**Fourth Grade**

**Key Concept 1:**

**Interdependence Lesson**

**Overview:**

This lesson is designed to introduce students to the concept of an interdependent world in a way that they can relate to.

**Materials Needed:**

* Pencil and paper

**Key Vocabulary:**

Dependence

Interdependence

Reciprocal relationships

**Objectives:**

E.7.4.2 Explain effects of increasing economic interdependence on different regions of the United States

G.9.4.1 Analyze effects over time of human-generated changes in the physical environment

G.9.4.3 Analyze ways environmental characteristics affect population distribution in Arkansas, the United States, and the world

G.10.4.1 Compare natural resources in various geographic regions to influence human settlement patterns

G.11.4.1 Describe global connections created through increased trade, transportation, communication, and technology

**Instructions:**

1. Have students list all the different species referred to as pets that they interact with or observe each day.
2. Talk about the relationship that each of these animals has with the human counterpart, paying close attention to reciprocal relationships and dependency. (A dog, cat, bird or fish usually depends on a human for their food, water, shelter, health care and companionship.)
3. Discuss what might happen to those pets if your family didn't come home for a week. Where would they find food? Water? Would they be lonely?
4. Discuss how we have created these "ecosystems" for our pets and if not maintained, the pet would lack the necessary things needed for survival.

Note: An ecosystem is made up of living organisms and their habitats (it includes plants, animals, microorganisms, soil, rocks, minerals, water sources and the atmosphere).

1. Ask the students to list the things they need to survive each day.
2. In small groups have students create a diagram (concept map) that describes where each of the things they need for survival comes from. This is called developing a concept map. Put the key word (food) in the middle of a sheet of paper. The kinds of food they commonly eat would make up the second concentric circle around the key word, 'food.' Then have students brainstorm a list of the places the foods come from by extending outward as new ideas emerge. For example, apples might be the first word on the second level out. Extending out from the word apple, the children might list the different stores they go to for apples. Then in a concentric circle, list where in the store originates.

Example: Apple -- Kroger -- Produce Section -- California.

1. When students have exhausted their lists ask them to imagine trucks disappearing from the scene. What would change? Would their favorite food still be available in the store?
2. Imagine that apple trees do not produce fruit one year. What might disappear from the stores? What if all the cows went on strike? What might not be in the store if cows refused to cooperate with humans? Have students read the labels on their food for one night and list all the food that is dependent on cows.
3. This is a perfect Segway into the concept of interdependence in global economics.

Be sure to check out Economics Arkansas’s website for additional free lesson plans and resources for all of your economics needs! [www.economicsarkansas.org](http://www.economicsarkansas.org)!