

# Shapes in the Blackfeet Language

## Fast Facts

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

## Stage 1 Desired Results

### Established Goals

**Geometric Reasoning Mathematics Content Standard 3** A student, applying reasoning and problem solving, will understand geometric properties, spatial relationships, and transformation of shapes, and will use spatial reasoning and geometric models to analyze mathematical situations within a variety of relevant cultural contexts, including those of Montana American Indians.

**3.1 Two-Dimensional Attributes:** Describe, compare, and analyze attributes of two-dimensional shapes.

**IEFA: Essential Understandings 1** There is great diversity among the 12 tribal Nations of Montana in their languages, cultures, histories and governments. Each Nation 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)?

### 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.

## Shapes in the Blackfeet Language - Kindergarten

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

Students will participate in identifying and saying the names of the shapes in English and Blackfeet (Pikuni).

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.

## Shapes in the Blackfeet Language - Kindergarten

### Materials/Resources Needed

- Pattern Blocks - [template](#) if don't have pattern blocks - Go to website, click on A-Z list on top of page, choose "P," go down to pattern block template and print the page out. Teachers can make circles on a word document if none are available. \* Teachers are welcomed to download activities to use in the classroom.
- 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.
- Rubber bands.

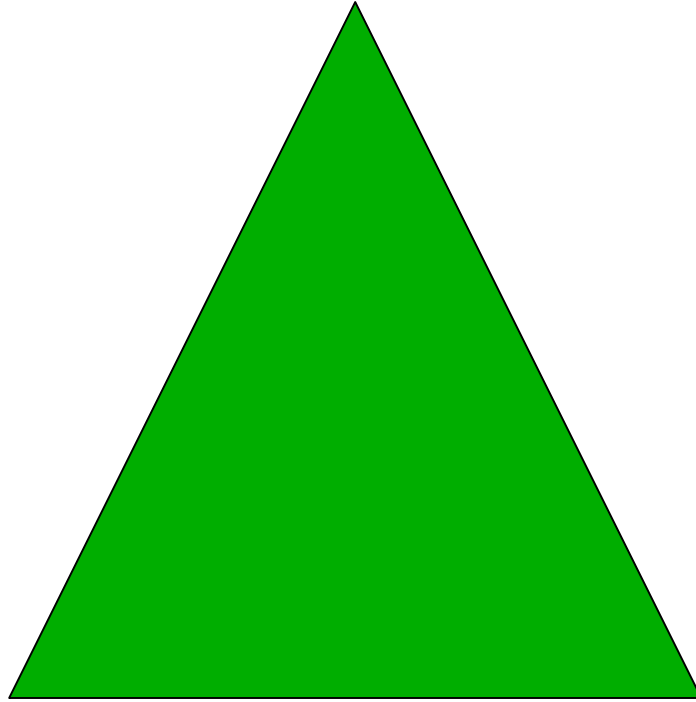
### Shapes in Blackfeet, With Phonetic Pronunciation (Calvin Weatherwax0

- 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 School district # 9 Native American Studies (406) 338-2715 or Blackfeet Community College Native American Studies (406) 338-5441.



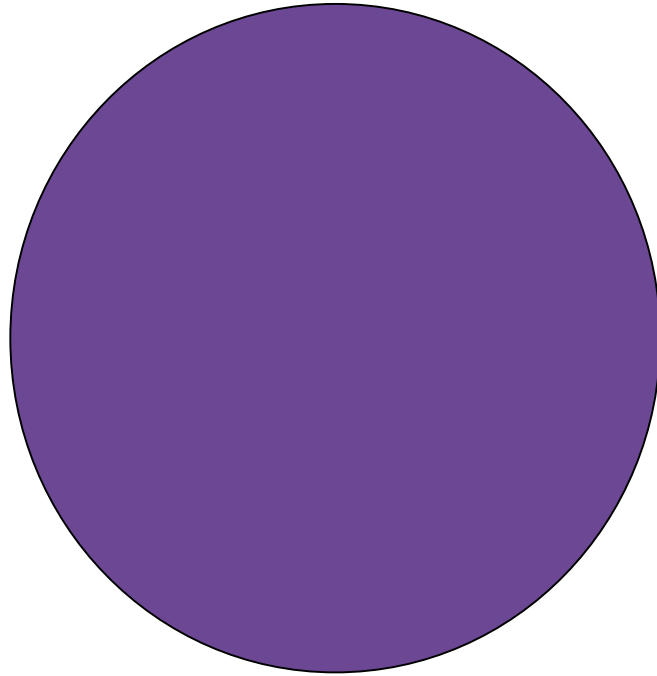
**Is-i-nap-innoyi**  
**(Is-e-nap-in-no-yee)**  
**Rectangle**



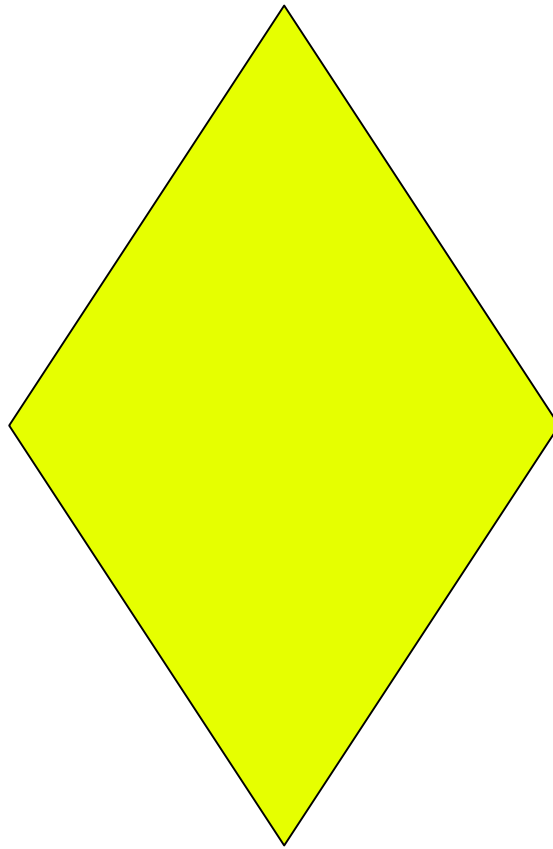
**No-toy-ii  
(No-to-yee)  
Triangle**



**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**