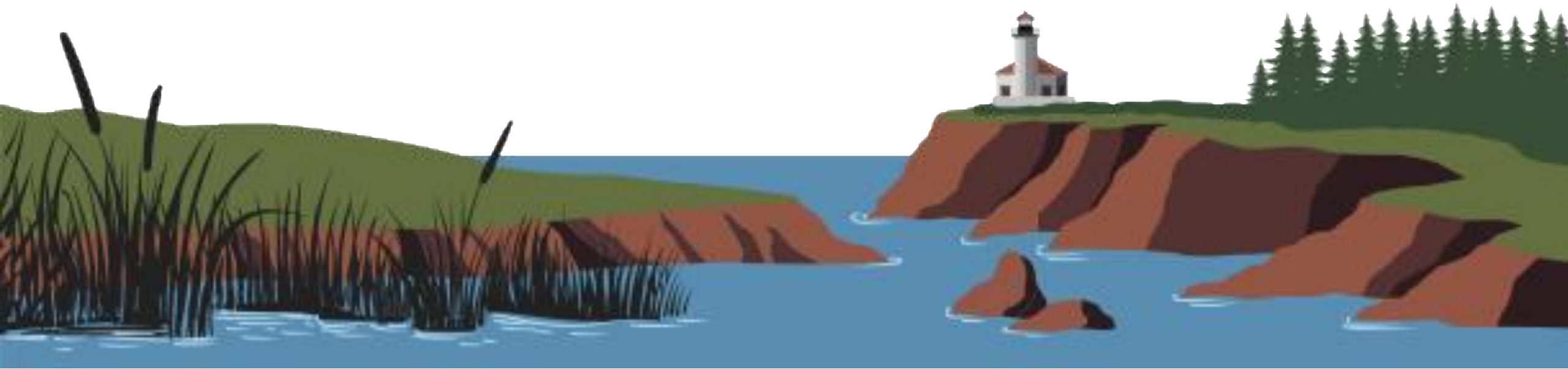
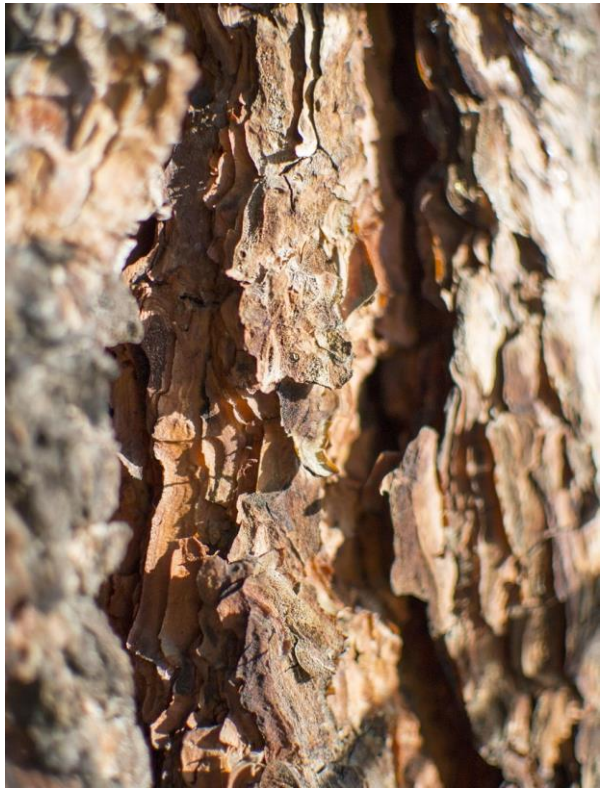
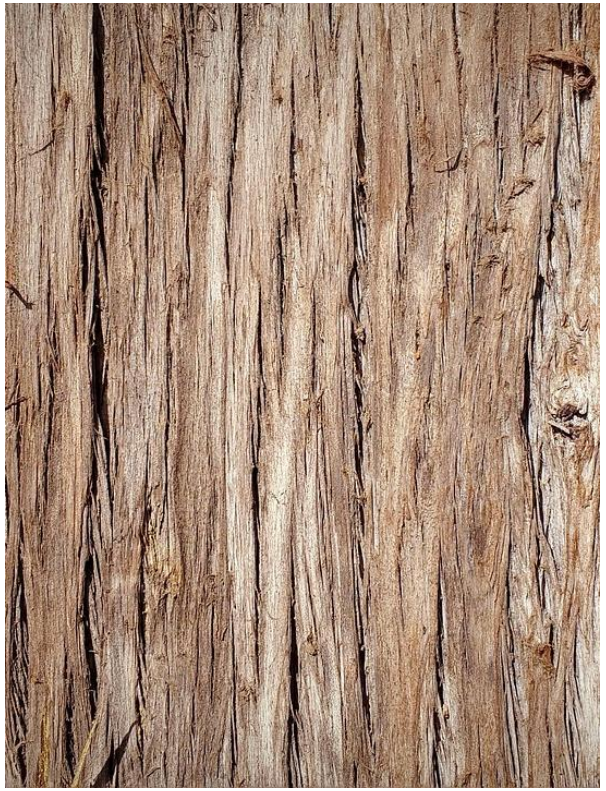
Grade 4

