Shaping Up

1st Grade

60 Minutes

Spring

Summary
When asked, students list possible shapes they think they can find on the prairie. A field leader records their answers on a paper for comparison upon return to the classroom. Students choose shapes that they would like to find in the prairie. Using simple data sheet and journal, students go outside and search for shapes and record them through illustrations and words into their notebook. Afterwards, students reflect about their journey and findings.

Next Generation Science and Iowa Core Standards

Next Generation Science

• 1-LS1-1
  ○ Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.

• K-2-ETS1-2
  ○ Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

Literacy

Writing

• W.1.8
  ○ With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

Speaking and Listening
- **SL.1.1**
  - Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.

- **SL.1.3**
  - Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.

- **SL.1.6**
  - Produce complete sentences when appropriate to task and situation.

**Materials and Resources**

- Shape Walk Data Sheet (can also be copied into journals)
- Pencils
- Colored Pencils
- Clip boards

**Presentation**

In the classroom, welcome students, teachers, and chaperones to Neal Smith National Wildlife Refuge. Remind them of your name. Explain to students that today, they will be learning about shapes on the prairie. Gauge students’ background knowledge by asking the students, “What are some shapes that they already know?” Draw their answers on the board. (see example on following page)

**Directions**

1. Tell students that they are going to play a game. They are going to see how many shapes different shapes they can find on the prairie! To prepare for the game, they will need to practice.

2. Hold up different pictures of prairie objects and ask students to raise their hand to tell you what shapes they see in the object. Explain that they will be doing the same thing outside.

3. Tell students that in a few minutes they will be going outside to search for shapes in the prairie. Hold up the data sheet and review it with the students.
Explain that when they find a shape, they will need to record the object in the appropriate box. Students may also draw the data sheet in their journals.

4. Pass out all the materials including clipboards, pencils, and paper. Remind students that naturalists are happy outside, explorers, adventurers, respectful, and quiet. They ask questions, use words, numbers and pictures, and share their discoveries.

5. Once outside, provide students with boundaries and tell them that they can search within the boundaries for shapes. After about 15 to 20 minutes, ask students to come together and go back inside.

6. Once inside, have students review their data and explain which shapes they found outside. Have students describe any personal observations they made about the shapes they found. What surprised them? Which shape did they find to be most interesting? What did they learn that they never knew before?

7. Lastly, ask students why they think observing shapes would be important? Explain that sometimes shapes can help people identify items in the natural world. Seeds, flowers, animals all come in different shapes and those shapes can give us clues about the identity of them. Some things are shaped for a specific reason, likes leaves being round so they can reach the most sunlight. What’s an example of a shape we found that might help a plant or animal do something?

8. Thank students for coming and remind them that if they enjoyed finding shapes outside that they could play the game anywhere outside!
# Resources

## Journal Prompt

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<thead>
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<th>Squares</th>
<th>Circles</th>
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<tbody>
<tr>
<td><img src="image" alt="Square" /></td>
<td><img src="image" alt="Circle" /></td>
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</table>

<table>
<thead>
<tr>
<th>Triangles</th>
<th>What other shapes did you find?</th>
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</thead>
<tbody>
<tr>
<td><img src="image" alt="Triangle" /></td>
<td></td>
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Neal Smith National Wildlife Refuge