

# Animated Learning with Stop Motion



Lindsey Tosches & Matt Burch, Somerville Public Schools  
Sue Cusack & Jacy Edelman, Lesley University  
<https://kennedymakerspace.com> • <http://steam.lesley.edu/>

---

# Welcome to Literacy for All



**Hello**  
你好

**Bonjour**  
**Hallo**  
**Ciao**

こんにちは  
**Hola**

# Agenda



Introductions: Kennedy School/Lesley STEAM Partnership

From Ecosystems & Energy Transfer to Plate Boundaries

Curriculum Connections & Student Level Impact

Hands-On Activity: Poetry in Action

Debrief

# Teacher Voice



<https://www.instagram.com/kennedymakerspace/>

# Stop Motion: Connecting Concepts and Open Responses



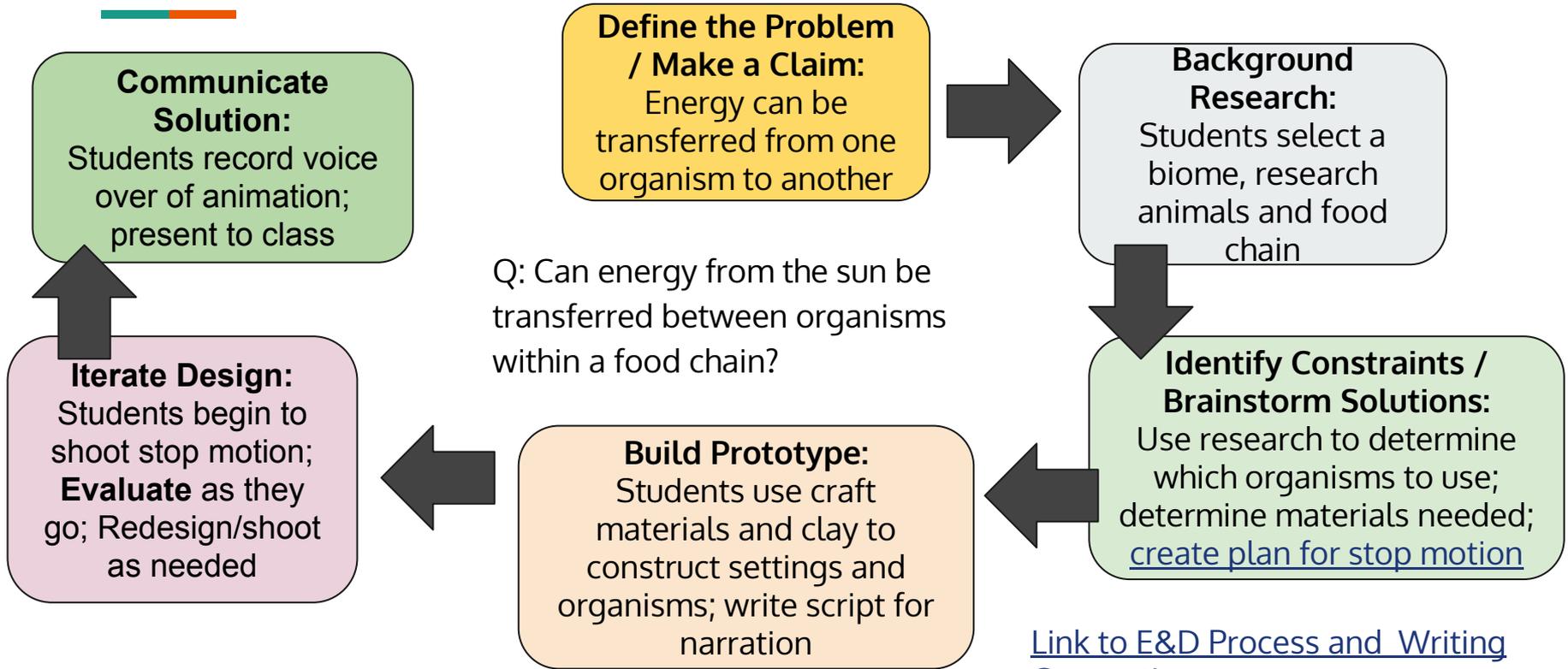
**Question:** *Can energy from the sun be transferred between organisms within a food chain?*

**Standards:** **LS2. Ecosystems: Interactions, Energy, and Dynamics** 5-LS2-1.

Develop a model to describe the movement of matter among producers, consumers, decomposers, and the air, water, and soil in the environment...

**PS3. Energy** 5-PS3-1. Use a model to describe that the food animals digest (a) contains energy that was once energy from the Sun, and (b) provides energy and nutrients for life processes, including body repair, growth, motion, body warmth, and reproduction.

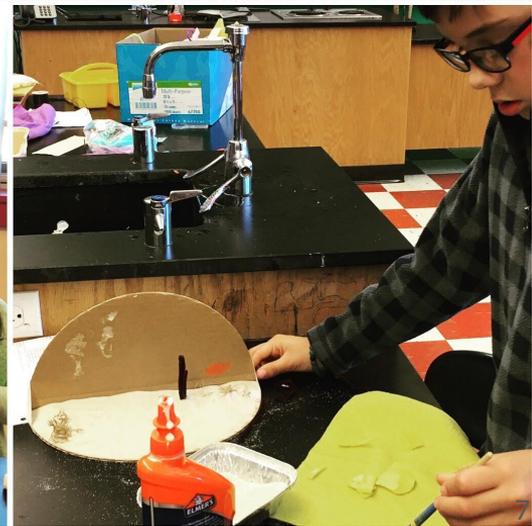
# Engineering and Design Process



[Link to E&D Process and Writing Connection](#)

