

ENERGY MOVEMENT THROUGH A FOOD CHAIN

Focus Lesson: Energy movement through a food chain

Materials:

Marbles

Pass the Energy, Please! By Barbara Shaw McKinney

Grade: 5

Time: 40 minutes

***Common Core Standards:**

CCSS.ELA-LITERACY.W.5.3

Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.

Thinking Skill: Collaborating with others, Conceptualizing

Objective:

Students will be able to understand that energy moves from one organism to another when an organism is consumed. Students will be able to understand that energy decreases as it moves through a food chain (producers to tertiary consumers) through a hands-on activity.

Connection:

We've been learning about food chains and food webs. Today we are going to explore how energy moves through a food chain.

Explicit Instruction:

Review the definition of a food chain. Ask students for examples (a pattern of eating and being eaten; for example a plant is eaten by a rabbit, which is eaten by a wolf)

Ask the class where they think they get their energy? (food)

Read *Pass The Energy, Please* by Barbara Shaw McKinney → Discuss how the food chains always start with plants and then move to consumers



Guided Practice:

Create groups of 5 students. Give each student a role in a food chain (sun, producer, primary consumer, secondary consumer, tertiary consumer). Explain to students that they are going to use their energy balls (marbles) in their food web. The sun will start with all of the energy balls; he/she will pass all of the balls to the producer because it produces all of its energy from the sun. Next the primary consumer can take half of the energy balls away. The secondary consumer will then take away half of the energy balls away from the primary consumer. Last the tertiary consumer will take away half of the energy balls away from the secondary consumer.

Ask the students who has the most energy. Who has the least? (Clarify that the sun always has energy to provide so it should not be seen as having the least).

Independent Practice:

Students will write a poem (in the style of the read aloud book) about their food chain and show how energy was passed from one organism to the next.

Reflection – Group Share:

Students can share their poems with the class.

Reading list:

Pass the Energy, Please! By Barbara Shaw McKinney

Teacher Note: