

# Activity One

## Food chain/web



Cut and stick the images into the right order. Match the pictures to the correct labels. Draw arrows to connect the pictures.

Can you name the animals in your food web? What do you know about them?

**Producer**

**Tertiary Consumer**

**Primary Consumer**

**Secondary Consumer**





# Activity Two

## Food chain pyramid



A trophic level classifies an organism's position on a food chain. As energy passes through each trophic level it is reduced by 10%, because each organism must use some of the energy to live, reproduce, eat, move, etc...

### Questions

1. Using the pyramid, which organisms in each trophic level?
2. What travels through the trophic levels?
3. What is the ultimate source of energy for any food web or chain?
4. What is used to indicate the flow of energy within a food chain or web?
5. What happens to energy as we move from one trophic level to the next? Why?
6. Which trophic level has the most amount of energy available? Which has the least amount available?
7. In food chains and webs, which trophic level must you have more of than others?
8. Which organism (trophic level) within the food chain would affect the ecosystem the most if it were removed? Explain why. Try to remove different cans from your food pyramid, what happens?

# Activity three

## The path of energy flow

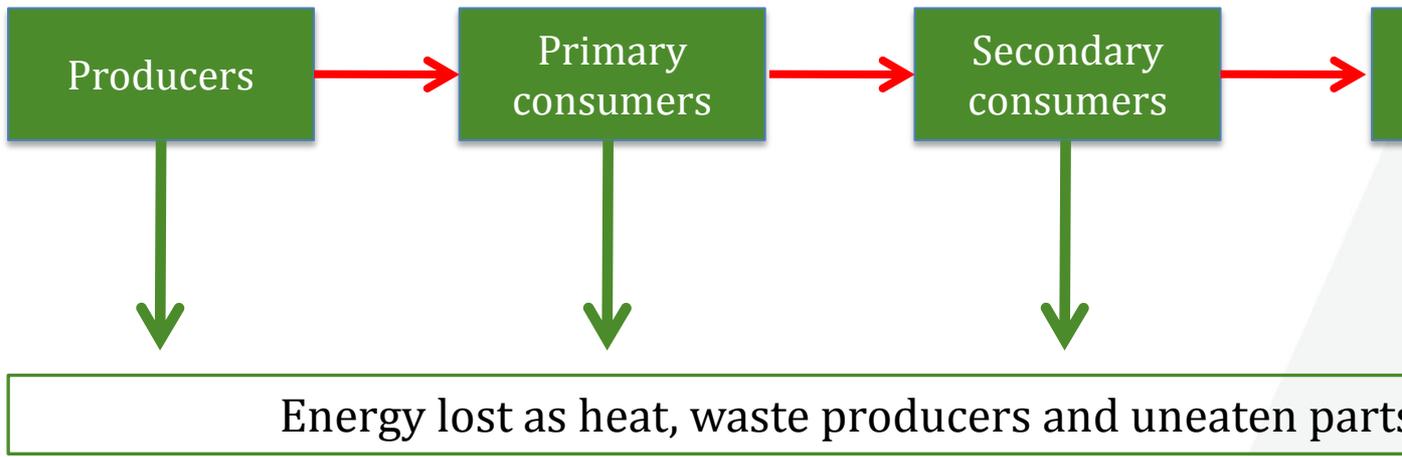


The percentage efficiency of energy transfer between trophic levels can be calculated using the equation:

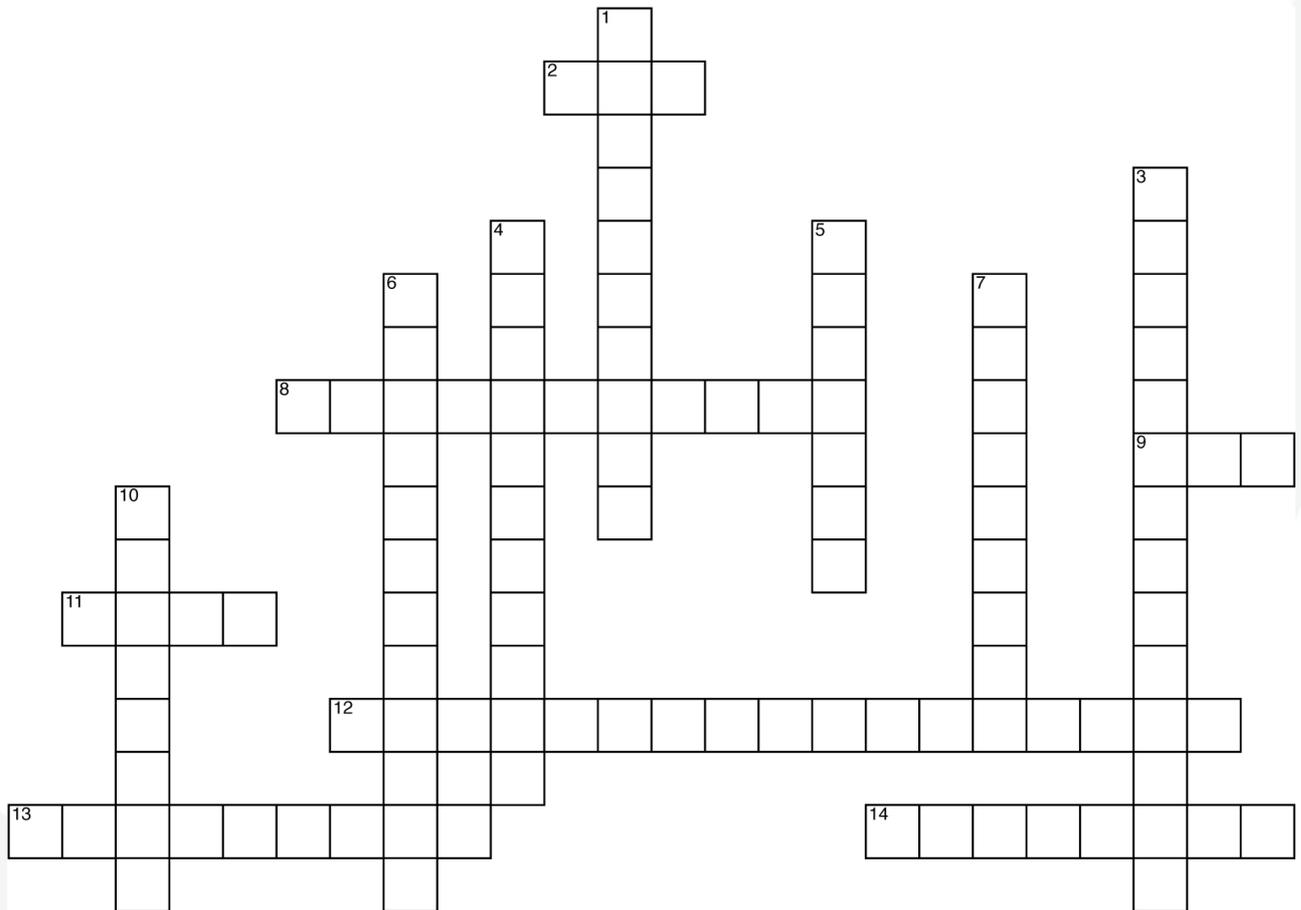
$$\frac{\text{Energy transferred to next level}}{\text{Total energy}} \times 100$$

Have a look at the picture below. Add how much energy is transferred from one trophic level to another, and how much is lost. N.B. The total energy to start with is 5000kJ





# Crossword



## ACROSS

- 2 Only \_\_\_ % of energy is lost during the transfer from one trophic level to the next
- 8 A diagram that represents the numbers of organisms at each trophic level in a food chain
- 9 Primary source of energy
- 11 Along a food chain, organism pass on \_\_\_\_\_ energy (in form of body mass) than they receive
- 12 A \_\_\_ eats primary consumers
- 13 A biological community of organism together with their habitat
- 14 A living thing

## DOWN

- 1 Some consumers which eat only producers are called \_\_\_\_\_
- 3 The chemical process that producers use to create their own food from the energy of the sun
- 4 The struggle between organisms of the same or different species for limited resources, such as food, light or territory
- 5 The interconnected feeding relationships within an ecosystem
- 6 What classifies an organism's position on a food chain?

- 7 All food webs have \_\_\_\_ which make their own food
- 10 A consumer that is not hunted by anything else for food