

# UE5 SideScroller Original Design Revised

Designed by William Gauvin

# Feedback & Revisions

I've recreated the entire level from the previous assignment. All encounters have been changed. I have designed the new level with the intent of keeping the focus on the Player being able to choose their path. Multiple branches occur in this level, each branch will lead back to the same choke point to keep the player on the critical path.

Because of my decision to create a brand new level, instead of adjusting encounters, I've used the feedback I received to influence the design of my new level. Here is some of the feedback I drew conclusions from that I put to practice in my revision design.

## Excess of Ammo

"I would add more enemies or less ammo, it seemed like I could kill any obstacle I had which takes away from the difficulty." - Greg Molot

Multiple play testers commented on the excess of ammo. This decreased the difficulty of the level as all encounters with killable enemies could be solved by firing what seemed like an unlimited supply of ammunition.

### **Revision:**

Throughout the entire level, only one ammo pickup (1 pickup = 10 shots) is given to the Player. There is also an encounter with [Bats](#) where the Player has no ammo and must avoid them instead of simply killing them all.

## Parkour Space

"The Bat Tower, spacing was a little tight" - Hugo Lalonde

In my previous level, parkour segments felt cramped and too precise. This didn't pair well with the rigid movement of the playable character.

### **Revision:**

I've included two parkour segments in this new level, each segment begins with generously spaced out obstacles and platforms. As the Player progresses through these parkour areas, spacing becomes tighter and require more precision. However, the parkour in this level never becomes as cramped as the previous level I designed.

## Item Placement

“I'd recommend placing the keys better. One I didn't even notice until I got to the door, and the other was just on the path.” - Hugo Lalonde

All of my player testers experienced difficulty with finding keys used to open locked doors. Placement was poorly chosen and it lead to everyone passing right by them.

### **Revision:**

In this new level, all my keys are placed under a spotlight to pull the Player towards them when they are in view. If a key is not in view of the Player and is required to complete the encounter, lights are placed to pull the Player in that direction until the key **is** in view.

All other pick ups are placed in direct view of the Player or along the critical path that ensure they will be spotted.

