

Structures Project

Read the following directions carefully.

You are to build a scale model of a structure. You can make a scale model of an actual building or other structure. Many things can be defined as a structure. A structure can be a building, a bridge, a tower, a machine, or any number of different objects that have been built for a specific purpose. **Check with your teacher before you decide on your structure. Make sure you will be able to successfully complete your model of the structure you have chosen before you begin.**

Do not want to attempt making a model that would be too difficult to complete. Do not build a model of a structure that is too easy or shows little detail.

- 1. Your model can not have a base greater than 24 inches by 24 inches. (61 cm. by 61 cm.) There will be exceptions for bridges.**
- 2. Your model can not be taller than 6 feet tall. (192 centimeters)**
- 3. Your model must be built to scale.**

a. Find the actual dimensions of what you are building a scale model of.

b. Decide on a scale. For example, you decide your model will have a scale where **1 inch equals 10 feet**. Your scale would be **in. = 10 ft.** If a structure is 200 feet long, your model would be 20 inches long. You may also use metric measurements. For example, 1 centimeter may equal 1 meter, **1 cm = 1 m.** If a structure was a 100 meters high your structure would be 100 centimeters high. Most science is done using the metric system because it is based on our place value system.

Please check with your teacher before you decide on your scale.

4. You may use any variety of materials to build your model: wood, plastic, aluminum foil, popsicle sticks, straws, paper mache, styrofoam, sugar cubes, cardboard, string, wire, toilet paper rolls, wrapping paper rolls, rocks and concrete, paper, clay, the list is long.

However, you should choose building materials that make your model look real and will be strong enough so that you will be able to transport your model to school.

5. Do your best work. Use paint or other materials to make your structure look realistic. Take your time, start early, and plan ahead.

Written Report (This should be no longer than 1 page)

1. Tell why you chose the structure .
2. Give a brief history of the structure. Tell what the structure is used for, or was used for. Include what makes the structure unique or important. Include a picture or a drawing of the original structure.
3. Tell what materials the original structure was built with. (Example: The Eiffel Tower was built with iron, the pyramids of Egypt were built with sandstone.)
4. Tell what materials you used to construct your model.
5. Give a concluding paragraph about building your model.
6. Use a note card and write the title of your structure, the scale you used, and your name.

Due Dates

1. A plan of action is due _____. This will include what your model will be, what scale you will use, what materials you plan on using.
2. A rough draft of your written report is due _____.
3. Your model needs to be finished and ready for display_____.
4. A final draft of your written report is also due on _____

parent signature_____ student signature_____

GRADING

Model is well made and looks realistic.	_____	20 points
Model is accurately built to scale.	_____	10 points
Model shows creative use of materials.	_____	10 points
Written report adds to interest of model.	_____	10 points
total points earned	_____	= _____ %
total possible	50	
Grade	_____	

teacher comments: