blue energy.

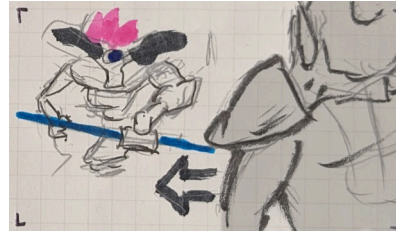
The camera zooms out to reveal the entirety of Waterblight Ganon and a title card.



A panning Overhead Shot reveals Waterblight Ganon from above.

VO: *Please take care.*





A Panning Over the Shoulder shot shows Link and Waterblight Ganon.

VO: *That... thing is one of Ganon's creations.*



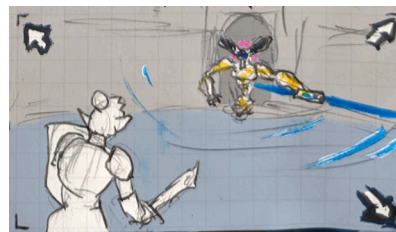
Waterblight Ganon looks menacing.

VO: *I put up as much of a fight as I could, but it proved to be my demise 100 years ago...*



Link looks determined.

VO: *Regardless... I believe that you are well prepared for this moment.*



Waterblight Ganon winds up for a backhanded swing.

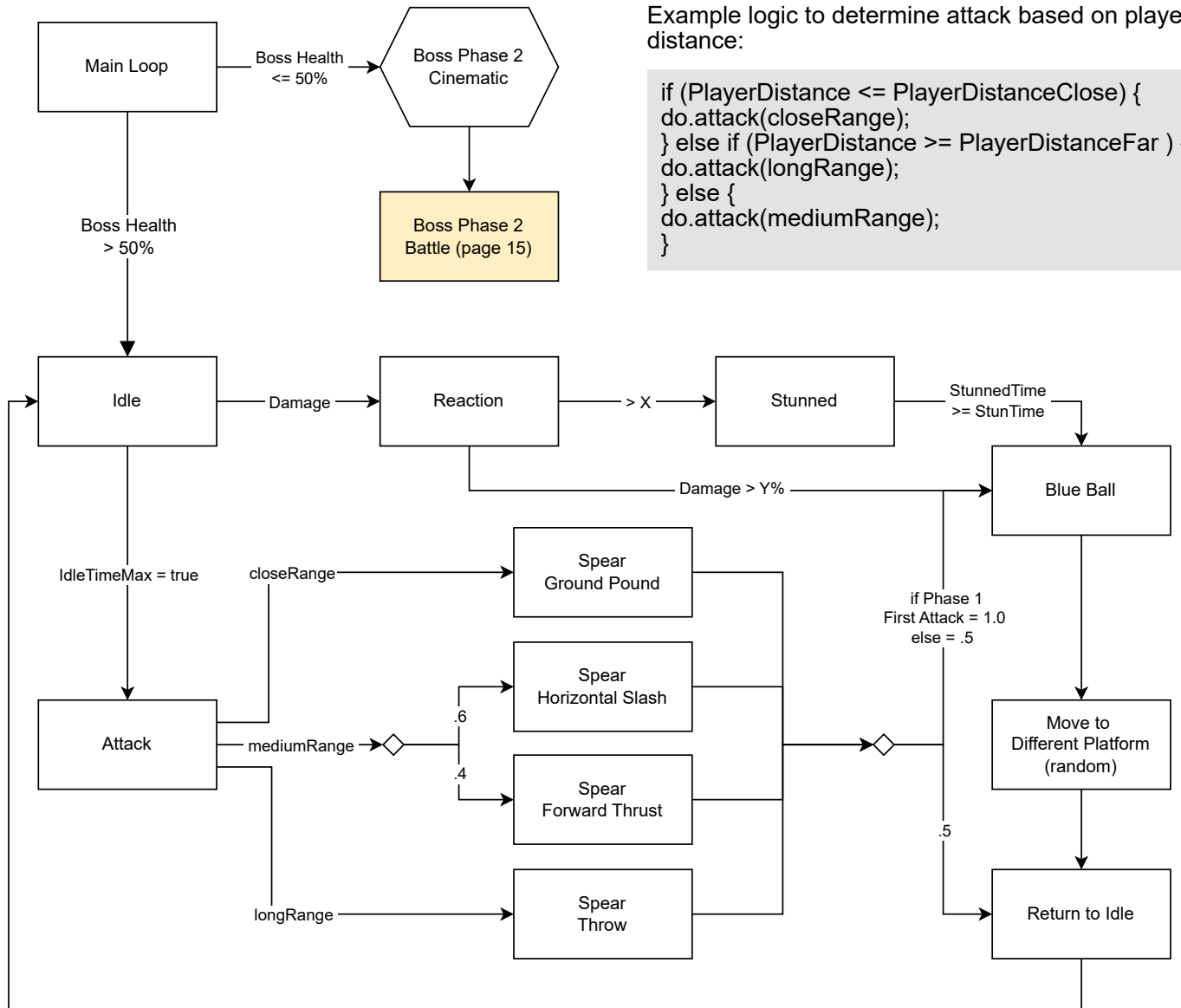
As Waterblight Ganon does a horizontal slash, the camera zooms out to the game view.