# Level Overview

## Assets

### Weapons

- Stunball
- Fireball

### Pickups

- Ammo (x10)
- Shield (Max)
- Key

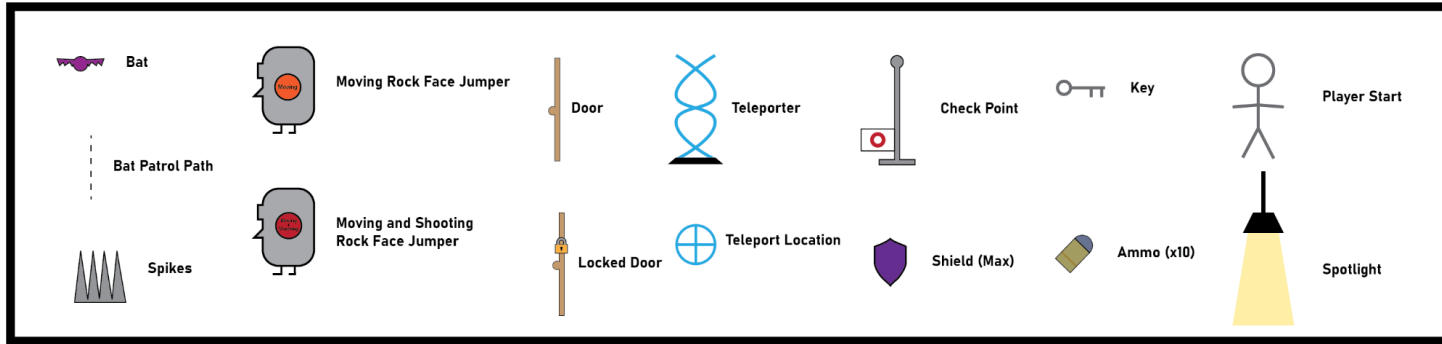
### Interactable Objects

- Door
- Locked Door
- Teleporter
- Check Point

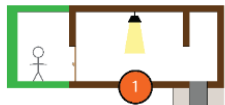
### Enemies & Hazards

- Moving Rock Face Jumper
- Shooting Rock Face Jumper
- Bat
- Spikes

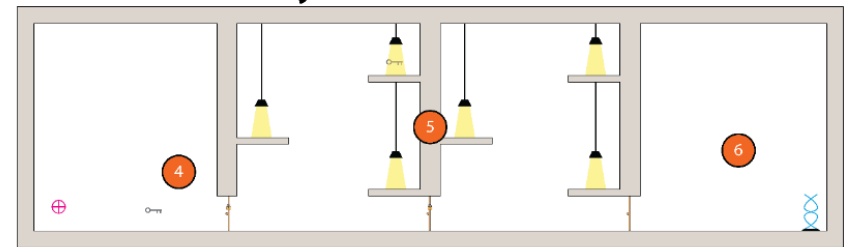
# Map



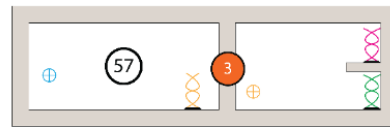
## Starting Area



## Key & Door Puzzle



## Decision Room 1

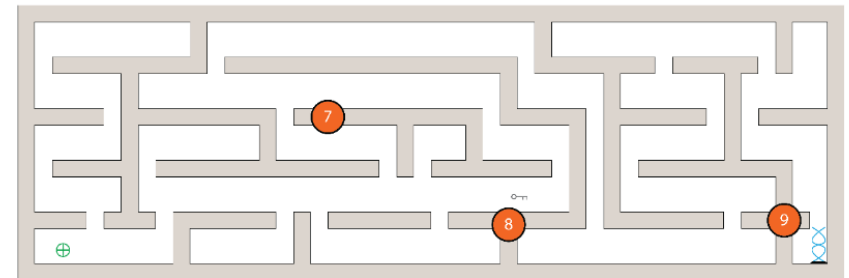


← To Key & Door Puzzle

↑ To Decision Room 2

↑ To Maze

## Maze

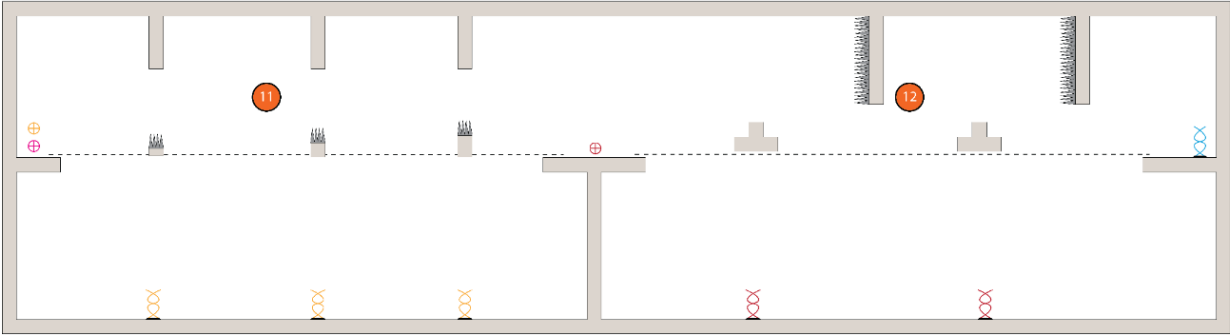


↑ To Decision Room 2



↑ To Decision Room 1

# Parkour Easy



← To Decision Room 3

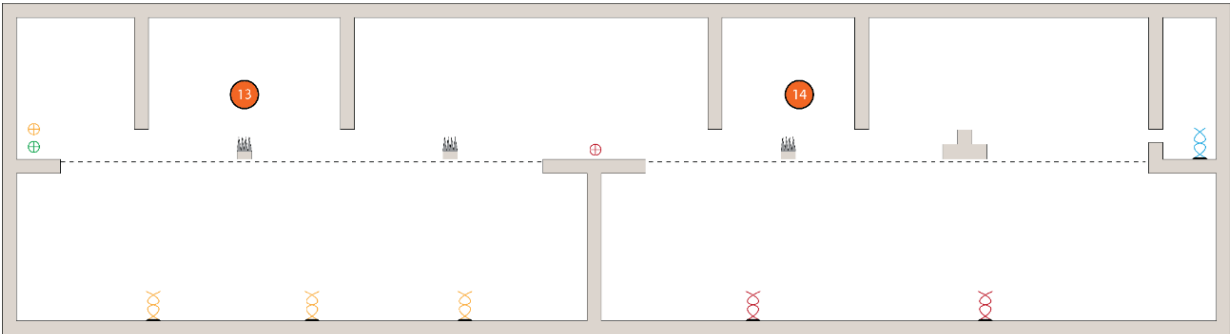
# Decision Room 2



← To Parkour Easy

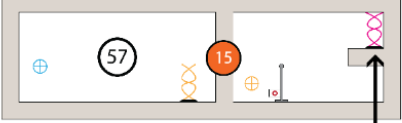
↑ To Parkour Hard

# Parkour Hard



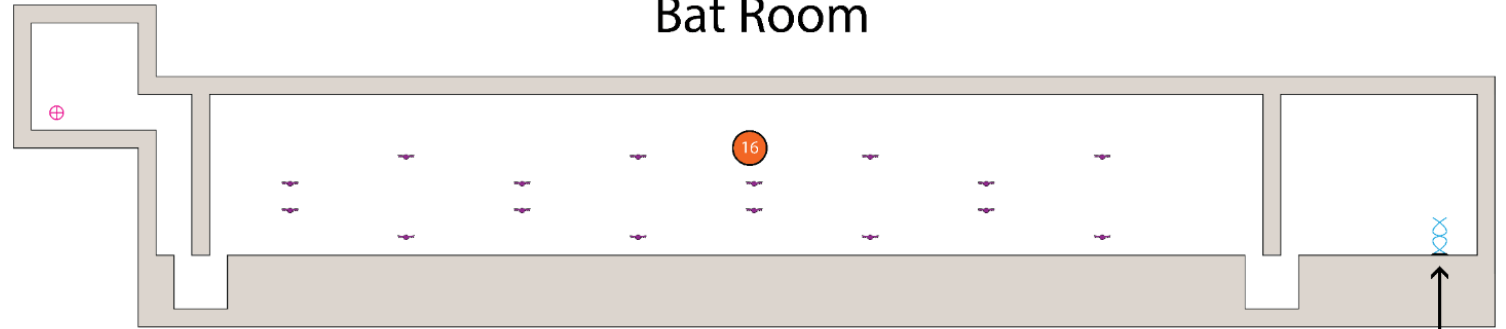
← To Decision Room 3

### Decision Room 3



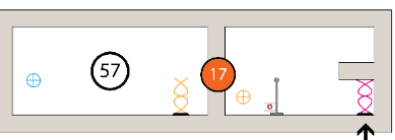
To Bat Room

### Bat Room



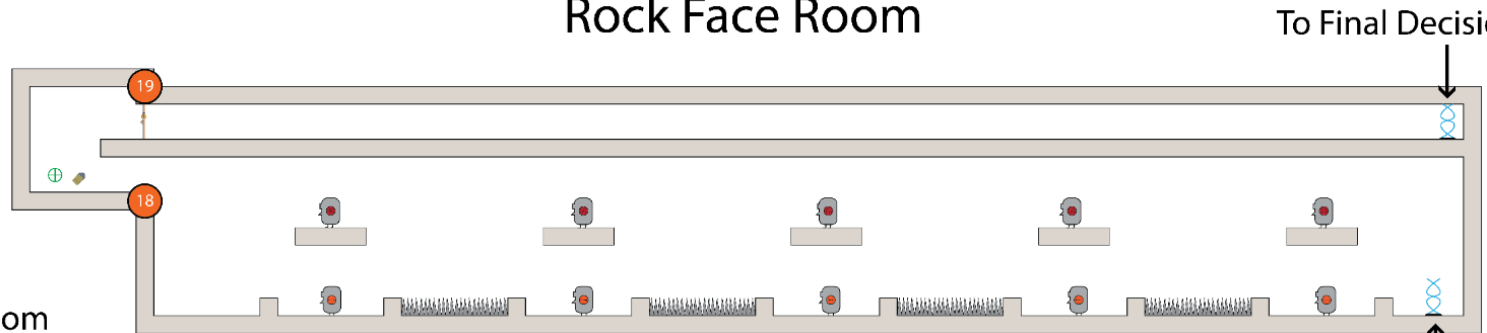
To Decision Room 4

### Decision Room 4



To Rock Face Room

### Rock Face Room

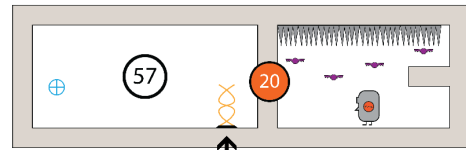


To Final Decision Room

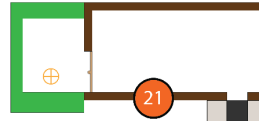
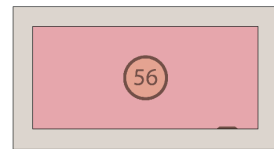
To Final Decision Room

# Final Area

# Final Decision Room



To Final Area





