



Candy Corn Lab



Purpose: This lab shows how energy flows through a food chain.

TEKS: 7.5C and 8.11B

Version 1 Directions:

1. Select four students from the class to come to the front of the room. Give each student a sign to wear with the picture and name of an organism.
2. Ask the class to put the students in the correct order to represent a food chain.
3. Hand the first student a bag filled with 100 pieces of candy corn.
 - a. Explain that this organism is the producer and creates all its energy by converting sunlight into chemical energy through photosynthesis. This is represented by the 100 pieces of candy.
4. Have the second student in the row take ten pieces of candy corn from the bag and place it in their own bag. This student is the primary consumer in the ecosystem.
 - a. Explain that the primary consumer only gets 10% of the energy that the producer had.
 - b. Ask students to explain why they only received 10 pieces of candy corn from the producer. (Answers: producers use most of their energy to grow, repair cells, and reproduce so primary consumers only get what's left.)
5. Have the third student take one piece of candy corn from the bag and place it in their own bag. This student is the secondary consumer in the ecosystem.
 - a. Explain that the secondary consumer only gets 10% of the energy that the primary consumer had.
 - b. Ask students to explain why they only received 1 piece of candy corn from the primary consumer. (answer: primary consumers use most of the energy their energy to grow, repair cells, move, think, and reproduce so secondary consumers only get what's left.)

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6. Have the fourth student take the top white portion off the top of the candy corn from student number 3's piece and place it in their own bag.
 - a. Explain that the tertiary consumer only gets 10% of the energy that the secondary consumer had.
 - b. Ask the students to explain why they only received the top portion of the candy corn. (Answer: secondary consumers use most of the energy their energy to grow, repair cells, move, think, and reproduce so tertiary consumers only get what's left.)
7. Have students draw and label the food chain they created. Illustrations should include the name of the organism as well as its level in the ecosystem, and how much energy it received.

Version 2 Directions:

1. Line students up in rows with 4 students in each row.
2. Hand the first student one piece of candy corn. This student represents the producer.
3. Have them give the corn to the next student in the row. This student represents the primary consumer.
4. The primary consumer then breaks off the bottom (yellow) piece and passes the orange and white part on to their neighbor.
5. The next student in line represents the secondary consumer. They keep the orange portion, and pass on the top white portion.
6. The final student is the tertiary consumer, or the top level consumer.
7. Discuss how the amount of energy decreases as the corn moved up the chain.