

Shapes in the Blackfeet Language

Fast Facts

Curriculum Area: Mathematics
Grade Level: Kindergarten
Suggested Duration: 60 minutes

Stage 1 Desired Results

Established Goals

Montana Content Standards for Mathematics

Geometry Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).

Geometry K.G.1 Describe objects, including those of Montana American Indians, in the environment using names of shapes, and describe the relative positions of these objects using terms such as: above, below, beside, in front of, behind, and next to.

Geometry K.G.5 Model shapes in the world from a variety of cultural contexts, including those of Montana American Indians, by building shapes from components (e.g., sticks and clay balls) and drawing shapes.

Indian Education for All Essential Understandings Regarding Montana Indians

Essential Understandings 1 There is great diversity among the twelve sovereign tribes of Montana in their languages, cultures, histories, and governments. Each tribe has a distinct and unique cultural heritage that contributes to modern Montana.

Understandings

- The rectangle, circle, square, triangle, and rhombus can be given two names, one in the Blackfeet (Pikuni) language and one in English.
- The Blackfeet language is unique to the Pikuni and different from all other tribes

Essential Questions

- How are these shapes the same?
- How are these shapes different?
- How many sides do the shapes have?
- How many corners do the shapes have?
- How do we say these shapes in English?
- How do we say these shapes in Blackfeet (Pikuni)?



Indian Education for All Unit

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Students will be able to...

- say and identify the shapes in English.
- say and identify the shapes in the Blackfeet (Pikuni) language.
- make the shapes on the geoboard with rubber bands.

Students will know...

- how the shapes look and be able to identify them.
- how to say the shapes in English and in Blackfeet (Pikuni).
- how to make the shapes on a geoboard as well as the circle on the back of the geoboard.
- Blackfeet (Pikuni) is one of many Native American languages.

Stage 2 Assessment Evidence

Performance Tasks

1. Student will practice and recite the shapes in English and Blackfeet. They will practice the shapes by forming them on a geoboard and by using the circle on the back of the geoboard.

Other Evidence

1. Students will participate in identifying and saying the names of the shapes in English and Blackfeet (Pikuni).
2. Teacher will observe the students making the shapes on the geoboard and saying the shape in English and Blackfeet (Pikuni).

Stage 3 Learning Plan

Learning Activities

Identify square, circle, rectangle, triangle, and rhombus in English. Show the students pictures of these shapes and have the student identify them. Pass out pattern blocks and attribute blocks of each shape for students to touch and examine (15 minutes).

Identify square, circle, rectangle, triangle, and rhombus in the Blackfeet (Pikuni) Language. Show the pictures of each shape with the Blackfeet (Pikuni) language and English translation on it. Teacher says the shapes in Blackfeet (Pikuni) and has the students repeat it. Talk about how many sides and corners each shape has. How are the shapes alike? How are the shapes different? Emphasize that the Blackfeet (Pikuni) language is the one of many different Native American Languages (15 minutes).

Students will go to their tables and make the shapes on the geoboards; the students will use the back of the geoboard to make circles. Observe each student and ask them to identify the shape in English and Blackfeet (Pikuni) language. Display the shapes for each student to refer back to (30 minutes).

The teacher can go over these shapes in English and the Blackfeet (Pikuni) language every day during math or calendar. This activity can be a math center with the pictures.

Materials/Resources Needed

- Pattern Blocks - printable [templates](#) if you do not have pattern blocks.
- Attribute blocks
- Pictures of each shape in English and Blackfeet (Pikuni)
- Geoboards - If not available, the teacher can use string, straws, clay, and other object for students to form the shapes. Link to an [online version of geoboards](#) if appropriate.
- Rubber bands for the Geoboards.

Shapes in Blackfeet, With Phonetic Pronunciation (Calvin Weatherwax)

- | | | |
|--------------|-------------------------|---------------------------|
| • Rectangle: | Is-i-nap-innoyi | Is-e-nap-in-no-yee |
| • Triangle: | No-toy-ii | No-to-yee |
| • Square: | A-tak-saa-kssin, | Ah-duc-suc-sin |
| • Circle: | O'taki | OOh-tah-kee |
| • Rhombus: | Il-taa-wa-ko-mo-tsi-iop | E-tah-wah-ko-mo-tsee-yiop |

Contact Information on pronunciation of the Blackfeet shape words: Browning Public Schools district # 9, Native American Studies (406) 338-2715 or Blackfeet Community College Native American Studies (406) 338-5441.

