

# Lesson Plan

## Energy Beads

**Class Duration:** 45 minutes  
hour

**Tour Duration:** 1

**Goals:** Explain how energy moves through the food chain and how much energy is lost at each trophic level by creating a necklace to aid in understanding.

**Supplies:**

- Lanyard
- Variety of beads

**Education:**

- \_\_\_\_\_ Teachers guide students to discover that all plants & animals (including humans) need energy to survive.
- \_\_\_\_\_ Determine that we all get that energy from the sun
- \_\_\_\_\_ Discuss different trophic levels and how energy is lost between each level
- \_\_\_\_\_ Pass out lanyard and beads and use this visual representation as they string the beads to illustrate how energy is passed through the food chain.
- \_\_\_\_\_ Represent a number of objects with a written numeral 0-20

**SCIENCE STANDARDS:**

3.1a  
4.2a, 4.2b, 4.2c  
6.4a, 6.5a, 6.5b, 6.5c, 6.5d

Common Core: K.CC, L.2.4, SL.2.1, L.2.3, W.2.8, SL.2.3,

**NGSS STANDARDS:**

K.W.2.1  
K.CC.3  
K-LS1-1  
SL.K.3  
SL.K.5  
K.MD.A.2  
1.MD.A-1  
5-PS3-1  
5-LS2-1