# Level Details

## Pickups

### Shield

- Fully refills the player's shield bar
- Applied once the player collides with the shield pickup

### Ammo

- Adds 10 bullets to the player's ammo count
  - Can't increase the player's ammo count past 25 bullets
- Applied once the player collides with the ammo pickup

### Key

- Used to open [Locked Doors](#)
  - Has a one-time use before breaking.
- Keys are universal to all locked doors

## Interactable Objects

### Ladders

- Allow the player to climb to reach higher platforms
- The player can perform a jump while climbing the ladder

### Teleporter

- Teleports the player to a location
  - The Teleport Location icon matches the color of the teleporter it is attached to.

### CheckPoint

- The player will spawn at the latest checkpoint they have passed
  - If no checkpoints have been passed, the player will spawn at the start

## Door & Locked Door

- If locked: A [Key](#) is needed to unlock
- Any key can open all locked doors
- Must be interacted with to open
  - Colliding will not open the door

## Enemies & Hazards

### Rock Face Jumper

- A grounded enemy that deals damage to the player through contact
- There are two types of behaviors Rock Face Jumpers can possess:
  1. Moving
  2. Moving and Shooting
- Rock Face Jumpers who shoot will launch Fireballs toward the player when the player comes into range
- They will continue in a straight direction until they hit a wall or reach an edge

