

Ice-cream Stick Bridge

Lesson Objective:

- · Learners learn about building, design, construction and planning
- Learners learn about teamwork and working in groups

Time Needed:

45 minutes

Materials:

- * 200 ice-cream sticks
- * Craft glue / glue gun
- * Object (bag of sugar/flour) to see whether the bridge can withstand the weight of the object.

Procedure:

- * Divide the learners into groups of 4.
- * Provide each group with a set of materials.
- * Explain to the learner's that each group must build their own bridge, using the ice-cream sticks and glue provided.
- * The bridge must be able to hold a weight of 1 kilogram.
- *The bridge should span to at least 30 cm.
- * In addition to meeting the structural and weight bearing requirements, the bridge will also be judged on its aesthetics, so the learners must be encouraged to be creative.
- * Learners should also be encouraged to use the fewest number of icecream sticks, in order to achieve their goal.
- * Each bridge should be judged by the class in terms of its aesthetics. Use a judgement scale of 1-5. (1: not appealing; 2: not appealing; 3: average; 4: somewhat appealing; 5: very appealing).

Learner Worksheet:

Design your own bridge:

You are in a team of 4 and have been given the challenge to design and build a bridge using ice-cream sticks and glue. The bridge must be able to hold a specific weight and span a certain length. Be creative, as your bridge will be judged on its aesthetics. You are encouraged to use the fewest number of ice-creams sticks as possible in order to achieve your goal. Good luck!

Name of your bridge:
Number of ice-cream sticks you anticipate using:
Sketch a diagram below, of how you anticipate your bridge to look: (showing the patterns that may be the strongest to use in order to hold the weight)