



Grade Level: 5  
Subject: Math

## 2D Shapes in Grand Ronde Artifacts

### ESSENTIAL UNDERSTANDINGS

- History
- Lifeways

### LEARNING OUTCOMES

- Students will be able to identify shapes located within Grand Ronde artifacts.
- Students will be able to state characters of shapes.

### CULTURALLY RESPONSIVE PRACTICES

- Movement inside of the classroom
- Preserving and honoring cultural history
- Student talk, working together and individually

### ASSESSMENT

To assess understanding, evaluate the 2D Shapes Record Sheet as well as the Exit Ticket collected at the end of the lesson.

### Overview

In this lesson, students will be exploring shapes found within Grand Ronde artifacts. They will be analyzing images of the artifacts, identifying a pre-selected shape from the image and then state characteristics of that shape to justify their thinking.

### MATERIALS

- [Artifact Introduction Powerpoint](#)
- [2D Shapes Record Sheet](#)
- [2D Shapes Task Cards](#) - One set of these needs to be printed and cut up.
- [2D Shapes Hierarchy Worksheet](#)
- [Exit Ticket](#)

### LOGISTICS

- Where does this activity take place?  
**Classroom**
- How are the students organized?

**Whole Class**      Teams: 3-5

**Pairs**                      **Individually**

### TIME REQUIRED

40 minutes

## STANDARDS

### Oregon State Standards: Math

**CCSS.MATH.CONTENT.5.G.B.3** Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.

**CCSS.MATH.CONTENT.5.G.B.4** Classify two-dimensional figures in a hierarchy based on properties.

## Background for Teachers

You will notice that a swastika appears on Basket A. Swastikas are a widely distributed ancient design appearing in the Middle East, India, Southeast Asia and in native North American. The meaning behind this image is “well-being” or “good fortune”. It may be beneficial to discuss this design prior to displaying this slide, ensuring that students understand the intent of the design used in this context.

To view more Grand Ronde artifacts, teachers and students are encouraged to visit the Chachalu Museum of The Confederated Tribes of Grand Ronde.

- [Chachalu Museum and Cultural Center | Confederated Tribes of Grand Ronde](#)

More artifacts and Grand Ronde art can also be viewed in the CTGR Cultural Education Culture Class Videos, linked below.

- [Culture Class Videos | Confederated Tribes of Grand Ronde](#)

## VOCABULARY

- **Parfleche** - Native American rawhide container.

## Opening

Depending on the students' knowledge about The Confederated Tribes of Grand Ronde, teachers can choose to show the following video to start the lesson. This video explains the story of the Grand Ronde people and will provide context to the students.

Our Story: <https://youtu.be/44A9LGZsdwo>

## Activity

1. Open the Artifact Introduction Powerpoint.
2. Let students know that all of these artifacts were collected from the Grand Ronde Reservation shortly after the establishment of the reservation.
3. Ask students what they notice about the artifacts and what questions they have. Please see the " speaker notes" section on each slide to help answer questions.
4. Once all the artifacts have been viewed, ask students to think in their head about the geometric shapes they may have noticed.
5. Let students know that they will be exploring the shapes found on these artifacts. They will be identifying a shape from the artifact, listing characteristics of that shape and eventually be organizing the shape into a hierarchy based on the characteristics.
6. Pass out the 2D Record Sheet to students and set the 2D Task Cards around the room.
7. Have students get into groups of two.
8. Model for students the expected behavior and how to complete the record sheet.
  - a. Find one of the task cards. Task cards do not have to be completed in any particular order.
  - b. Look for the black circle and identify the shape in the circle.
  - c. List characters of the shape in the circle. For example, a square has 4 equal sides and 4 right angles.
9. Release students to work on the record sheet.
10. Once students have finished the record sheet gather the students back together as a whole group.
11. Go over each of the task cards quickly to ensure that everyone has the same shape. If differences arise, encourage students to share their reasoning and come to a consensus on what the right answer is.
12. Let students know that they will now be organizing the shapes found on the artifacts into a hierarchy based on their characteristics. They will be doing this by evaluating similarities in different shapes from the artifacts.
13. Have students get back together with their original partner. They will also want to use the 2D Shapes Record sheet to help them recall what the shapes and characters are.

## Closure

1. Pass out 2D Shapes Hierarchy Worksheet
2. Give students time to work on the worksheet.
3. Have students complete the exit ticket after they have completed the 2D Hierarchy Worksheet with their partner.

## Differentiation

- Before releasing students to work on the 2D Hierarchy Worksheet, it may benefit students to recall what the hierarchy groups are.

## Notes/Other

Jan Michael Looking Wolf's or Grand Ronde Canoe Family audio tracks can be played as background music while students are working. These audio tracks can be found on Spotify or Apple Music.

Jan Michael Looking Wolf: [Spotify](#) and [Apple Music](#)  
Grand Ronde Canoe Family: [Spotify](#) and [Apple Music](#)

## Appendix

- Artifact Introduction Powerpoint:  
<https://docs.google.com/presentation/d/1U8alkT7wAr1o2vhqiGlkk8Ekipp8kkVgRkp3AkM2AmE/edit?usp=sharing>
- 2D Shapes Record Sheet:  
<https://drive.google.com/file/d/1oREZidE4KkDG7BMxmFWonApLAscOUfb3/view?usp=sharing>
- 2D Shapes Task Cards:  
[https://drive.google.com/file/d/1DQGBaiT\\_AIDh6ZhLuJohpo7IGADMm1\\_O/view?usp=sharing](https://drive.google.com/file/d/1DQGBaiT_AIDh6ZhLuJohpo7IGADMm1_O/view?usp=sharing)
- 2D Shapes Hierarchy Worksheet:  
<https://drive.google.com/file/d/1ao7Mb1qbyZdluJRleABsLzlaWEHqK77/view?usp=sharing>
- Exit Ticket:  
<https://drive.google.com/file/d/1djlcpRufMNRpsnAa7V7WcKamz4pEn1iT/view?usp=sharing>