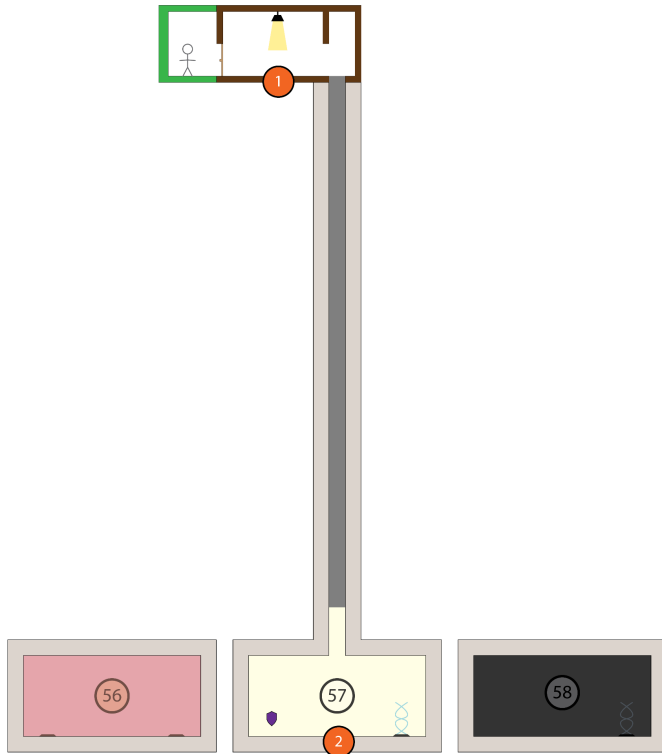
### Bat

- Flies and deals damage to the player through contact
- Bats fly on a horizontal path until colliding with a solid object.
  - On contact with a solid object, bats turn around and fly until they hit another solid object
- Bats positioned on top of dashed lines move back and forth along those lines

### Spikes

- A stationary hazard that deals continuous damage to the player as they come into contact with them

# Encounters



## Starting Room (1,2)

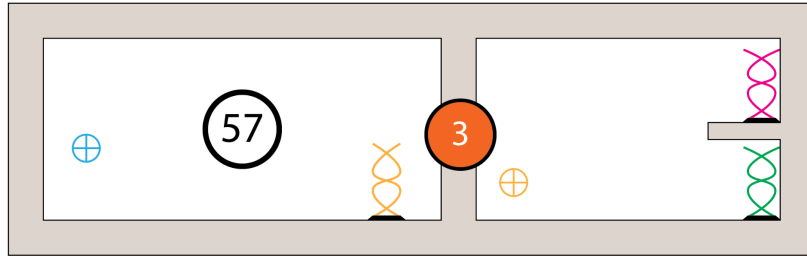
### Encounter 1:

- The Player begins on a grass lawn
- An unlocked [door](#) is ahead of them
- On the other side of the door, another character (an Idle Mannequin) encourages the player to step through the door on the right
- Once stepped through the door, the player will fall into encounter 2

### Encounter 2:

- The player falls into a concrete room with no exits.
- The number “57” is written on the wall
- On the left, a [shield](#) pickup
  - Once standing where the shield pickup is, an inaccessible room will be visible to the left. This room has a dim red light, the number “56” on the wall, and another character (Idle Mannequin) dead on the floor.
- On the right, is a [teleporter](#) that takes the Player to [Decision Room 1](#).
  - While standing on the teleporter, a room to the right will be visible to the right. The room is dimly lit with the number “58” on the wall

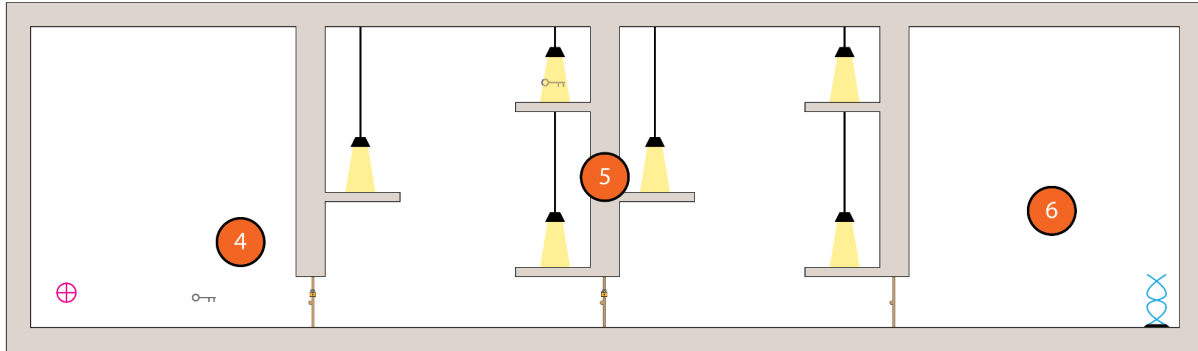
## Decision Room 1 (3)



### Encounter 3:

- The Player is teleported to the left of the Decision Room
- The Player must take another teleporter to the other side of the wall dividing this area.
  - Teleporting from one side of the dividing wall to the other will be a feature in every Decision room onward. This is meant to condition the player into anticipating where this teleporter will bring them.
- Once teleported to the right side of the dividing wall, the Player must decide which teleporter to take, each teleporter brings them to a separate branch. Both branches lead back to the same choke point.
- The top (Pink) teleporter will take them to the [Key & Door Puzzle](#)
- The bottom (Green) teleporter will take them to the [Maze](#).

## Key & Door Puzzle (4,5,6)



The Player has chosen the top teleporter in [Decision Room 1](#) and has been teleported to this branch.

