

Objective

By the end of this lesson, you will be able to understand and work with large numbers in the context of Earth Science.

Materials and Prep

- Paper and pencil
- Calculator (optional)
- Basic understanding of place value and addition/subtraction

Activities

1. Activity 1: Earth's Population

Research and find the current population of the world. Write down this number and discuss what it represents.

2. Activity 2: Earth's Land Area

Find the total land area of the Earth in square kilometers. Write down this number and compare it to the population from Activity 1. Discuss the difference and what it means.

3. Activity 3: Earth's Water Volume

Calculate the approximate volume of all the water on Earth in cubic kilometers. Write down this number and compare it to the land area from Activity 2. Discuss the vastness of Earth's water resources.

Fifth Grade Talking Points

- "Large numbers can help us understand the scale of things in Earth Science. For example, the current world population is over 7 billion people!"
- "When we talk about the land area of the Earth, it is about 148 million square kilometers. That's a lot of space for us to live on!"
- "The volume of all the water on Earth is estimated to be about 1.332 billion cubic kilometers. That's a huge amount of water compared to the land area!"