# Phase 1 Battle Flow

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Example logic to determine attack based on player distance:

```
if (PlayerDistance <= PlayerDistanceClose) {
  do.attack(closeRange);
} else if (PlayerDistance >= PlayerDistanceFar) {
  do.attack(longRange);
} else {
  do.attack(mediumRange);
}
```



## Description

- Phase 1 starts with Waterblight Ganon blocking the door.
- After their first attack they will transform into a blue ball, move to one of the four stone platforms, and transform back into their physical form.
- If uninterrupted, Waterblight Ganon will choose to do one of the following attacks based on distance:
  - Close: **Spear Ground Pound**
  - Medium: **Spear Horizontal Slash** or **Spear Forward Thrust**, based on a weighted value. I want them to do the Horizontal Slash more frequently.
  - Far: **Spear Throw**
- After attacking, there is a 50% chance that Waterblight Ganon will attack again, and a 50% chance that they will move to another platform via their ball transformation. (Note: actual % subject to change.)
- If the player deals enough damage to Waterblight Ganon's Eye, Waterblight Ganon will become stunned.
- If the player reduces Waterblight Ganon's health by Y%, it will trigger their ball transformation.
- Phase 1 ends once Waterblight Ganon's health has been reduced to 50%.

# Phase 1 Battle Attack 1

11

## Attack Name

Spear Ground Pound

## Distance

Close

## Damage

Light

## Tell

The spear is raised above the head, pointed downward.

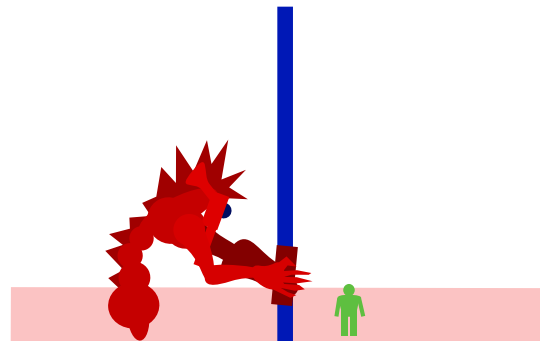
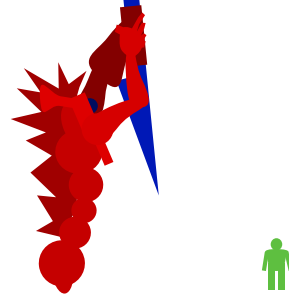
## Attack

The spear is thrust downwards into the ground, creating a shockwave that radiates in all directions.

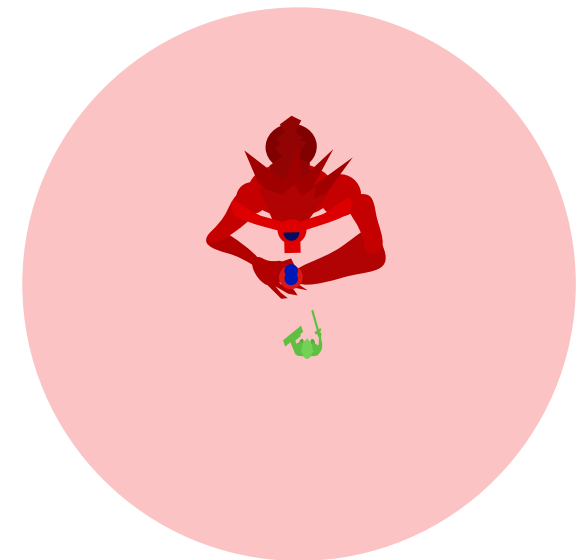
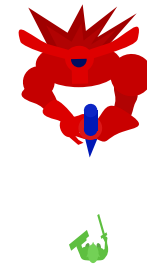
## Weakness

Easily blocked by using a shield.

