Dinosaur Project

[Developed by Cheryl Fassett and Lynn Millbyer (Phoenix High School, New York).]

Math students at the Phoenix High School participated in a project to transform a scale model of a dinosaur skeleton into a gigantic representation of the model to be displayed in the school's hallway.

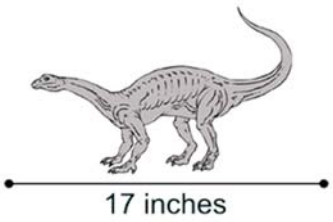
A build-it-yourself model of a dinosaur was purchased. Students working in groups were given a unique set of "bones" (from the model kit) which needed to be transformed into giant "bones" for the school's model. The bones were enlarged and reproduced on cardboard.

The enlarged "bones" are assembled to create the actual dinosaur. String attached to the ceiling and walls helps the dinosaur "stand" in the hallway. A build-it-yourself model of a dinosaur was purchased. Students working in groups were given a unique set of "bones" (from the model kit) which needed to be transformed into giant "bones" for the school's model.

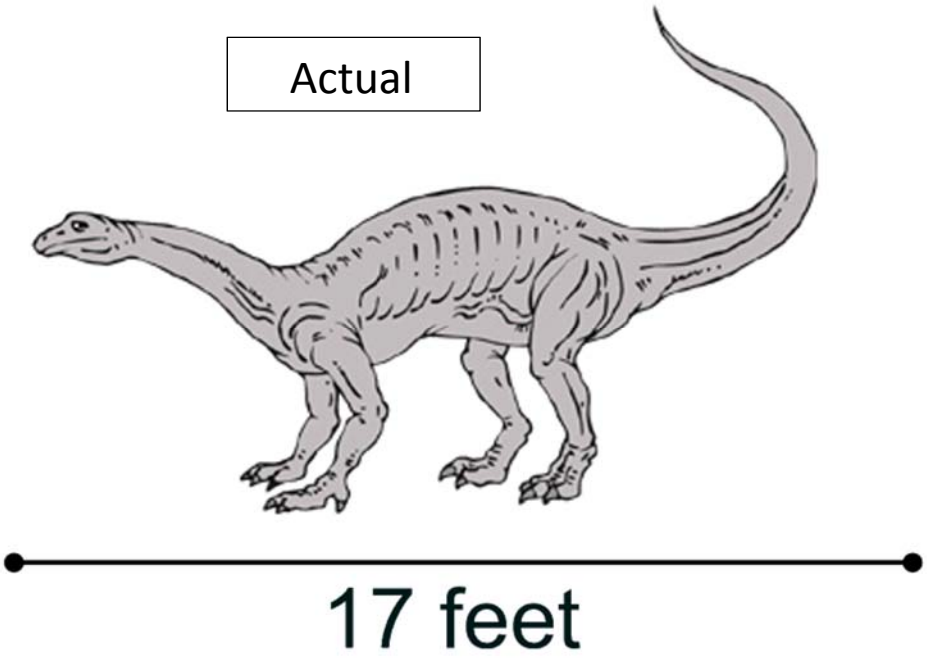
Impressive!!!

The Task:

Model



Actual



The Process:

Each group of students will:

- select an envelope containing the miniature "bones."
- determine how to transform the small bones into larger "bones" which will be assembled to form the dinosaur. The enlarged bones will be drawn on cardboard and cut out.
- have access to the following materials: meter sticks, yard sticks, twine, markers, chalk, overhead projector, transparency paper, opaque projector and graph paper.
- be invited to participate in the assembly of the large dinosaur after school.
- be required to submit a written lab report detailing how the group determined the needed ratio, how the group actually reproduced the bones, what was learned from the project, how these acquired skills could be useful in the future, and how they, personally, felt about the project.
- receive a grade based upon the quality and accuracy of their pieces, the completeness of the lab report, task log, and conclusion statements.

Students are allowed to personalize their bones with paint and/or artwork.

Large pieces of cardboard are needed for this project. Look for cartons from refrigerators and large appliances. Enlist the assistance of the students in securing the cardboard.