Encounter 4:

- A [key](#) lays on the ground in front of where the Player is teleported.
- A locked [door](#) blocks the player from reaching the area to the right
  - The key in this room must be used to unlock the door

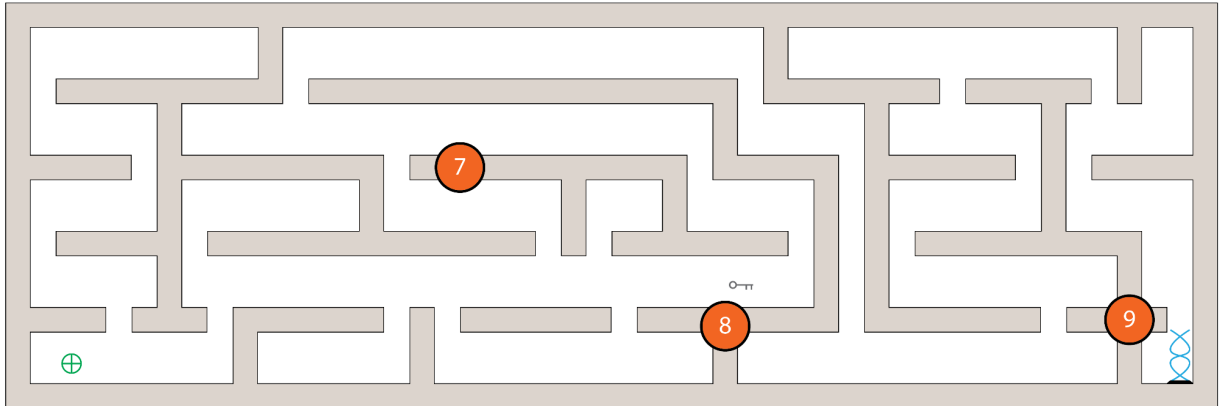
Encounter 5:

- The first room in Encounter 5 requires the Player to retrieve a key to unlock the locked door blocking access to the next room
- Spotlights are placed on platforms to pull the player towards them.
- The top platform has a key to open the locked door
  
- The second room in Encounter 5 is identical to the first room.
- However, the door is not locked this time, and no key lies on the top platform
- This room teases the idea of player conditioning that will be used at the end of this level.

Encounter 6:

- A teleporter that takes the Player to [Decision Room 2](#).

## Maze (7,8,9)



The Player has chosen the bottom teleporter in [Decision Room 1](#) and has been teleported to this branch.

Encounter 7:

- A maze to be completed

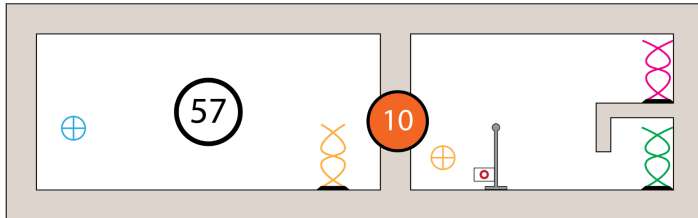
Encounter 8:

- A key is placed off the expected path the Player will take to complete the maze
  - This key is used at encounter 19, an optional gate to bypass enemies in the [Rock Face Room](#)

Encounter 9:

- A teleporter that takes the Player to [Decision Room 2](#)

## Decision Room 2 (10)

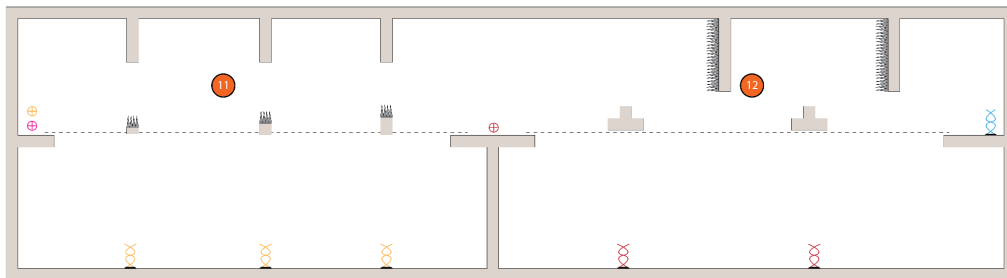


### Encounter 10:

- The Player is teleported to the left of the Decision Room
- The Player must take another teleporter to the other side of the wall dividing this area

- The first [CheckPoint](#) is reached
- The Player must decide which teleporter to take, each teleporter brings them to a separate branch. Both branches lead back to the same choke point.
- The top (Pink) teleporter will take them to an [Easy Parkour](#) room
- The bottom (Green) teleporter will take them to a [Hard Parkour](#) room
  - A simple skill gate in the form of a small passage blocks the player from taking the bottom (Green) teleporter.
  - The [Hard Parkour](#) room requires the Player to shrink to complete it. To complete the skill gate, the player must shrink themselves to fit into the small passage.

## Easy Parkour (11,12)



The Player has chosen the top teleporter in [Decision Room 2](#) and has been teleported to this branch

