DYNAMIC®
LEARNING MAPS

Target Level	Precursor Level	Initial Level	Accessibility Considerations for Science and Engineering Practice: Constructing Explanations and Designing Solutions
Use models of food chains or food webs to identify producers and consumers in aquatic and terrestrial ecosystems.	Classify animals based on what they eat (e.g., meat eating, plant eating).	Identify food that animals eat.	• Use concrete pictures and/or tactile representations/objects to represent concepts in a problem definition or explanation. • Select from choices presented orally and/or with concrete pictures and/or tactile representations/objects to represent solutions to a problem.

Activity Title	Estimated Classroom Time Needed	Essential Questions
What Animals Eat	One class period	• Does the student understand that organisms interact in an ecosystem for food? • Does the student understand the role of producers and consumers in a food chain?

Suggested Materials

Story featuring different animals eating, pictures or tactile representations of meat eaters and plant eaters, and pictures or tactile representations of food, non-food items, and arrows (to show direction of energy transfer)

Example story:
- Cole, J (1996). *The Magic School Bus Gets Eaten: A Book About Food Chains*. New York: Scholastic.

Additional stories and texts:
- http://www.ecologyedu.com/education_resources/food_chain_and_food_web_book_reviews.html
- http://www.nsta.org/recommends/

Engage Students in the Activity

Ask students about their favorite animals. Ask students questions about what kind of food their favorite animals eat. Use picture response cards and/or tactile representations during the discussion. Read a story about different animals eating foods. Use literature that includes animals that eat plants and meats.

Use a sample video to build on or link to prior knowledge on food chains:
- "Feed Me: Classifying Organisms," https://www.youtube.com/watch?v=AHCOzc143Ec

Activity Description

Define (throughout the activity): meat eater, plant eater, producer, consumer

Step 1: Select a story representing an aquatic ecosystem or a terrestrial ecosystem. After discussing different animals and what they eat, have students complete basic models of foods that animals eat. Students should be given a model to complete with three images or tactile representations: one of an animal, one of a food that the animal eats, and one of a non-food item. Ask the students to identify what completes the model. Have the students practice with a variety of animals and foods. Later in the activity, ask the students to identify the specific types of foods each animal eats.

Step 2: Gather images or tactile representations of familiar animals that eat only meat or only plants (not omnivores). Display the image or tactile representation of an animal to the students using a model similar to the one above, adding in a plant or meat image or tactile representation, and help identify if the animal eats plants or animals. Talk with students about how animals can be grouped based on if they eat meat or plants. After the students have identified what the different animals eat, have the students sort the animal pictures or tactile representations into two groups: plant eaters and meat eaters.

Step 3: Create an example food chain similar to the model below, using picture cards or tactile representations. Using the organisms from a story, identify a producer (makes its own food), and a consumer (depends on others for food and must eat other organisms to obtain food) for students. Point out that animals described earlier in the activity are all consumers. Identify that some animals eat producers (plants) and that all plants are producers. Using the story, have students create a food chain using picture cards or tactile representations and arrows.

An adaptable supplemental activity can be found at https://www.scholastic.com/magicschoolbus/parentteacher/activities/eaten.htm

What do you think of this activity? Let us know: **http://tinyurl.com/gnjlu42**   © 2014 University of Kansas, Center for Educational Testing and Evaluation

Ideas for Differentiating the Activity		
At the Target level:	*At the Precursor level:*	*At the Initial level:*
Students will identify producers and consumers in aquatic and terrestrial ecosystems.	Students will classify animals based on what they eat.	Students will use models to identify food an animal eats.

Checks for Understanding		
At the Target level, students will:	*At the Precursor level, students will:*	*At the Initial level, students will:*
Label and place producers and consumers accurately in food chains found in aquatic or terrestrial ecosystems.	Identify animals as meat eaters or plant eaters and group together animals that eat the same type of foods.	Identify a food item that completes a presented model.