Competition

Answer the questions below.

1. State the definition of a biotic factor.
   Any living organism that has an effect.
2. State the resources that plants need in order to survive.
   Light, water, carbon dioxide, minerals
3. Explain what the arrows in a food chain represent.
   The direction of energy transfer.
4. Describe what is shown by a pyramid of biomass.
   The total mass of living (or recently dead) tissue in each population in a food chain.
5. Describe how you could use sampling to measure the effect of sunlight on growth of grass.
   Using systematic sampling with a transect from a sunny area to a shaded area, with quadrats placed at regular intervals. The number of blades of grass or height of grass could be counted in each quadrat to determine if there is a pattern.

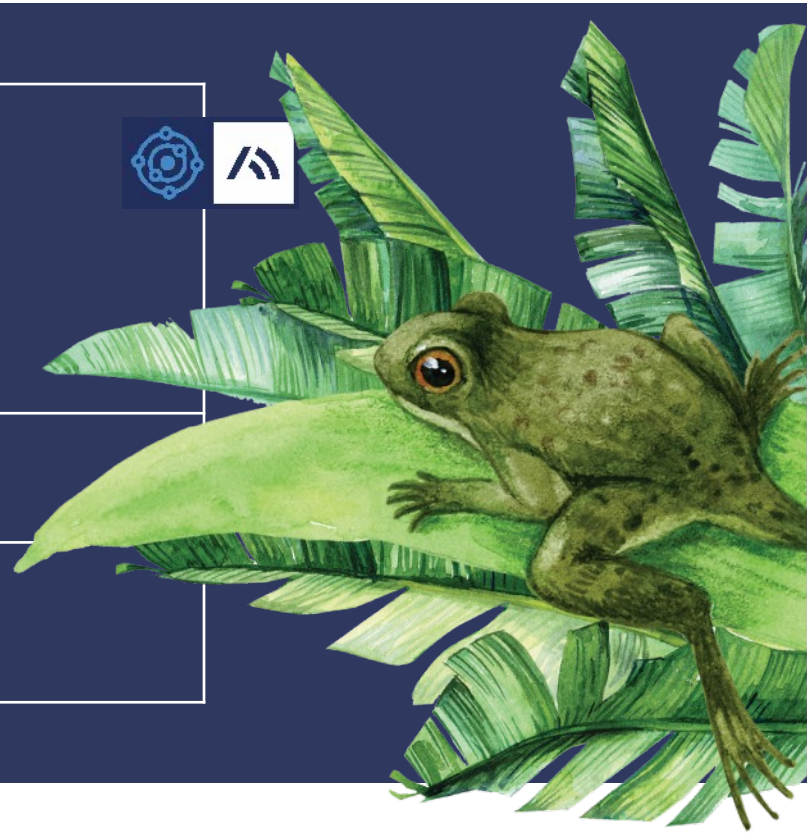
Do Now



Competition

B1.3.10

Science
Mastery

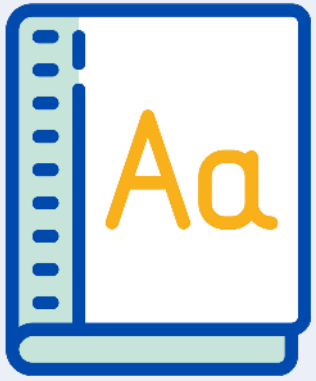


B1.3.1 Prior Knowledge Review
B1.3.2 Ecosystems
B1.3.3 Representative Sampling
B1.3.4 Sampling Investigation
Maths in Science Lesson 8
B1.3.5 Measuring Plant Distribution
B1.3.6 Measuring Plant Distribution Analysis
B1.3.7 Food Chains and Food Webs
B1.3.8 Trophic Levels
B1.3.9 Biotic and Abiotic Factors
➢ **B1.3.10 Competition**

Following this lesson, students will be able to:

- State the resources that animals compete for
- State the resources that plants compete for
- Describe changes that may increase competition within a community

Key Words:



competition **resources** **space**

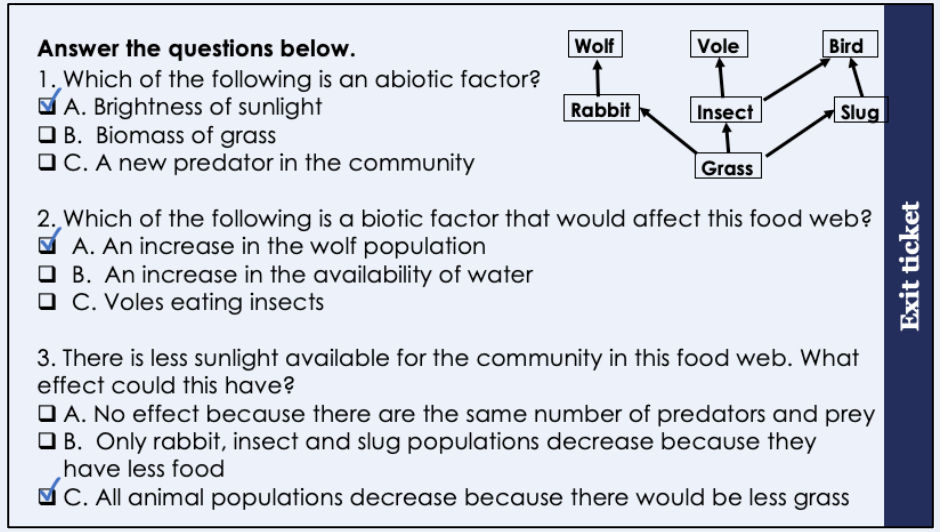
mates **predators** **territory**

Lesson Objectives

This is the fix-it portion of the lesson

The **fix-it** is an opportunity to respond to gaps in knowledge, especially those identified by the previous lesson's exit ticket.

- The teacher should customise this slide as needed, to facilitate
  - **reteach**, **explanation, demonstration** or **modelling** of ideas and concepts that students have not yet grasped or have misunderstood.
  - **practice** answering specific questions or of key skills.
  - **redrafting** or **improving** previous work.



Fix-it

Competition

Competition is when organisms compete for **limited resources.**

Animals compete with each other for **space**, **mates** and **food**.

Plants compete with each other for **space**, **water**, **minerals** and **light**.

Which of these factors are abiotic and which are biotic?





Competition

Some animals compete for **dominance**.

This means they control the territory and access to food and mates.







Did you know?
The term ‘pecking order’ comes from dominance behaviour in chickens.

Competition

Determine if the following statements are true or false:

1. Plants compete for water.
   True
2. Animals compete for light.
   False
3. Competition is only when organisms fight for mates.
   False
4. The organisms that are the best at competing are more likely to grow and survive.
   True
5. Both animals and plants compete for space.
   True

Check for understanding

Which statements do you agree with?

Plants and animals always have to compete for resources.

Plants in the desert must compete for sunlight.

Animals compete for mates so that they can reproduce.

The biggest organisms are always the best competitors.

Talk Task

Answer the questions below.

1. Which of the following would daisies compete for in a field?

☑ A. Water

❑ B. Predators

❑ C. Mates

2. Plants compete for sunlight. What is the best explanation for this?

❑ A. Sunlight helps plants grow

☑ B. Sunlight is needed for photosynthesis, the process by which plants make their own food

❑ C. Taller plants can reach more sunlight

3. Which of the following is an example of competition?

☑ A. A lion marks out its territory

❑ B. The population of birds increases so the population of slugs decreases

❑ C. Cacti in the desert have lots of sunlight

Exit ticket

Feedback

Lesson B1.3.10	
What was good about this lesson?	What can we do to improve this lesson?

Send us your feedback by clicking this link. Thank you!