

Geometry in Birch Bark Biting Lesson Plan

by Jessica Wesaquate and Andrea Rogers

Grade Level:

Three

Objectives:

- Students will be able to circle the geometric shapes found in a given birch bark biting.
- Students will be able to create their own birch bark biting using three or more geometric shapes to demonstrate their knowledge of symmetry.

Pre-requisite Knowledge:

Geometric shapes

Materials:

photocopies of birch bark biting examples, pencils, pencil crayons

Recalling: Engage students in activities that will have them recall familiar geometric shapes as well as introduce geometric shapes they may not be familiar with. The geo board is a great resource.

Set:

Make a transparency of a simple birch bark biting and put it up on the overhead. Have students draw the birch bark biting in their workbooks and circle the geometric shapes that are evident to them. Take this time to go over geometric terminology.

- Often visual imagery can help students' visual understanding of 2-D geometry.

Activity:

Using birch bark biting samples with geometric shapes (photocopies):

- Have students circle where they see geometric shapes in the birch bark bitings, indicating what types of shapes they are. They could use colored pencil crayons and make a legend at the bottom of the page to indicate the shapes.
- Draw a birch bark biting with a pencil and paper using three or more different geometric shapes, assuring symmetrical designs. Students may use colored pencils to indicate the symmetry.

Assessment:

observation notes, rubric

Aboriginal Perspectives is supported by the University of Regina, the Imperial Oil Foundation, the Canadian Mathematical Society and the Pacific Institute for the Mathematical Sciences.