Side View



Top-down View



# Phase 1 Battle Attack 2

12

## Attack Name

Spear Horizontal Slash

## Distance

Medium

## Damage

Medium

## Tell

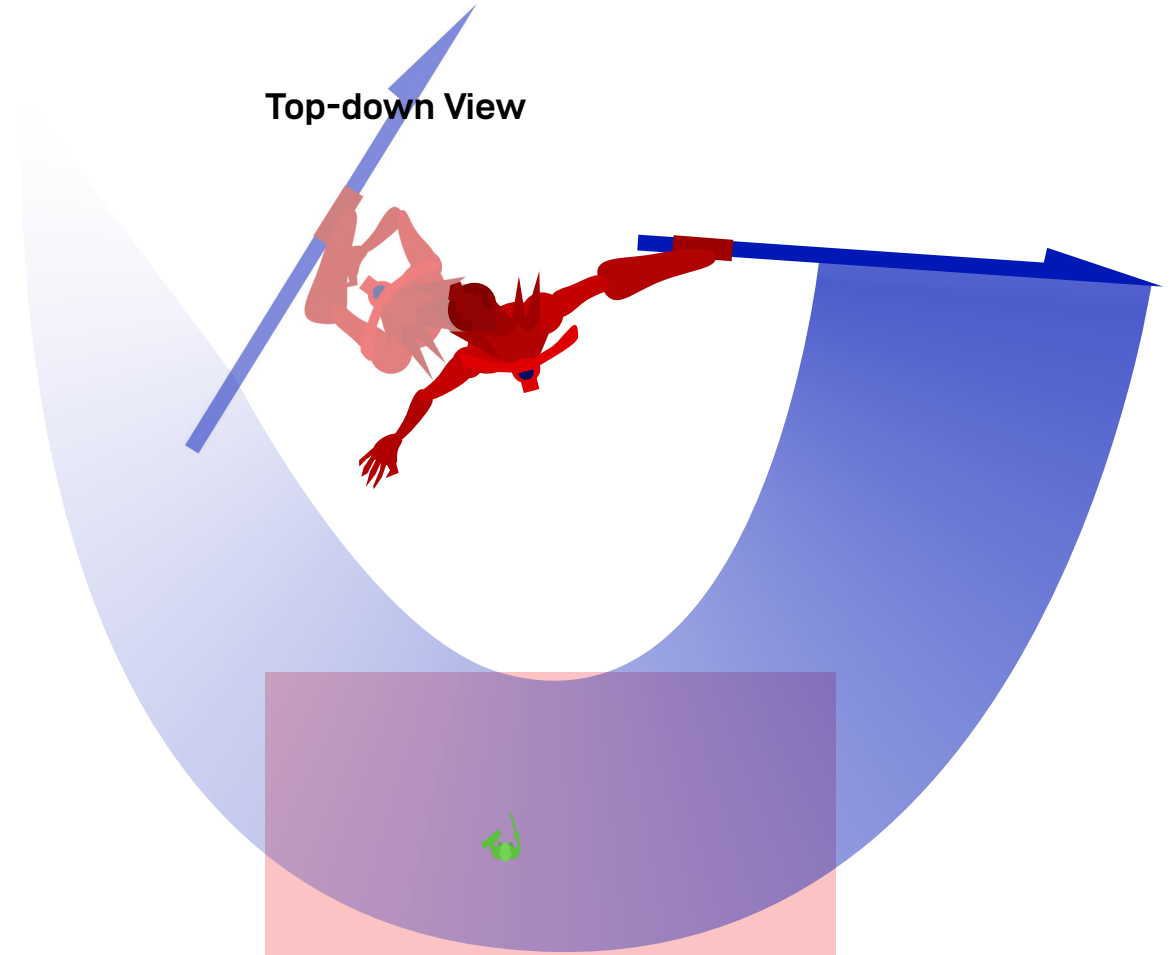
Spear is brought across the body towards the right shoulder.  
Just before the attack, the spear slides into its longest position.

## Attack

The spear is swung to the left horizontally.

## Weakness

Can be jumped over or dodged to rear.



# Phase 1 Battle Attack 3

13

## Attack Name

Spear Forward Thrust

## Distance

Medium

## Damage

Medium

## Tell

Spear is pulled straight back at hip level.

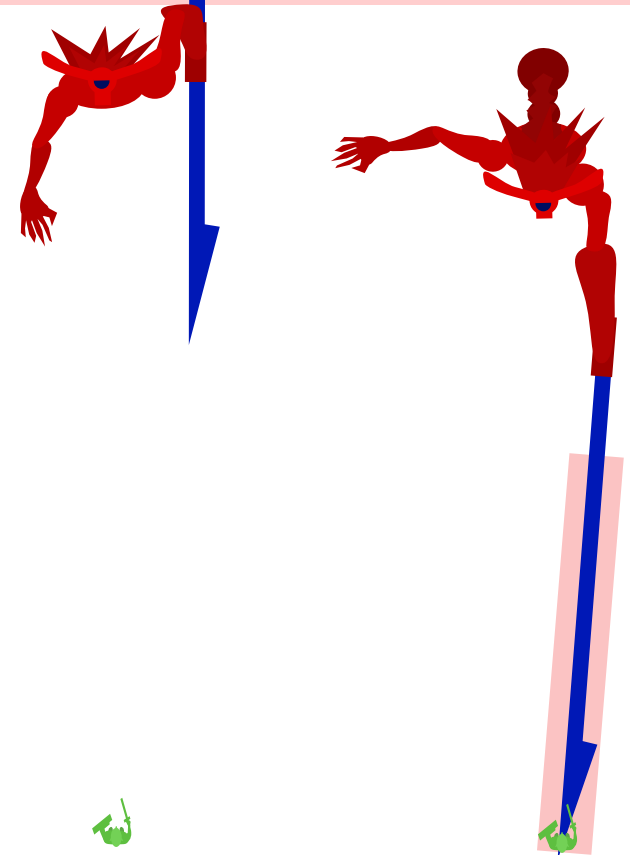
## Attack

Spear is thrust forward towards Link.

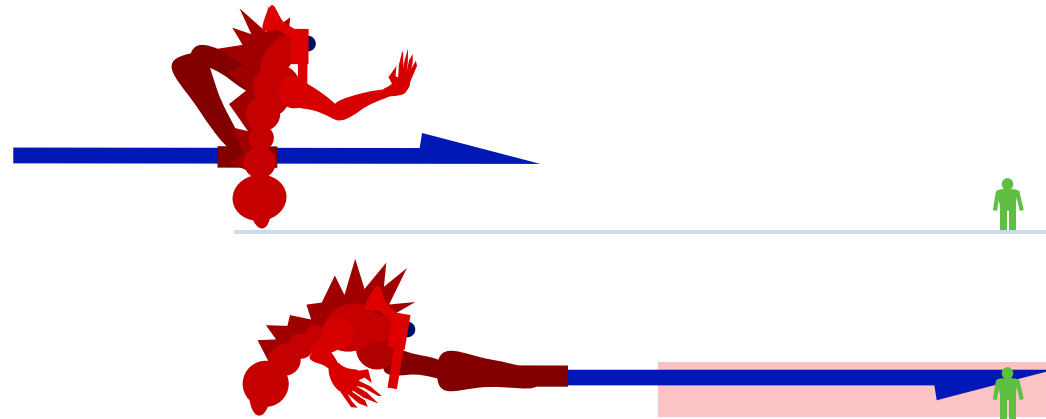
## Weakness

Can be dodged to the side.

Top-down View



Side View



# Phase 1 Battle Attack 4

14

## Attack Name

Spear Throw

## Distance

Long

## Damage

Heavy

## Tell

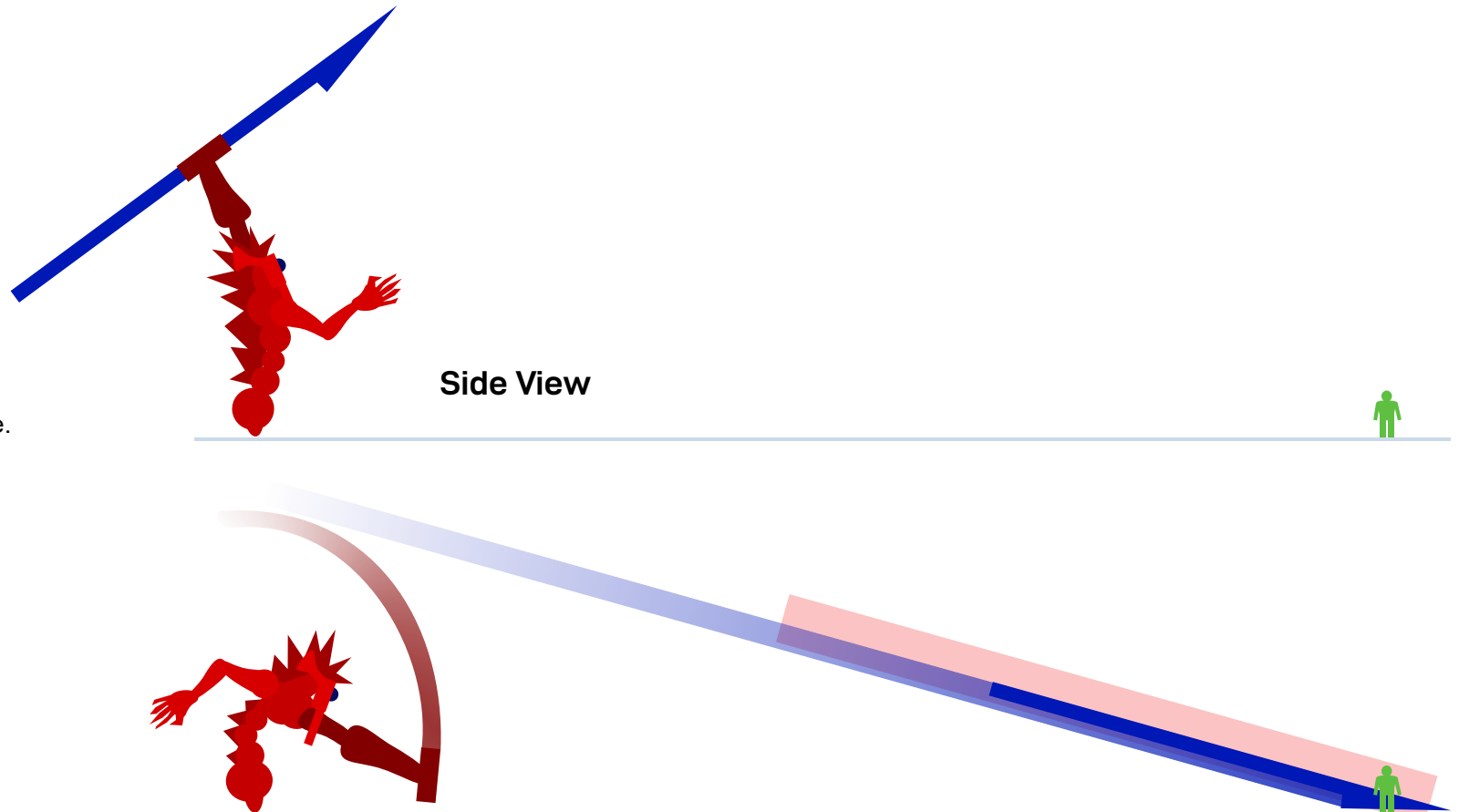
The spear is raised high into the air, pointing upwards.

## Attack

The spear is thrown forward at a slight downward angle.

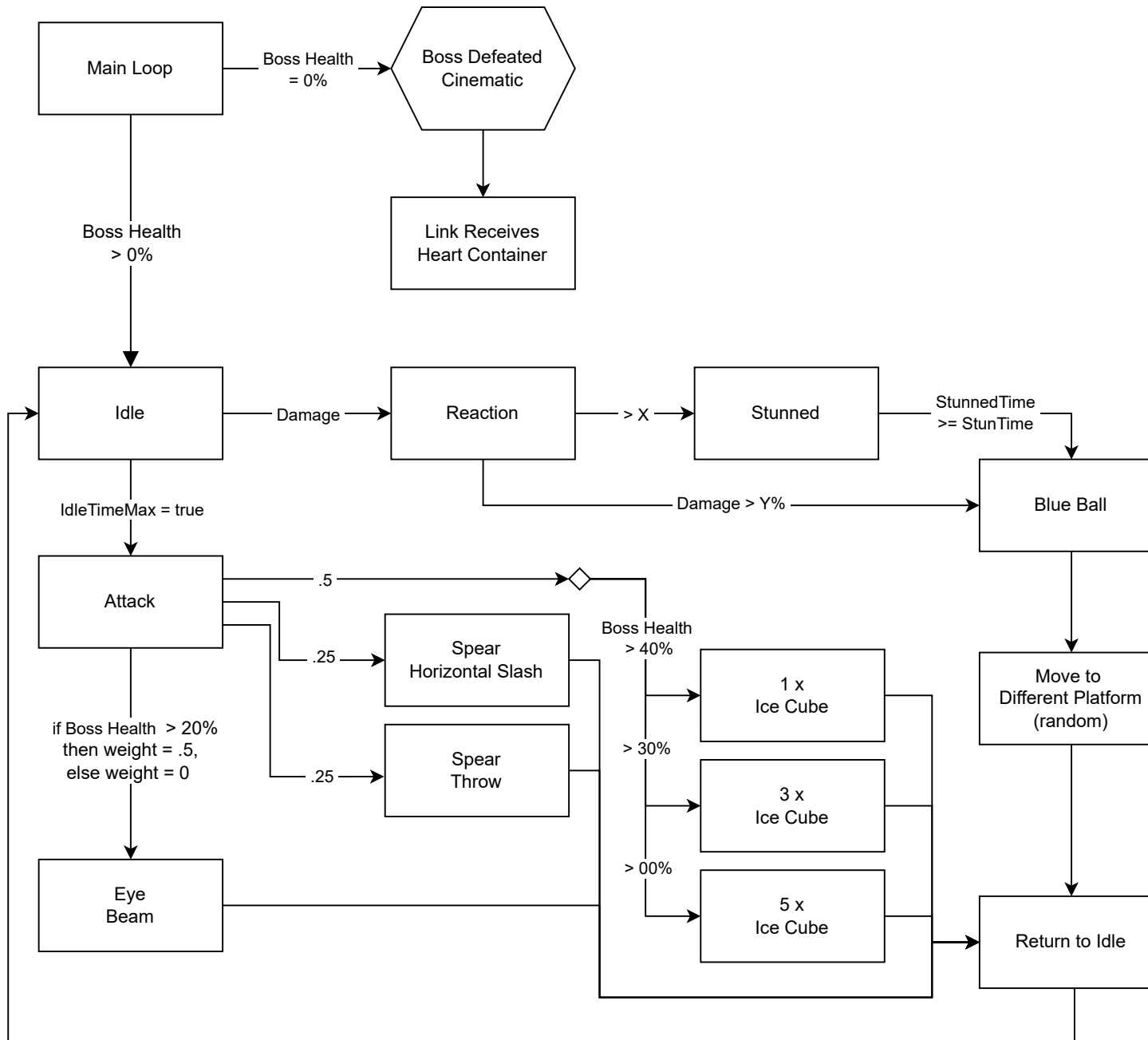
## Weakness

Takes time for the spear to regenerate.



# Phase 2 Battle Flow

15



## Description

- Phase 2 starts with Waterblight Ganon in front of the Shrine.
- Using the power of his right hand, he raises the water level and stone platforms and then he flips upside down to hang from the ceiling.
- Unlike in Phase 1, in Phase 2 he does not do an initial attack. Instead he transforms into a blue ball to reposition himself above one of the four stone platforms.
- Phase 2 has the following attacks:
  - Spear Horizontal Slash v2
  - Spear Throw v2
  - Ice Cube Summons x1
  - Ice Cube Summons x3
  - Ice Cube Summons x5
  - Eye Beam
- In Phase 2 there is a higher chance that Waterblight Ganon will do several attacks in a row, from the same position, before moving to a new position.
- There is about an equal chance that he will do either a Spear attack, an Ice Cube attack, or an Eye Beam attack with caveats.
  - Above 20% health, Eye Beam attack is not one of the options.
- Which Ice Cube pattern depends on his health as well:
  - Above 40% health he will send 1 Ice Cube.
  - From 30-40% health he will send 3 Ice Cubes.
  - Below 30% health he will send 5 Ice Cubes.

# Phase 2 Battle Attack 1

16

## Attack Name

Spear Horizontal Slash v2

## Distance

Versatile

## Damage

Medium

## Tell

Spear is brought across the body towards the right shoulder.

Just before the attack, the spear slides into its longest position.

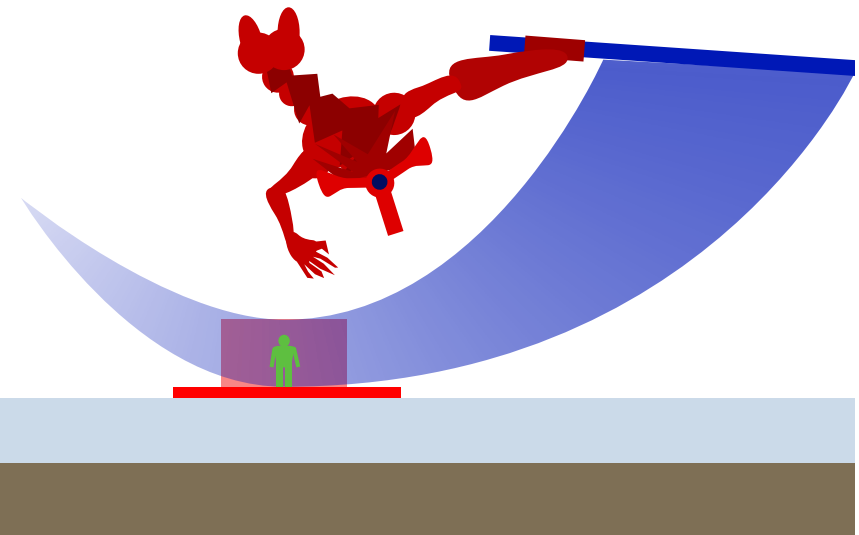
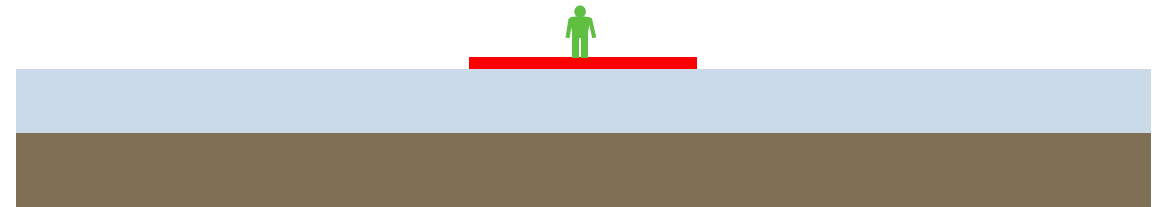
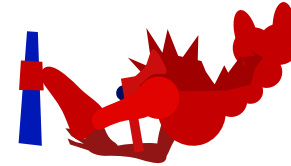
## Attack

The spear is swung in an arch from high right to low center to high left.

## Weakness

Can be dodged to rear.

## Front View





# Phase 2 Battle Attack 2

17

## Attack Name

Spear Throw v2

## Distance

Versatile

## Damage

Heavy

## Tell

The spear is raised high into the air, pointing upwards.