---

# Behind the Scenes



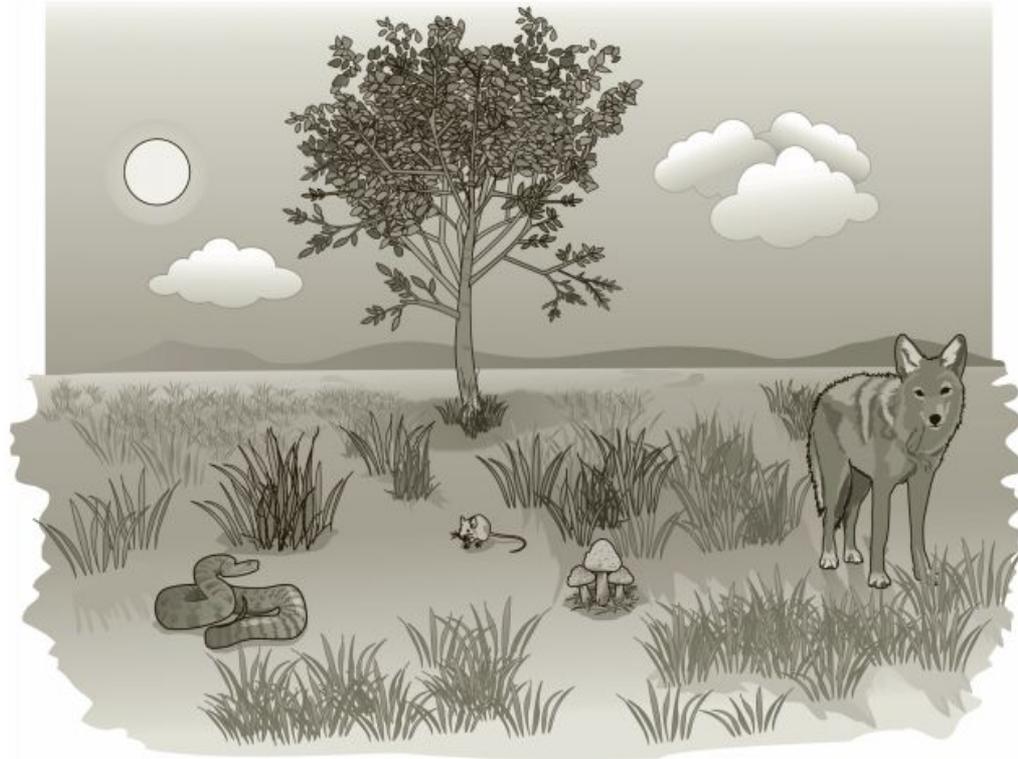


# Final Product: Stop Motion



# Final Product: Open Response Writing<sup>1</sup>

A prairie ecosystem includes many different organisms, such as grasses, coyotes, trees, mushrooms, snakes, and mice, as shown in the picture below. The energy needed by all the organisms in the ecosystem comes from one primary source.



- a) Identify the primary source of energy in the prairie ecosystem.
- b) Identify one producer, one consumer, and one decomposer shown in the picture of the prairie ecosystem.
- c) Explain how the energy from the primary source you identified in part (a) moves through the prairie ecosystem. Be sure to include producers, consumers, and decomposers in your answer.

<sup>1</sup>Massachusetts Department of Education  
<http://www.doe.mass.edu/mcas/pdf/2013/254775.pdf>  
f

# Student Written Work Sample

- A. The primary source of energy in the prairie ecosystem is the sun
- B. The producer is a tree. One consumer is the coyote. One decomposer is the mushroom.
- C. Energy from the sun (primary source of energy) moves through the prairie ecosystem. The tree grows and starts to make photosynthesis by getting water, sunlight, and air. The mice (consumer/herbivore) eats the grass. Then the snakes eats the mice and he is a carnivore. Then the coyote finds the snake and tries to catch the snake. The coyote is a carnivore. He catches the snake and eats it. After a long time the coyote passes away and he decomposes. The mushrooms decompose the coyote back to the roots and gives them the nutrients. So the trees will grow because of the nutrients that were back in the soil. The tree connects the roots to the mushrooms so the tree will grow. This is how the ecosystem goes through the food chain.

# Stop Motion: Modeling the Plate Boundaries

*Learning Intention: We will be working collaboratively to create a stop motion animation video that models and explains what is occurring at each type of plate boundary.*



## **Success Criteria:**

- 1) I have worked respectfully and cooperatively with my groupmates.
- 2) I have created a storyboard of the movie's "action" and written rough drafts of the narrative.
- 3) I have created a video that is 2 - 5 minutes long and includes 75 or more photos.
- 4) I have visually modeled convergent, divergent, and transform plate boundaries and what is happening at each boundary and what events are likely to occur as a result.
- 5) I have narrated the video's action in clear, descriptive sentences that explain what is happening at each plate boundary and what events are likely to occur as a result.

# Student Work



Student created videos that models and explains each of the three types of plate boundaries.

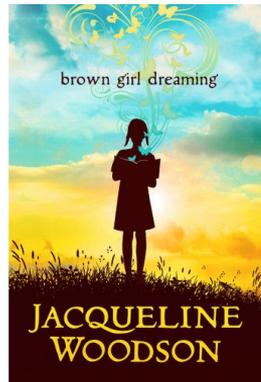
# Shifting to Something More Playful



---

# Poetry in Action

Looking at the work of [Jacqueline Woodson](#) and [Bob Raczka](#), we will explore Stop Motion Animation through poetry.



---

## Share & Debrief

