## **Objective**

By the end of this lesson, you will be able to understand the basic concepts of Earth Science and how they relate to the world of Minecraft and Fortnite.

## **Materials and Prep**

- A computer or gaming device with Minecraft and Fortnite installed
- Paper and pencil
- Access to the internet for research

No prior knowledge is required for this lesson, but having some familiarity with Minecraft and Fortnite will be helpful.

## **Activities**

• Activity 1: Minecraft Landforms

Explore different landforms in Minecraft, such as mountains, rivers, and caves. Take notes on the characteristics of each landform and how they are similar or different from real-world examples.

• Activity 2: Fortnite Biomes

Investigate the different biomes in Fortnite, such as forests, deserts, and snowy areas. Compare these biomes to real-world ecosystems and discuss the importance of biodiversity.

• Activity 3: Earth Science Research

Choose a specific topic in Earth Science, such as volcanoes, weather patterns, or rock formations. Use the internet or other resources to research and create a short presentation on your chosen topic.

## **Talking Points**

- Landforms in Minecraft
  - "In Minecraft, landforms are created by the game's terrain generation algorithm."
  - o "Mountains in Minecraft can be tall and have steep slopes, just like real mountains."
  - "Rivers in Minecraft flow downhill and can create valleys and canyons."
  - "Caves in Minecraft are underground hollow spaces formed by erosion or lava."
- Biomes in Fortnite
  - "Biomes in Fortnite are different types of environments with unique characteristics."
  - "Forests in Fortnite have dense vegetation and provide cover for players."
  - "Deserts in Fortnite are dry and have limited resources."
  - "Snowy areas in Fortnite can be slippery and affect movement."
- Earth Science Research
  - "Volcanoes are formed when molten rock called magma erupts onto the Earth's surface."
  - $\circ\,$  "Weather patterns are caused by the interaction of air masses and the rotation of the Earth."
  - "Rock formations, like the Grand Canyon, are created by erosion over millions of years."