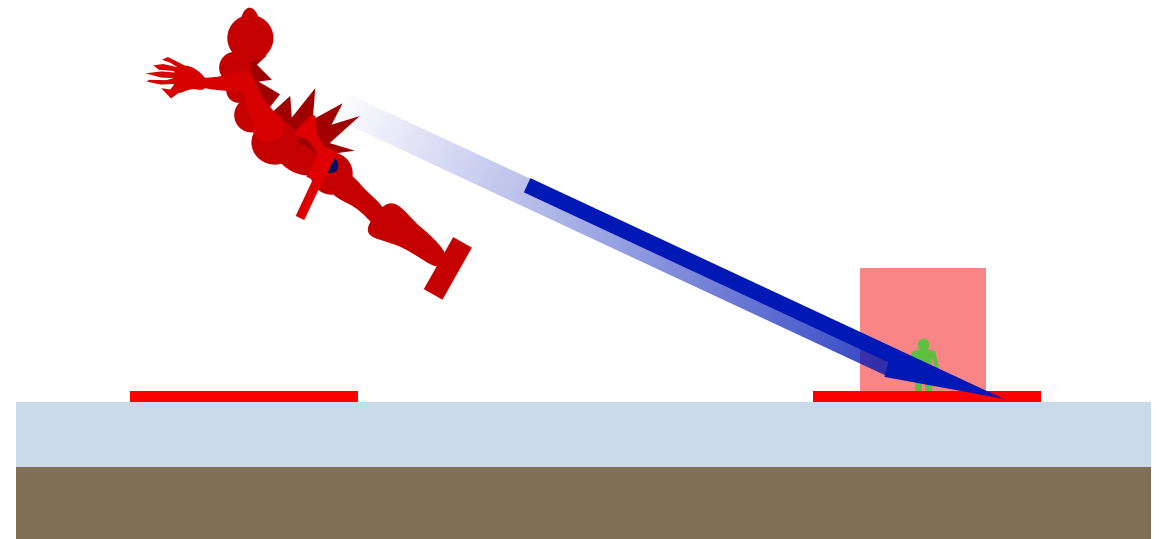
## Attack

The spear is thrown forward at a downward angle.

## Weakness

Takes time for the spear to regenerate.

Side View



# Phase 2 Battle Attack 3

18

## Attack Name

Eye Beam

## Distance

Versatile

## Damage

Extra Heavy

## Tell

A thin red beam shoots from the eye while red circles pulse around the eye.

Just before the attack the eye pulls in blue energy.

