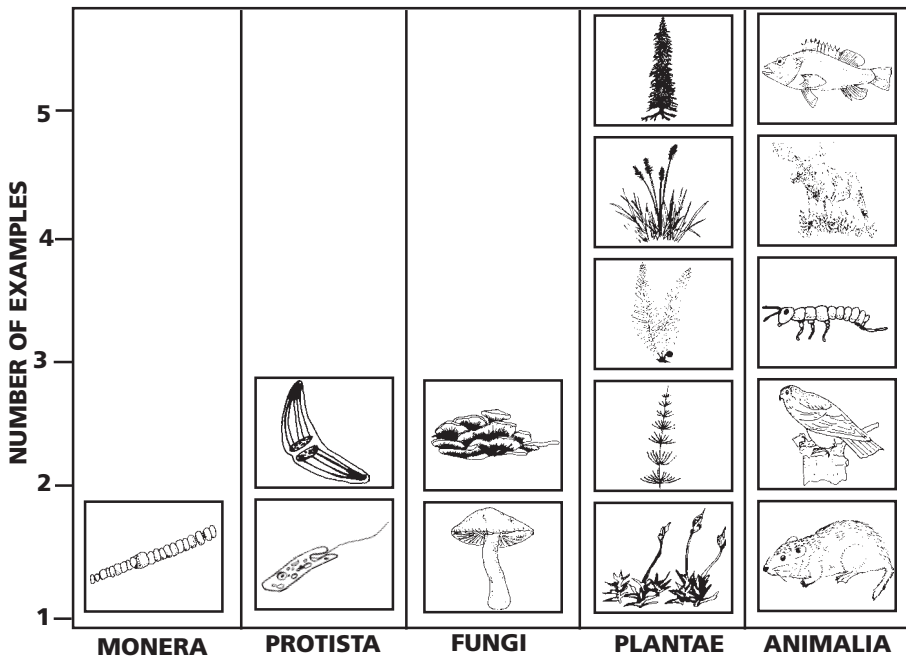


# Five Kingdoms But No King

ALERT: ALASKA ECOLOGY CARDS OPTIONAL



## Section 1 ECOLOGY ACTIVITIES

**Grade Levels:** 1-6

**Subjects:** Science, language arts, art

**Skills:** Classifying, applying, drawing, listening, sorting

**Duration:** Two 30-minute periods

**Group Size:** Any

**Setting:** Indoors

**Vocabulary:** Algae, Animalia, bacteria, detritivores, eukaryotic, Fungi, living things, kingdoms, Monera, nonliving things, Plantae, prokaryotic, Protista

### Objectives:

1. Students will name the five kingdoms of living things.
2. Students will be able to identify an example from each kingdom.

### Teaching Strategy:

Students become more familiar with living and nonliving things in an ecosystem and with the five kingdoms by classifying sets of pictures.

### Complementary Activities:

"It's Alive, Isn't It?" in this section. And all "Investigating..." living things in their habitats activities in Section 3.

### Materials:

"Five Living Kingdoms" fact sheets (from INSIGHTS Section 1). Alaska Ecology Cards or magazines and/or books (that can be cut) with pictures of nature or wildlife. Index cards (3x5 or 5x7) at least five per student, glue, crayons or markers, and something to represent each of the five kingdoms (pond water for

protists, mushrooms and lichens for fungi, microscope slides of bacteria for monerans).

### Background:

See INSIGHTS, Section 1, Elements of Ecosystems.

### Procedure:

1. Review definitions for the terms **living** and **nonliving**. Brainstorm with students a list of living and nonliving things. Introduce the Five Kingdoms of Living Things and discuss the differences between each. Ask students to think of representatives of each kingdom.

### VARIATION FOR YOUNGER STUDENTS

For younger students, teachers may want to focus on the plant and animal kingdoms, or on the concepts of "living" and "nonliving."

2. This step may be done in class, as homework, or as preparation by the teacher: Ask students to go through the resource materials and make a collection of pictures of living things from the five kingdoms and some nonliving things. Encourage students to look



for microscopic living things as well as large, easily recognizable things.

3. Students draw or paste their pictures on separate index cards. Each student makes five cards, one image per card. If appropriate, students write the name of the pictured item on the card. Collect the cards.

3. Divide the class into teams or have students play individually. Shuffle all the cards together.

4. Pass 5-10 cards to each team, leaving a small class pile in the center. Explain that the object of the game is for each team to get rid of all its cards by correctly classifying the item pictured.

5. Depending on grade level and experience, the cards can be classified as living or nonliving, or by kingdoms. The teacher calls out a category, living or nonliving (or plants, animals, fungi, etc.).

6. If a team has a card that fits the category, the students should hold it up. If their classification is correct, they discard the card to the central pile. If their classification is wrong, they have to draw another card from the pile and they can't discard. Allow the teams time to come to a decision among themselves about which card to hold up.

7. The first team to discard all of its cards wins.

### **Evaluation:**

1. Students list the five kingdoms of living things and give an example for each.

2. The teacher posts a blank bar graph of the Five Kingdoms of Living Things. Each student randomly chooses any five cards and sorts them according to the appropriate kingdom. Students glue their cards on the graph in the appropriate column. The teacher checks each student's placement.

### **Curriculum Connections:**

(See appendix for full citations)

#### **Books:**

*DK Science Encyclopedia* (also on CD)

*How Nature Works* (Burnie)

*Nature* (Rainis)

#### **Website:**

Natural Perspective (on-line periodical)

<[www.perspective.com/nature](http://www.perspective.com/nature)>

### **Teacher Resources:**

(See appendix)