# Cedar Bark



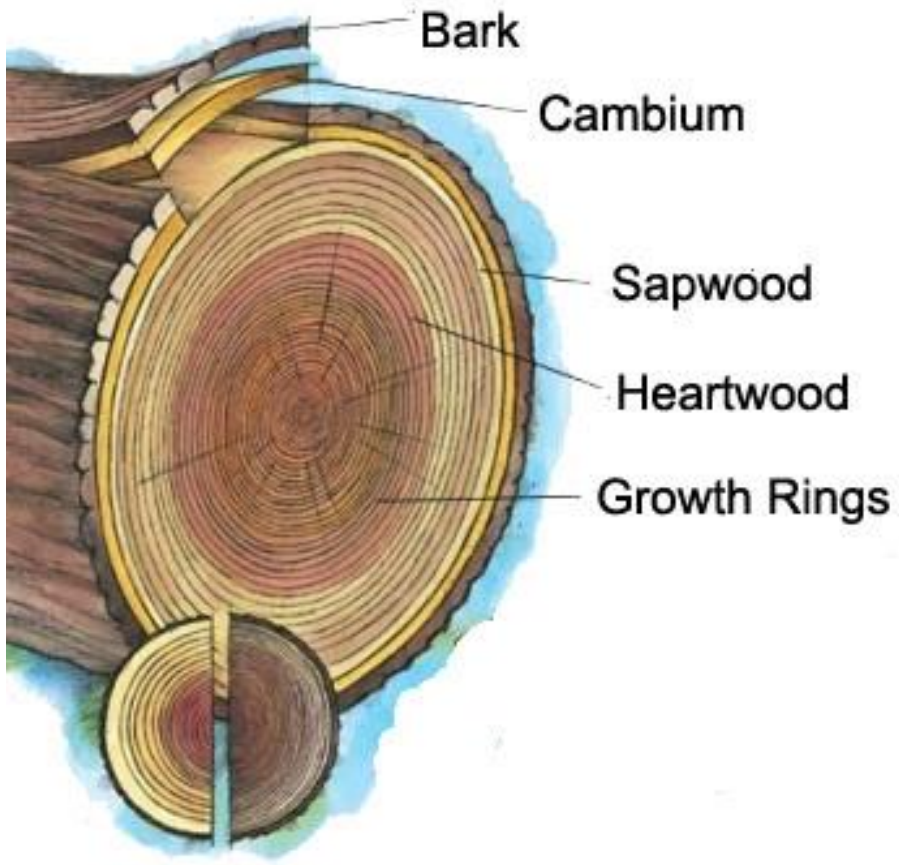
# Examples of Different Types of Bark



*Images source: Pixabay (license information)*

# Anatomy of Tree Structures



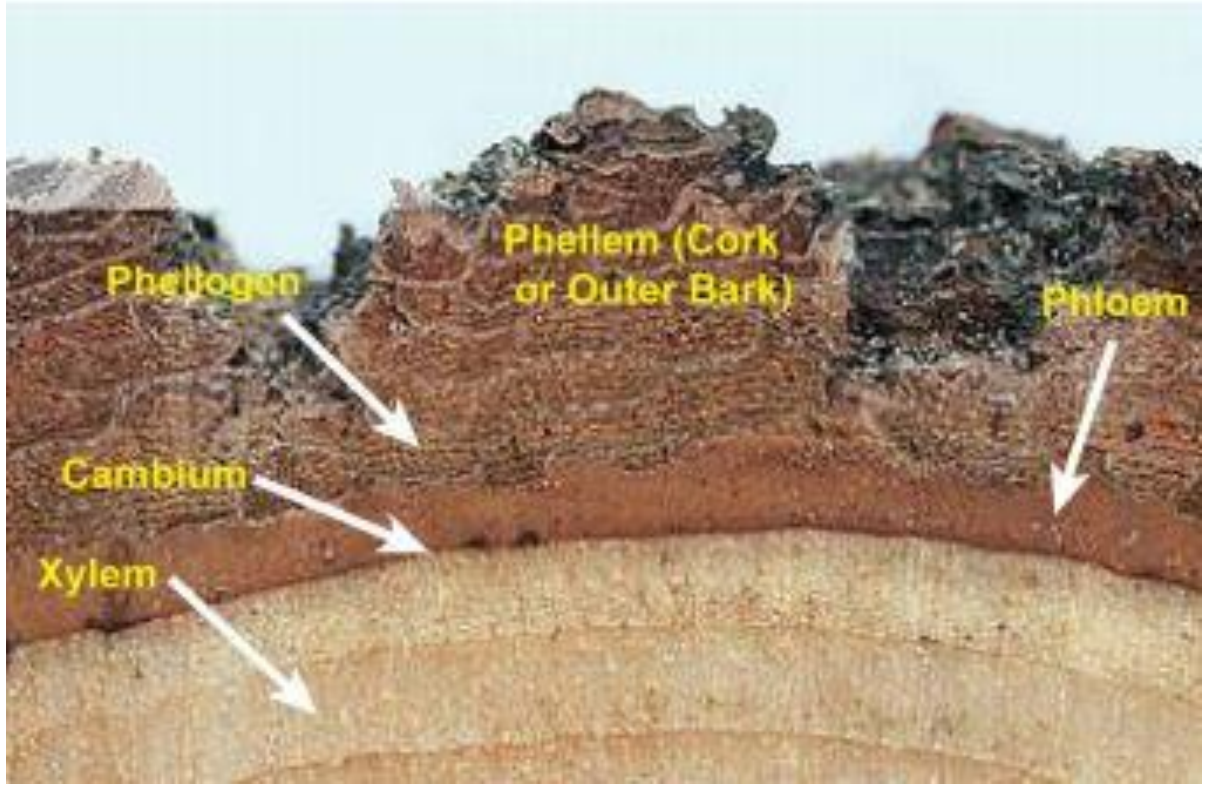




*Image sources: 1) U.S. Department of Agriculture, Forest Service 2) Utah State University Extension*

# Western Red Cedar







*Image sources: (Tree) CTCLUSI; (bark) Wikimedia Commons; (leaves) Wikimedia commons*

# Traditional CTCLUSI uses of cedar



Construction Material



Baskets



Clothing



Canoe

*Image source: CTCLUSI*

# Why Cedar?



**Plank House- Strong wood lasts for many years**



**Baskets- flexible bark bends without breaking**



**Clothing- Soft and insect-resistant**



**Canoe- Lightweight wood moves easily through water**

*Image source: CTCLUSI*

SCIENCE

# Bark Identification and Reflection Worksheet

Your name: _____Date: _____

1. **Noticing Patterns**
   Walk to several different trees and look at and touch their bark. Answer the following questions.

