Mathematics, Grade 6 Unit VIII: Lesson 3

Report / Model: Big Bugs



Review the concept of ratio and proportion. You will apply this concept to the world of insects. Pick at least 3 insects that interest you and then do research on them. Your research should find answers to questions such as how fast they fly, how high they jump, how much they can carry and other questions you might think of.

Compare these insects to humans using ratio and proportion. An example would be: If a grasshopper weighs 2 grams and jumps 8 centimeters, how far could he jump if he weighed as much as you do, and could jump proportionately. Prepare a chart comparing your insects to humans. Use the questions and data collected from your research. Find or draw pictures of your insects to accompany your chart. Write a summary of your project and mount it along with the insect illustrations on poster stock. Display the project in the classroom

Extension: Create a giant insect model, perhaps 100 times as big as natural or maybe the size of an average sixth grade student. Use your imagination to decide what materials to use in making your model. Consider Styrofoam, cardboard, PVC pipe, chicken wire and papier-mâché, etc. Use ratio and proportion to calculate what your insect could do if he were this new size: How much would he eat? How high could he jump? How fast could he go? Think of other questions and answer them. Compile this information and record it on a chart. Attach this chart to your model and display the monster in the classroom.