

Lesson Nine Size and Scale

Introduction

Maps are very useful for helping us learn more about life around us. They help us to make a picture in our minds of what life is like in a certain area. Sometimes we learn about the land, sometimes we learn about the way other people live, and sometimes we use maps just to help us to understand more about where we are and where we want to go. When reading maps, it is important to remember that everything on the map is made according to its correct size. That way we know exactly how far away things are and how big or small they are in relationship to other things around us.

Shared Book Literature Source

Jack and the Beanstalk, Carol North.

A read-aloud fairy tale that stimulates children's imagination in a world of giants and fantasy

Other Materials Needed

- Landscape Picture Map
- United States Discovery Map
- Map markers

Suggested Lesson

Ask your children to describe the largest thing they have ever seen personally or might know about (perhaps from television or in a picture magazine or book). Responses will vary from elephant, whale, building, ship, mountain, China, etc. For contrast, have student discuss the smallest thing they have ever seen or might know about. Accept all descriptions, including such examples as ant, snowflake, germ, seed, particle of sand on a beach, etc. Ask the children to think about how people might measure the size of these huge and tiny objects. Given the opportunity to share experiences and ideas, the children probably will begin to speak in terms of inches, feet and miles. Explain to the children that comparisons of things enable us to see approximate relative size. For example, a whale would be many, many times larger than a goldfish.

Show the Landscape Picture Map. Ask the children to refer to the Landscape Picture map to find the largest and smallest thing on the map. The city buildings may appear to be larger or taller than the mountains at the back of the map. Ask the children to think about why this might be. Encourage the children to discuss the relative size of trees, buildings, automobiles, trucks, ships, etc.

In a shared book experience, read the tale of Jack and the Beanstalk with the children to experience what happens when Jack meets the giant. Ask the children to think about the way size affects what Jack does in the story. For example, sometimes he is afraid of it and sometimes he learns to use it to his advantage. Ask the children to explain why this is so.

Again, ask the children to refer to the Landscape Picture Map to decide which building is the tallest. Ask the students "Approximately how many cars, end to end, would it take to equal the height of this building?" "How many helicopters stacked one on top of another would equal one hotel?" Jointly, work with the children to create a bar graph that helps them to illustrate their best approximations.

Encourage the children to compare the objects on the picture graph with those found in the story. (Tree, houses, large building such as castles, etc.) Ask the children to create their own graphs of the various objects found in the story. For example, one giant beanstalk may equal twelve Jacks, or one golden egg may equal tree mice, etc.

Show the United States Discovery Map and mark the map scale. There are different meanings for the word scale. Ask the students what scale means. Map scale is used to measure distance on a map. Show the bar graph scale. Use the map scale to measure distance between places.