   - How do the parts of the bark differ from tree to tree? What is similar and what is different? Record your thinking using words, pictures, symbols, numbers, or a combination of these.

   - What characteristics help this tree survive? Draw or write about one structure you observed and explain how it might help the tree.



## 2. Observing Bark

Choose a tree and look closely at its bark. Use your senses to answer the following questions.

- What color is the bark?
- How does the bark feel? (Circle all that apply)

  Smooth | Rough | Shaggy | Papery | Scaly | Other: _____

- Does the bark have a smell? Describe it.

- Can you find any living things on the bark? Record what you see using words, pictures, numbers, or a combination of these.

- Draw a picture of your bark sample below. Label any special features you notice.

- Which characteristic seems most important for this tree? Why?





To be done at the end of the Cedar Activities.

### 3. Reflection: Observation, Knowledge, and Care

1. One important use of Western Red Cedar for the Confederated Tribes of the Coos, Lower Umpqua and Siuslaw Indians is:

   What characteristics of Cedar make this use possible?

2. The Coos, Lower Umpqua and Siuslaw People developed knowledge of Cedar through generations of observation and relationship. How might this knowledge help people make decisions about caring for Cedar trees?

3. What does "nothing had to be wasted" help you understand about the relationship between people and cedar?





## Cedar Characteristics Challenge Cards

**Preparation:**

Materials:

- Cedar Use Cards (1 copy of each)
- Cedar Characteristic Cards (see printing instructions below)
- Chart paper or recording sheets for each Cedar Use Card station
- Tape or clips for posting the Cedar Use Cards

Cedar Characteristic Use Cards Printing: (Suggestion: Print and laminate in color on heavy card stock for repeated use.)

Classes of 15–20 Students: Print 3 copies of each Cedar Characteristic Card.
Classes of 21–30 Students: Print 5 copies of each Cedar Characteristic Card.
Classes Larger than 30 Students: Print additional copies as needed so that each student can draw a card during Round 1.

Set Up:

1. Place the Cedar Use Cards around the room.
2. Place chart paper next to each Cedar Use Card.
3. Shuffle the Cedar Characteristic Cards and place them face down in a central location.
4. Label chart paper with:

| Characteristic | Why might it help? |
|---|---|

Note: Students may use words, pictures, labels, symbols, numbers, or a combination of these to communicate their thinking.

Estimated Time: 15 minutes

- Round 1: 2–3 minutes
- Round 2: 3–4 minutes
- Round 3: 3–4 minutes
- Debrief: 2–3 minutes
-

**Activity Overview:**

Purpose
Students explore how the characteristics of cedar made different uses possible. Through observation, reasoning, and discussion, students begin to understand how generations of knowledge helped the Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians identify and use the unique properties of Cedar.

Important Notes

- There may be more than one reasonable match.
- Encourage students to explain their thinking.
- The goal is not to find the "correct" connection.
- Students should notice that a single characteristic may support several different uses and that a single use may rely on several characteristics.

Tip**:** If time is limited, complete Round 1 (individual) and Round 2 (partner) only. If additional time is available, include Round 3 (Notice and Compare) before the whole-group debrief.

(To be copied, projected, or read aloud.)

## Cedar Characteristics Challenge Instructions

There may be more than one reasonable connection. Focus on explaining your thinking.

**Round 1: Individual Thinking**

1. Draw one Cedar Characteristic Card.
2. Read the characteristic.
3. Decide which Cedar use it could help support.
4. Place your card at that station.
5. Add your thinking to the chart paper.
   Use words, pictures, labels, numbers, or symbols to show your thinking.

**Round 2: Partner Thinking**

1. Work with a partner.
2. Draw a new Cedar Characteristic Card.
3. Decide together where it belongs.
4. Add your thinking to the chart paper.
   There may be more than one reasonable connection.

**Round 3: Notice and Compare**

1. Visit several stations.
2. Read classmates' ideas.
3. Notice:
   - patterns,
   - similarities,
   - differences,
   - new ideas.
4. Add a new idea or strengthen an existing idea.

