

LOUISIANA SCIENCE STANDARDS THAT ARE INTRODUCED OR REINFORCED DURING TREES AND TRAILS FIELD TRIPS

SCIENCE

1st grade

FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSES

- **1-LS1-1:** Use tools and 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.
LE.LS1Aa: All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water and air.
LE.LSID.a: Animals have body parts that capture and convey different kinds of information needed for growth and survival. Animals respond to these inputs with behaviors that help them survive. Plants also respond to some external inputs.
LE.ETS1B.a: Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for solutions to a problem.
- **1-LS1-2:** Read grade-appropriate texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.
LE.LS1B.a: Adult plants and animals can have offspring. In many kinds of animals, parents and the offspring themselves engage in behaviors that help the offspring to survive.

HEREDITY: INHERITANCE AND VARIATION OF TRAITS

- **1-LS3-1:** Make observations to construct evidence-based account that young plants and animals are similar, but not exactly like, their parents.
LE.LS3A.a: Young animals are very much, but not exactly, like their parents. Plants also are very much, but not exactly, like their parents.
LE.LS3B.a: Individuals of the same kind of plant or animal are recognizable as similar but can also vary in many ways.

ANCHOR PHENOMENA THAT CAN BE INTRODUCED IN THE CLASSROOM (PRE-TRIP OPTIONS)

1. What are pollinators? Watch this you tube video- “The Beauty of Pollination,” by Louie Schwartzberg. Moving Art. Link is: <http://youtu.be/MQiszdkOwuU>
2. Why do bees have fuzzy heads?

3. What is this a picture of? Why is it curled up in a ball?



4. How is a proboscis like a mouth?
5. Where do trees get their food?
6. Why do stink bugs stink?
7. Why are some bees and butterflies black and yellow?
8. Trees, flowers, grasses are all plants.
9. Why do we need trees?
10. Tree cookie. What is that?



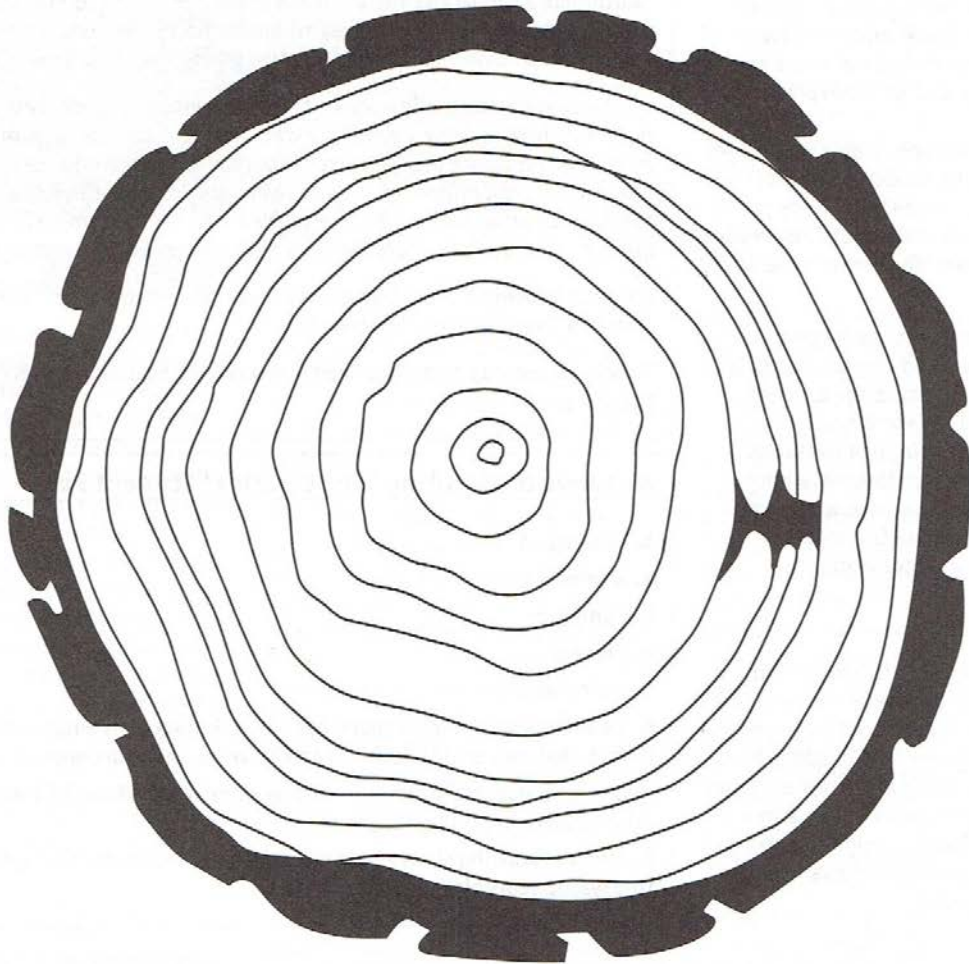
Activities to Extend Conceptual Understanding of Performance Expectations

1. **GROWING PLANTS FROM SEEDS** - Students will observe the growth of lima bean plants from seeds. Discuss what seeds need to sprout and continue to develop into a plant that when given proper environmental conditions will produce lima beans. Link to the activity- <https://www.wikihow.com/Grow-Lima-Beans>
2. **LIFE CYCLE COMPARISONS** - Plants and other organisms all have a life cycle. Students can draw and describe the life cycle of a person and/or other animal, and compare it to the life cycle of the tree. (Life cycle of a tree attached).
3. **TREE COOKIE ACTIVITY** - Show students a tree cookie and how to determine the age of the tree by counting the rings (A picture of a tree cookie is attached). Using a paper plate and crayons, have students create a tree cookie that would be approximately their age. You can also point out the bark, bumpy edges of the

tree, the center circle of heartwood and the smooth inside edge known as the cambium layer.

COUNT THE TREE RINGS ON THIS TREE COOKIE TO DETERMINE HOW OLD THE TREE IS. THEN DRAW YOUR OWN TREE COOKIE THE SAME AGE AS YOURSELF.

Tree Rings



Project Learning Tree
Student Page

Life Cycle of a Tree