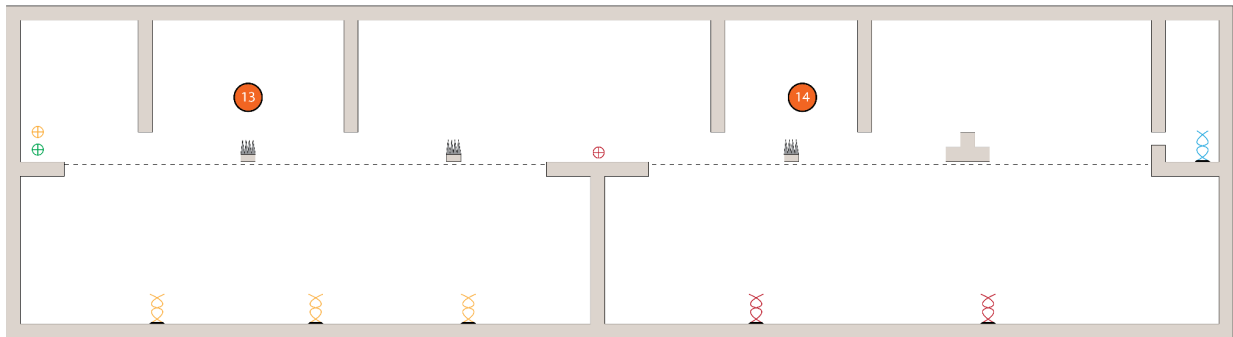
### Encounter 11:

- A moving platform makes it way back and forth along the dotted line.
- Barriers force the Player to jump over them while the platform can freely pass through
  - Spikes on top of the barriers stop the Player from resting on top.
- Teleporters below send the Player back to the start of the encounter should the Player fall off the moving platform
- Once completed, the Player can rest momentarily while they wait for the second platform in Encounter 12 to arrive.

### Encounter 12:

- Much like encounter 11, encounter 12 has a moving platform with barriers to jump over
- Spiked walls stop the Player from dashing forward and skipping this section.
- Teleporters below send the Player back to the start of the encounter should the Player fall off while trying to complete the parkour
- Once completed, a teleporter takes the Player to [Decision Room 3](#)

### Hard Parkour (13,14)



The Player has passed the skill gate and chosen the bottom teleporter in [Decision Room 2](#). They have been teleported to this branch.

### Encounter 13:

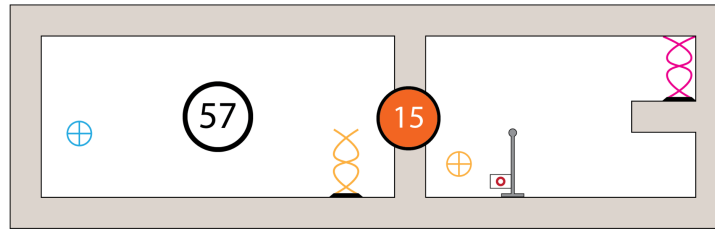
- A moving platform makes its way back and forth along the dotted line.
- Walls with small gaps underneath force the Player to shrink to fit under them
- Barriers force the Player to jump over them while the platform can freely pass through
  - Spikes on top of the barriers stop the Player from resting on top.
- Teleporters below send the Player back to the start of the encounter should the Player fall off the moving platform
- Once completed, the Player can rest momentarily while they wait for the second platform in Encounter 14 to arrive.

### Encounter 14:

- Much like encounter 13, encounter 14 has a moving platform with walls to shrink under and barriers to jump over
- The space between the two sets of obstacles is shortened to increase difficulty.
- Teleporters below send the Player back to the start of the encounter should the Player fall off while trying to complete the parkour
- Once completed, a teleporter takes the Player to [Decision Room 3](#)



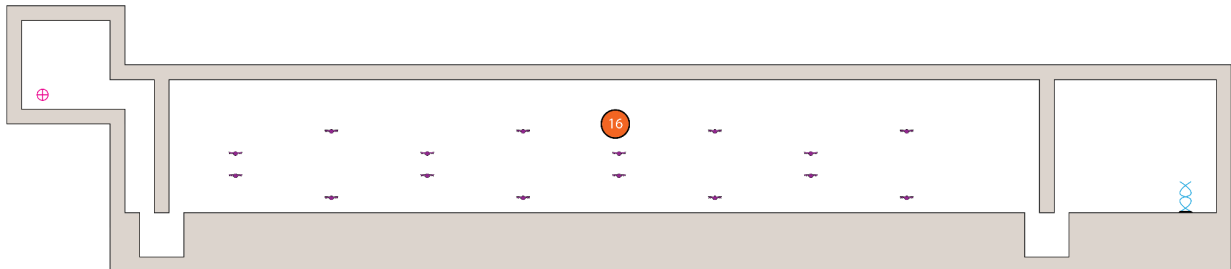
## Decision Room 3 (15)



### Encounter 15:

- The Player is teleported to the left of the Decision Room
- The Player must take another teleporter to the other side of the wall dividing this area
- Unlike previous Decision Rooms, this room's design varies
- There is no longer a decision to make. There is only one option for the Player.
- The top (Pink) teleporter takes the player to the [Bat Room](#).

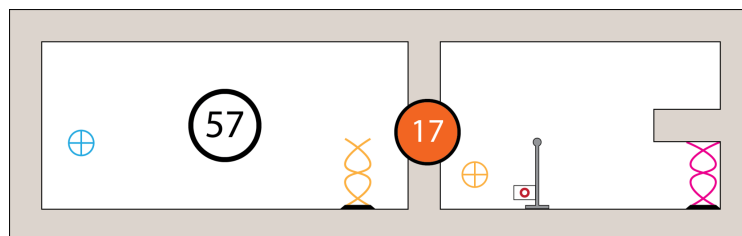
## Bat Room (16)



### Encounter 16:

- A horde of bats fly back and forth between two walls in sets of two.
- Every set of bats alternates the amount of space between and under them.
- The Player must jump between or shrink underneath the bats in order to get past them
- At the end of this room, a teleporter takes the Player to [Decision Room 4](#).