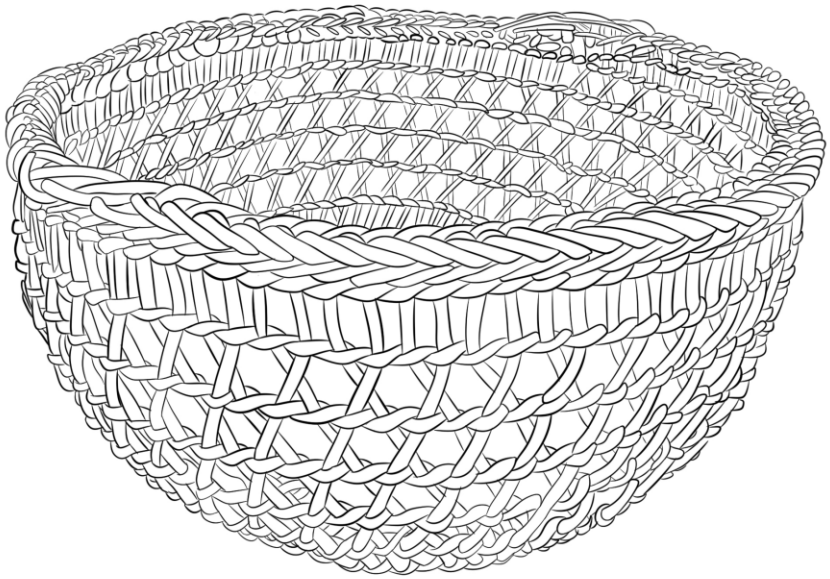
**Reflection**

Through generations of observation, the Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians learned which cedar characteristics made different uses possible.

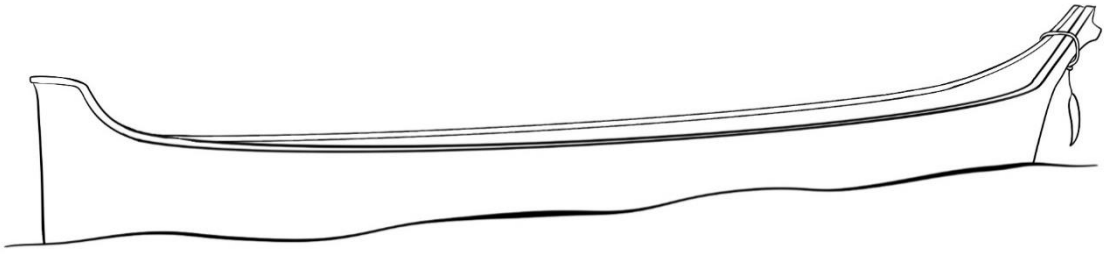
- What are you noticing about the relationship between cedar characteristics and cedar uses?

