

# Elemental Sword Dungeon Journey

## Overview

**Description:** A Legend of Zelda-esque dungeon crawler where you must acquire different elemental swords to defeat enemies and open certain doors. Once you find all the swords you can fight the boss. You can switch between the three swords (fire, ice, lightning) with the bumpers, and different enemies can only be defeated by the correct color of sword. Additionally, there will be health pickups and damage power-ups that drop randomly from enemies.

**Win Condition:** You fight through the dungeon and kill the boss.

**Lose Condition:** You lose all your life from taking damage from enemies.

## Controls

**Directional pad:** Movement

**A:** Sword attack

**L/R Bumpers:** Switch sword elements

**Start:** Pause menu to return to the main menu, see controls, or restart

## Mechanics

**The player:** will have a health meter represented by small crystals. A player can take 3 hits before they die and lose, restarting the game. Health can be restored by eating food that drops from enemies randomly. Additionally, temporary damage increase power-ups can also drop randomly. The character's color will change depending on the sword element in use.

**Enemies:** enemies will have several designs and unique movement patterns. Each type of enemy will correspond to a specific element and you must use the rock-paper-scissors element type to defeat them.

**Combat:** pressing 'A' will cause the character to swing their sword. Hitting enemies does damage to them, but only if your sword is the correct element to hurt them. Damage will work in a rock-paper-scissors pattern where fire beats ice, ice beats lightning, and lightning beats fire. I might change what the actual elements correspond to for it to make sense, but that's the general idea. Enemies will be knocked back when hit to give the player some breathing room and as damage feedback. If an enemy is not damaged by the correct element, a different noise will play and the enemy will not be knocked back.

## Audio:

**Music:** Main menu music, gameplay music (make gameplay music really quiet when paused)

**Sound Effects:** when player is hit, when player changes swords, when player swings sword, when enemies are hit, when the enemies die, when a power-up is picked up, and when the player dies

## Some Coding Ideas

- Sword element switching controlled by a state machine
  - Changing the player palette to match the theme of the element when states are changed to indicate to the player which element is being used
- Enemy movements can be set to a pattern to allow the player to learn how each enemy type moves
- Player dying (and maybe enemy death, if it's not too taxing for the Gameboy system) can be expressed using the mosaic function for sprites – definitely using this for the boss death
- Player direction and animation frame will be determined in a similar way as the Pikachu lab, with enums
- Coding the map and each room of the dungeon will be the most challenging part of the project
  - I could use a state machine for each room, but there might be an easier way to do this
  - No matter how it happens, there will be a transition screen where the bg moves to accommodate the player's new location in the next room

## Example Screenshot:

