

Building the Venues

Grade Level(s)

K-3, 4-7

Subject Area(s)

Science, Mathematics, Technology

Links to Vancouver 2010 Education Program Component(s)

Sports and Healthy Living, Olympism

Activity Description

1. Students should build a miniature Olympic infrastructure (ski jump, bobsleigh track, luge run, etc.) using different materials.
2. Students first observe in person or via images the way in which those structures are made.
3. Students then make a sketch of the structure and come up with a list of materials.
4. Summaries of the projects are presented to the class in order to get comments and suggestions for ways to improve the structure's stability.
5. Students build their Olympic structure as part of a crafts activity.
6. If needed, they improve their structure.
7. In the end, students present their structure and build a miniature Olympic site working together as a class.

Supplementary activity:

Use clay to shape and add elements to the background and individuals (for example, skiers, trees, a podium, a flag, etc.).

Learning Outcomes

Students will be able to:

- describe the forms and shapes that make up structures built by humans (cones, arches, pyramids, pillars, etc.);
- compare the effect of different materials on force and movement and their effect on different types of structures;
- take measures to stabilize the structure.

Resources Needed

Sheets of paper, pencils

Different objects used for building structures (little twigs, popsicle sticks, Styrofoam, tooth picks, Q-tips, cardboard, cork stoppers, etc.)

Wood glue, hot glue (glue gun)

Supplementary activity:



Modeling clay

Duration of Activity

Five periods of 45 minutes

Cognitive and Affective Domains

Cognitive – Understanding

Affective - Receiving

Assessment Strategy

Assess structure stability and improvements made by students, as well as the degree to which students have taken into account forces and movement when designing their structure and the solidity of the materials