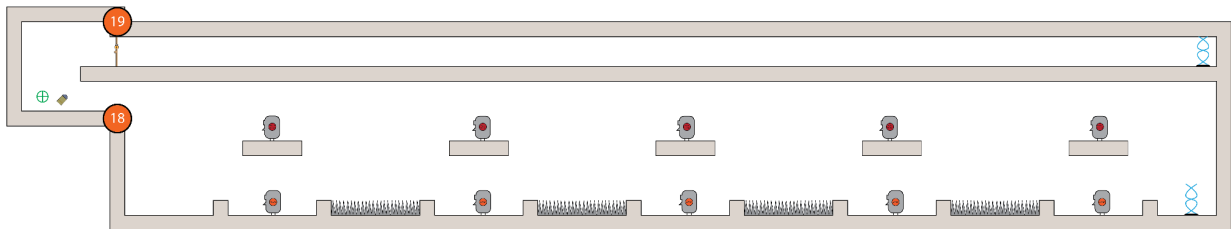
## Decision Room 4 (17)



#### Encounter 17:

- The Player is teleported to the left of the Decision Room
- The Player must take another teleporter to the other side of the wall dividing this area
- Much like [Decision Room 3](#), this Decision Room doesn't offer the player a decision.
- There is no longer a decision to make. There is only one option for the Player.
- The bottom (Pink) teleporter takes the Player to the [Rock Face Room](#).

#### Rock Face Room (18, 19)



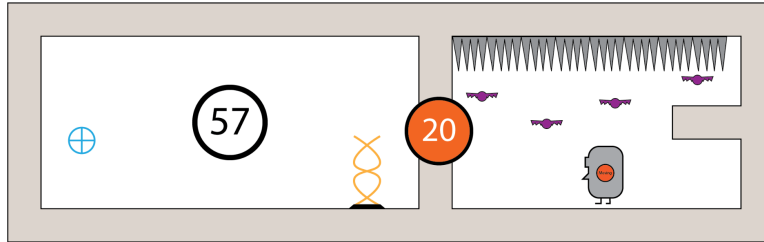
#### Encounter 18:

- The Player arrives at the left side of the room, an [Ammo](#) pickup gives the player 10 bullets
- An alternating series of moving [Rock Face Jumper](#)'s and [Spikes](#) to be jumped over
- Above every moving Rock Face Jumper, a shooting [Rock Face Jumper](#) stands on a platform above. Shooting at the Player when they come near.
- At the end of this encounter, a teleporter takes the player to the [Final Decision Room](#).

#### Encounter 19:

- If the Player found the key back in the [Maze](#), they can unlock the locked door. The hallway behind the locked door allows the Player to bypass encounter 18 and head straight to the [Final Decision Room](#)

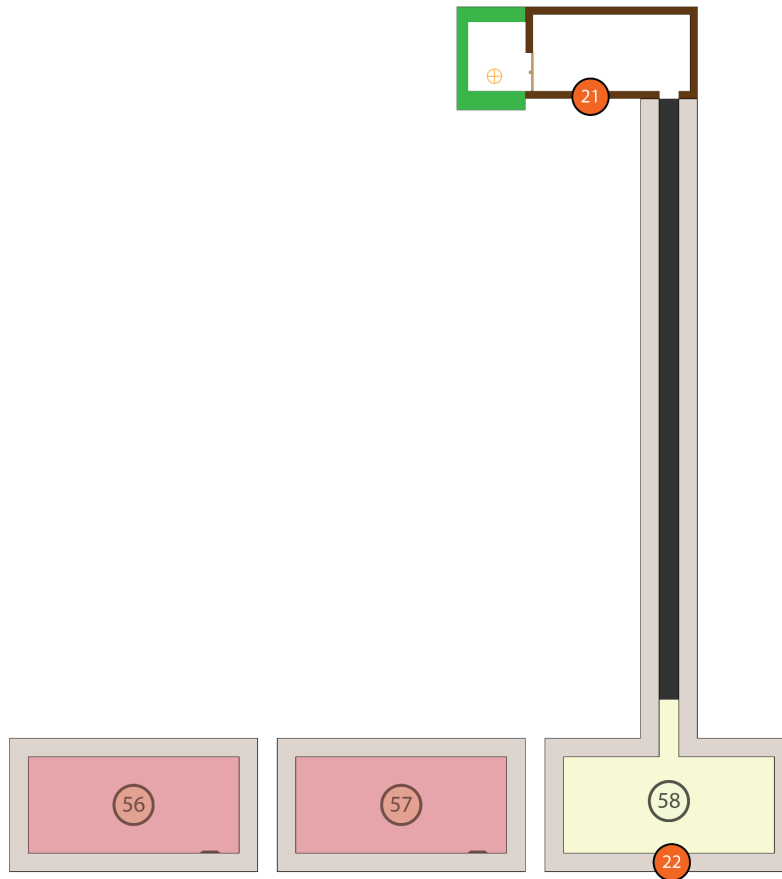
## Final Decision Room (20)



### Encounter 20:

- The Player can see the room to the right filled with spikes and enemies.
- There are no teleporters visible in the room to the right.
- After four decision rooms, the Player has been conditioned to think that the teleporter (orange) in front of them will take them into that room to the right. A room that leads to the certain death of the Player.
  - There are no other options, so the player must take this teleporter
- However, the teleporter (orange) teleports the player to a dark pit which they will fall down and land in the [Final Area](#).

## Final Area (21, 22)



### Encounter 21:

- The Player lands in an area identical to the [Starting Room](#).
- The same character (Idle Mannequin) encourages the player to step through the door on the right.
- The Player falls down the dark hole
- This entire sequence is the same as the beginning of the level.

### Encounter 22:

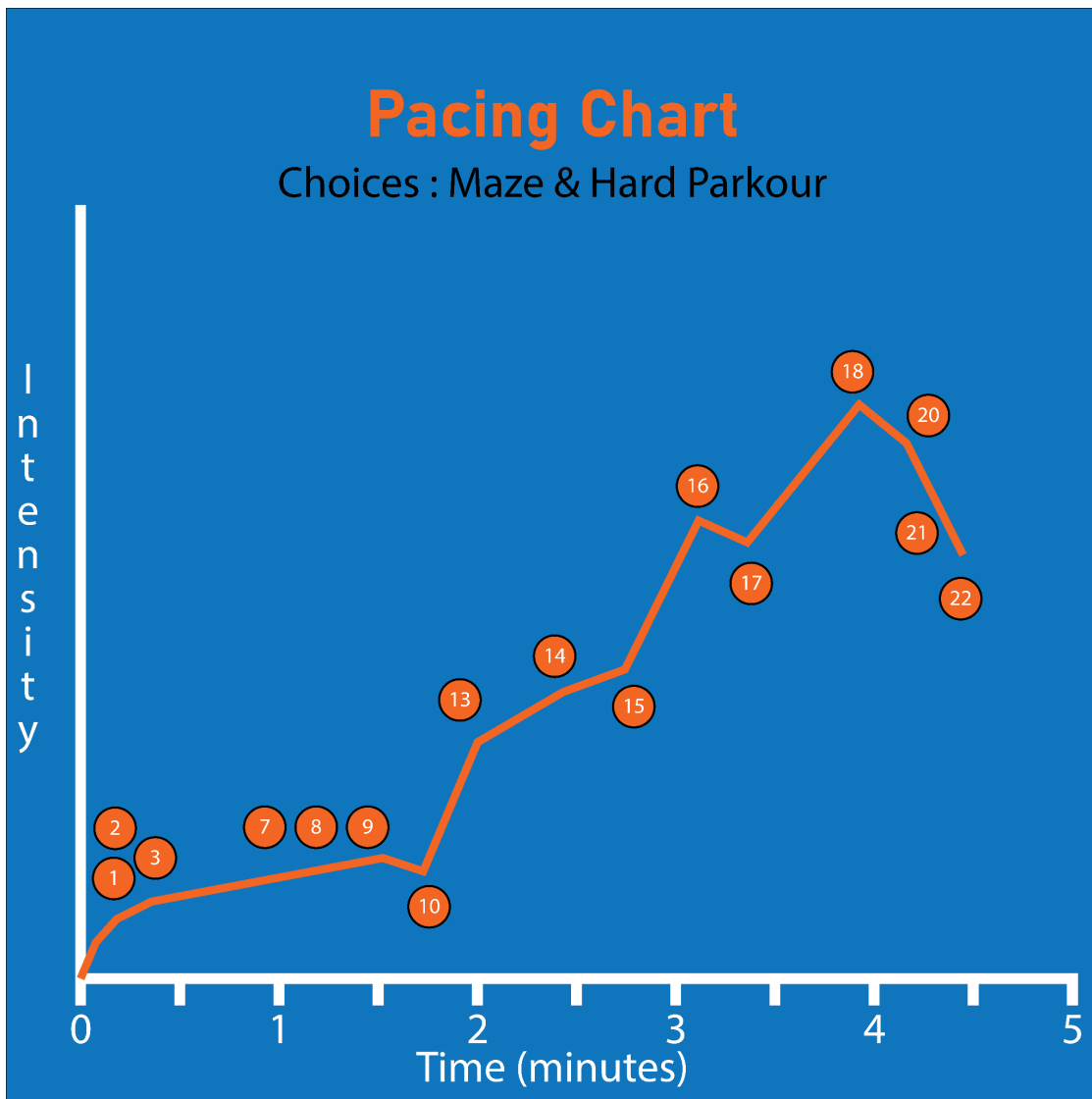
- The Player lands inside the same room as encounter 2. However, the number on the wall reads “58”
- The player can see the original encounter 2 room to the left. A red dim light shows the number “57” on the wall. A dead character lays on the floor in that room
- End of Level

## Supplemental Information

### Encounter 20 - 22 explained:

At the end of encounter 20, the Player thinks they are going to be teleported into the room full of enemies and die. Instead, they are teleported back to the beginning and end up in the room with "58" on the wall. This sequence of events is supposed to make the Player think that the character they played (Test subject 57) **did** get teleported to that room and die. Now they play as a new character (Test subject 58) going through the same experience and starting the experiment.

### Pacing Chart



# Decision Tree