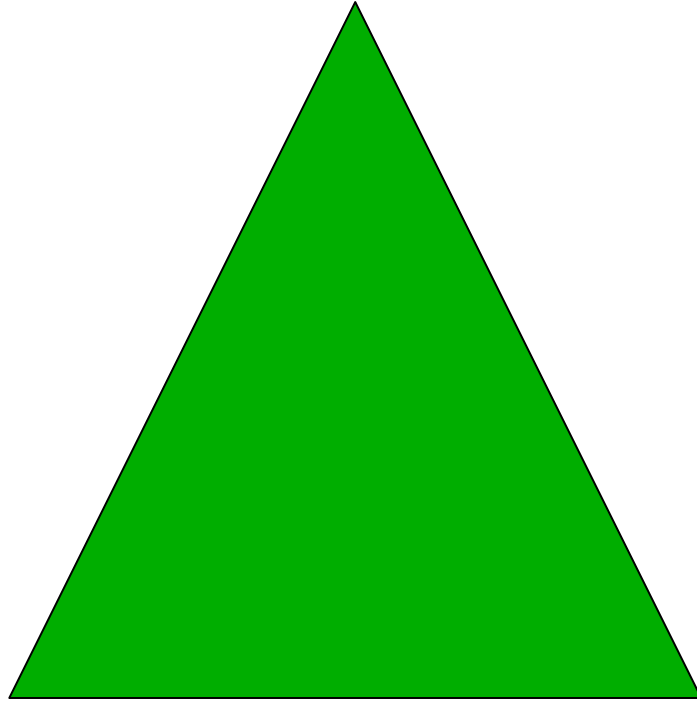
Montana Content Standards and IEFA Essential Understandings Regarding Montana Indians

[Montana Content Standards for Mathematics - Kindergarten](#)

[Essential Understandings Regarding Montana Indians](#)



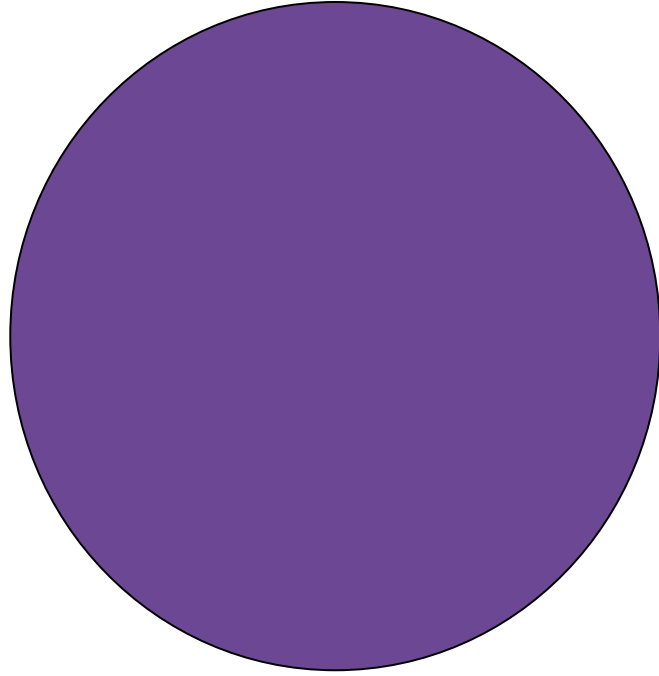
Is-i-nap-innoyi
(Is-e-nap-in-no-yee)
Rectangle



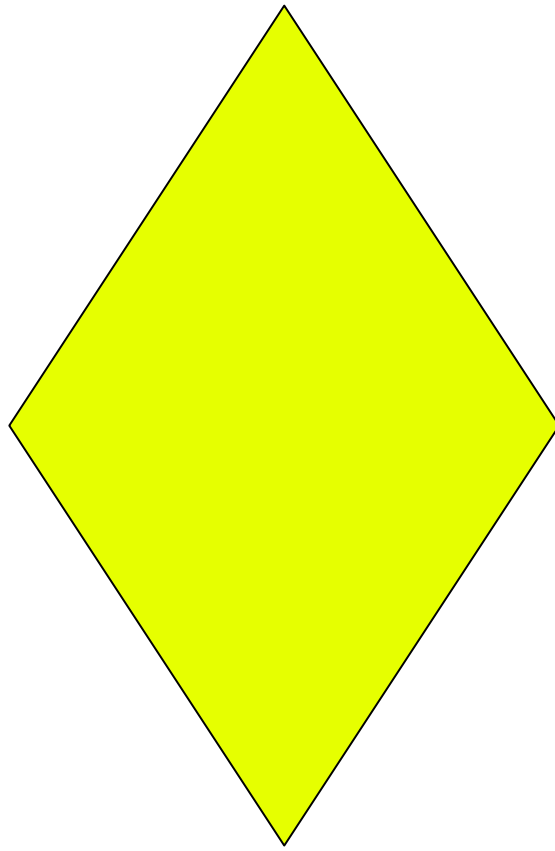
**No-toy-ii
(No-to-yee)
Triangle**



A-tak-saa-kssin
(Ah-duc-suc-sin)
Square



O'taki
(OOh-tah-kee)
Circle



Il-taa-wa-ko-mo-tsi-iop
(E-tah-wah-ko-mo-tsee-yiop)
Rhombus