Cedar Use Cards

# Basket

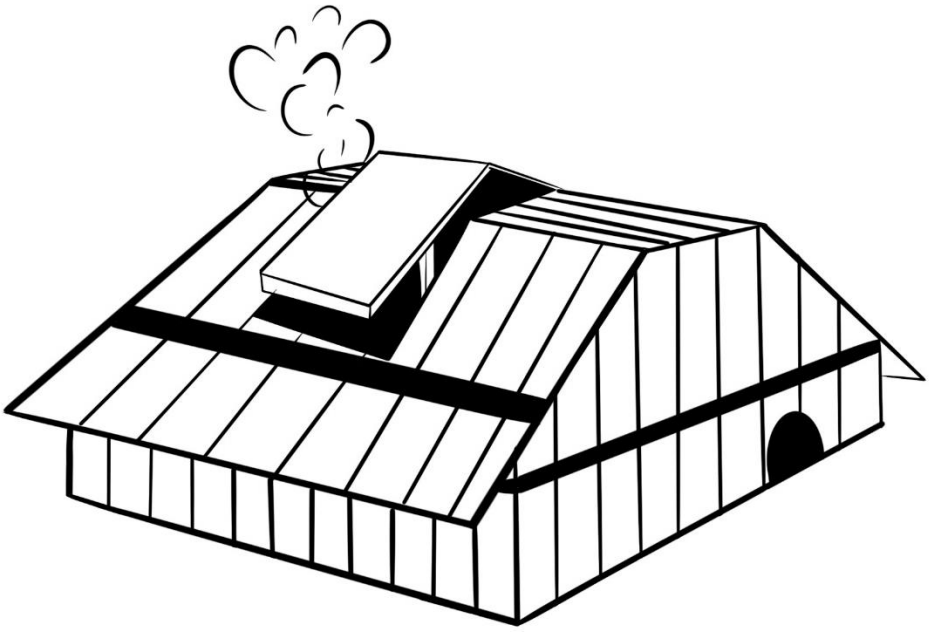


# Canoe

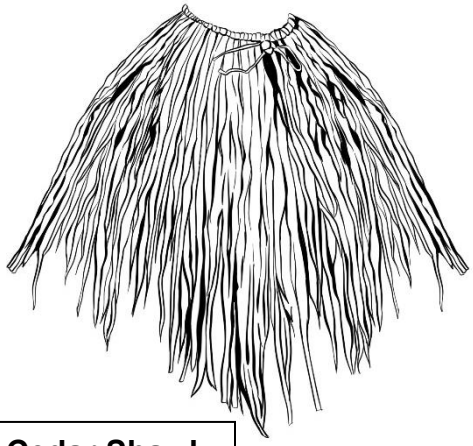


Cedar Use Cards

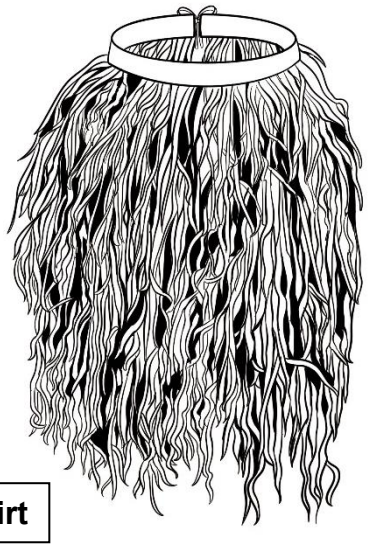
# Plank House



# Clothing



**Cedar Shawl**



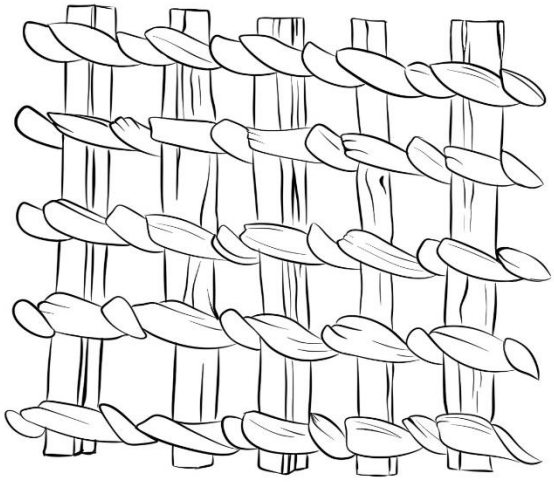
**Cedar Skirt**

Cedar Use Cards

# Rope

Picture/Drawing of Rope

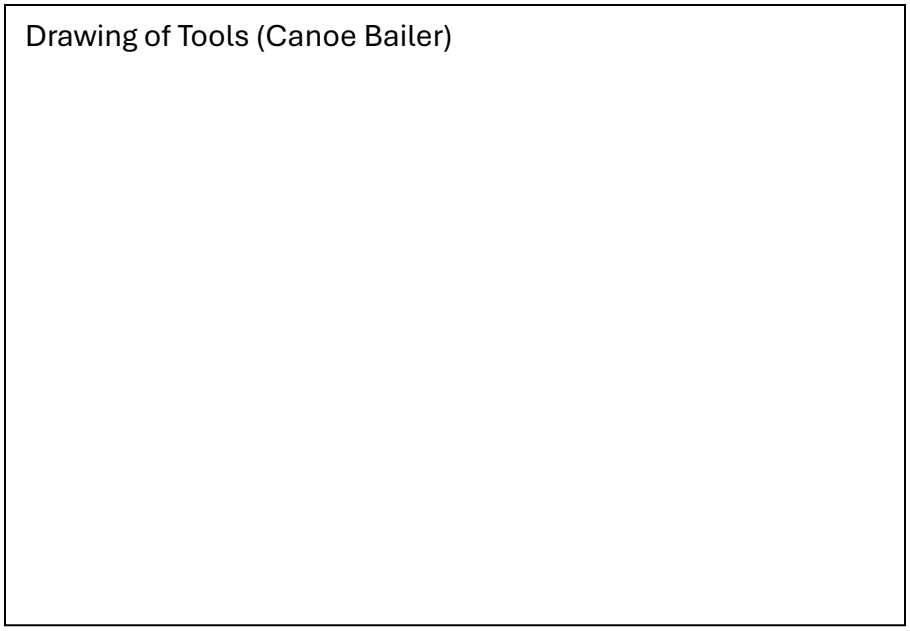
# Woven Mat



Cedar Use Cards

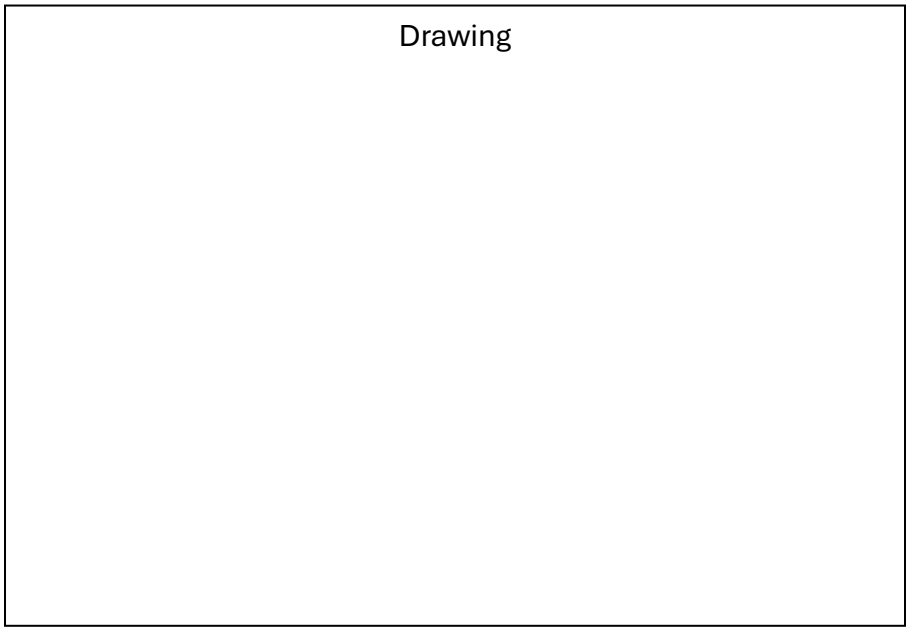
# Tools

Drawing of Tools (Canoe Bailer)



# Baby Bathing Canoe

Drawing



Cedar Characteristics Cards

| | |
|---|---|
| **Flexible Bark**<br>Can bend and fold without breaking. | **Strong Wood**<br>Can support heavy weight and withstand use. |
| **Lightweight Wood**<br>Easy to move and carry | **Resistant to Rot**<br>Holds up well in wet environments. |
| **Straight Grain**<br>Can be split into long, even pieces. | **Fragrant Oils**<br>Contains natural oils that help protect against insects and decay. |
| **Water Resistant**<br>Can shed water and stay useful in wet weather. | |