Lesson created by: JamieLynn Cook and Jacqueline South

Length of lesson: approx. 30 minutes

Science Objectives: SOL 3.6
The student will investigate and understand that environments support a diversity of plants and animals that share limited resources.

Language Arts Objectives: SOL 3.5, 3.6
The student will explain cause and effect relationships.

Materials
A Log’s Life by Wendy Pfeffer
Cause and Effect Graphic Organizer (provided with lesson)

Procedure
Before Reading: Ask students to brainstorm in a “class generated list” all of the animals that could live in/on a tree. Record responses. Explain to students today they will listen to the story about what happens to a tree over time. Ask them to listen for cause and effect relationships. Read the story once for enjoyment, then reread for lesson.

During Reading: Using an over head or document camera contraption, show students the Cause and Effect Graphic Organizer. Stop at the different chunks below to have a class discussion about the cause and effect relationship. Have students record their responses on the graphic organizer.

Chunk# 1 – The Cause – a storm with strong winds and lightening
The Effect – the tree crashes down and becomes a log

Chunk# 2 – The Cause – seasons of weather and animals who make the log their home
The Effect – the log collapses and falls to the ground

Chunk# 3 – The Cause – moss grows all over the log
The Effect – the log crumbles into small pieces

Chunk# 4 – The Cause – Earthworms churn eat the crumbles.
The Effect – After ten years of rotting, it has become dirt.

Chunk#5 – The Cause – A new seed falls to the ground.
The Effect – grows into a new tree, the life cycle of a tree starts over again

Evaluation
View student graphic organizers to determine whether students were able to articulate the cause and effect relationships in the story. (see attached graphic organizer)

Possible Center Ideas
1. Word Study: Create word cards with nouns and verbs on them. Use examples from the story of how the animals (animals) move (verb). Have students sort word cards into 2 groups.
2. Science/Art: Have students draw the life cycle of a tree.

3. Science: Using your senses: Have students look back through the story and write down words that describe sounds and things they could see.

4. Science: Have students sort the animals in the story into herbivore, carnivore, and omnivore.

5. Science: Have students sort living things into consumers, producers, and decomposers.

6. Social Studies: Create a list of products that are made from wood. Then, draw a before and after picture to represent how a piece of wood changes. For example, draw a piece of wood turning into a piece of furniture or paper.

7. Writing/Research: Have students choose an animal from the story. The student will research information about the animal and then write a creative story about the animal’s life in the log.

**Differentiated Ideas**

Higher Level Thinking: Describe how natural events and human interaction can effect the environment in positive and negative ways. Have students write and explain how trees can be affected by other natural events to cause destruction in the forest. Have students write a persuasive essay arguing for why human interaction in the rainforest/forest could be good or bad.

Support: Have students draw picture cards in the order of the events in the story. Cut and mix up picture cards and have the students put them back in order. Students should see that each picture changes as a result of cause and effect. Repeat as necessary.