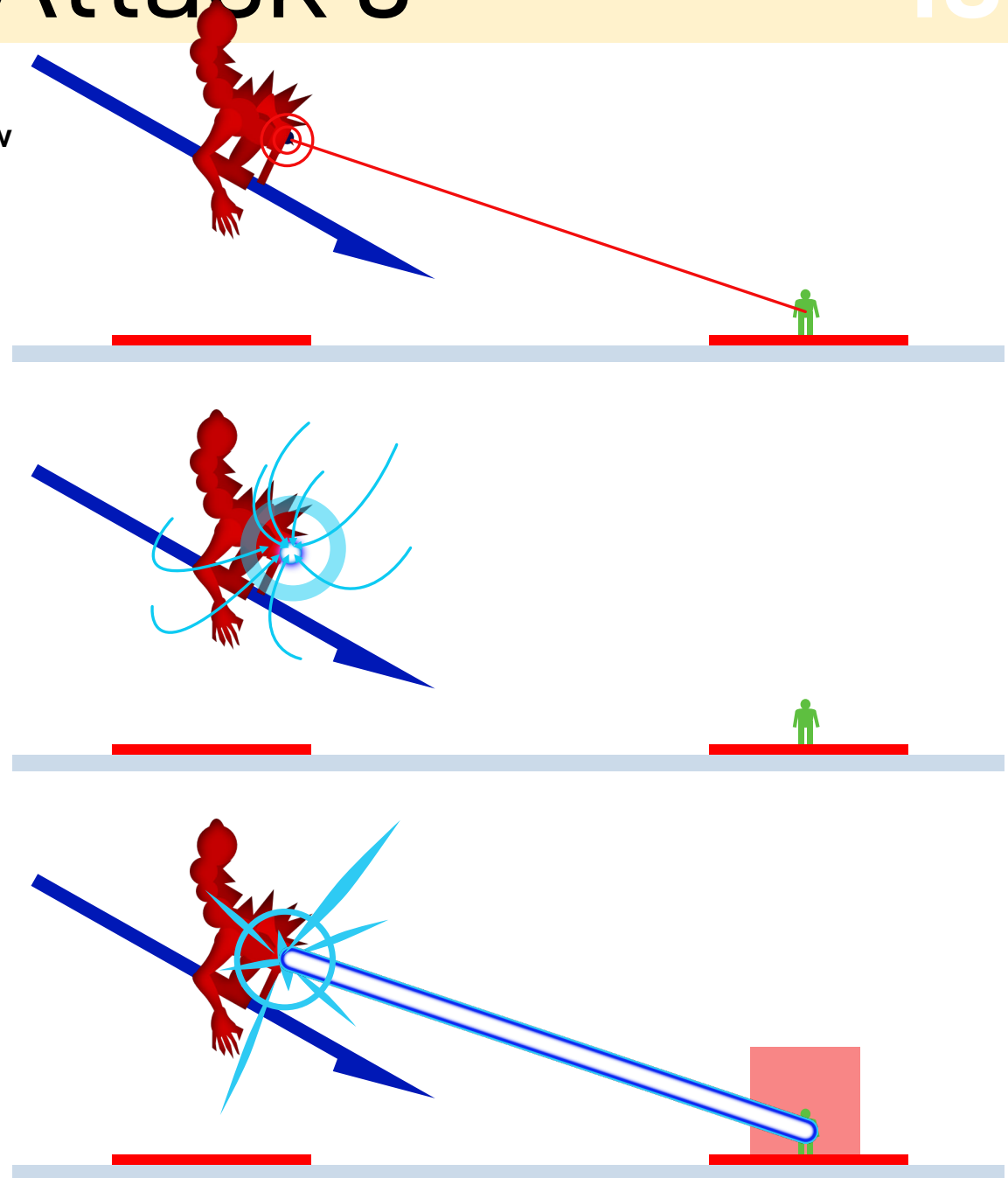
## Attack

A thick blue beam shoots out towards Link.

## Weakness

The blue beam can be reflected back at Waterblight Ganon by using a Perfect Guard.

Side View



# Phase 2 Battle Attack 4

19

## Attack Name

Ice Cube Summons

## Distance

Versatile

## Damage

Medium (per each Ice Cube)

## Tell

Waterblight Ganon's right hand glows with blue energy. As they raise their arm upwards, large ice cubes are formed in the water and also rise. The ice cubes hang mid-air. Before moving forward an ice cube will flash with a white ring of light.

## Attack

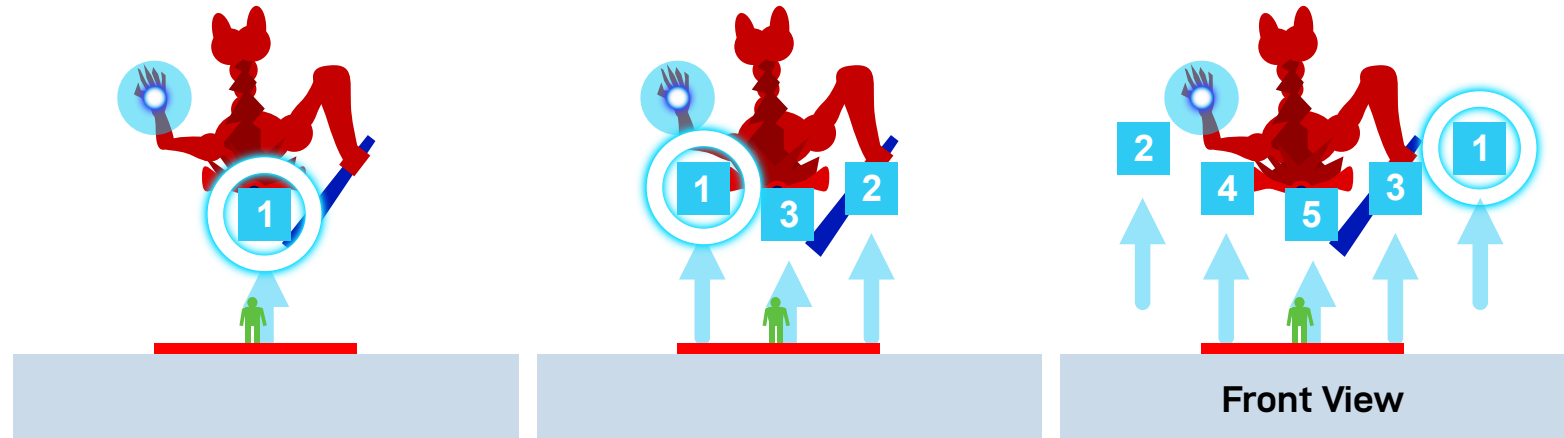
The ice cubes will move toward Link. They have some amount of tracking so if the player only moves a short distance they may still be hit. There are three ice cube patterns that will spawn depending on the boss's remaining health:

- When it is over 40%, he will only summon a single ice cube.
- When it is between 30-40%, he will summon three ice cubes.
- When it is lower than 30%, he will summon five ice cubes.

The ice cubes fly forth one at a time, starting with the outermost ice cubes, alternating between right and left, and working their way inwards.

## Weakness

The ice cubes can be destroyed with the Cryonis ability or any attack, and can be knocked back towards the boss with the Stasis ability.



## Top Down View

