



UPPER PRIMARY

Advance Science

E-Booklet

Part 2



Animal Adaptation Comprehension - Kangaroos

Upper Primary Advance Science

Adaptation and Habitat of Australia's Native Animal: The Kangaroo

Kangaroos are the world's largest marsupials and are found across Australia in open grasslands, woodlands, and semi-desert regions. There are several species, including the Red Kangaroo, Black Wallaroo, Western Grey Kangaroo, and many others.



Red Kangaroos can weigh up to 90 kg and grow to two metres tall, while Black Wallaroos are the smallest species at around 20 kg.

Kangaroos are famous for hopping – they can travel up to 60 km/h and leap over 8 metres in a single bound. Kangaroos have short hair, powerful hind legs, small forelimbs, big feet, and a muscular tail that helps with balance and movement.

Their fur colour can be red, grey, or brown, depending on the species. Kangaroos have excellent hearing and keen eyesight, and live in social groups called mobs. Females, called 'flyers', carry their young, called joeys, in a forward-opening pouch; males are known as 'boomers'. Kangaroos are unable to hop backwards and are featured on Australia's coat of arms as a symbol of national progress. Kangaroos are also quite strong swimmers when needed

Read the passage above and answer the questions that follow.

1. Which kangaroo species is the smallest?
 - a) Red Kangaroo
 - b) Western Grey Kangaroo
 - c) Black Wallaroo

2. What is the primary function of a kangaroo's tail?
 - a) To store food
 - b) For balance and movement
 - c) Attracting mates

3. How fast can kangaroos hop?
 - a) 30 km/h
 - b) 40 km/h
 - c) 60 km/h

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Read the passage above and answer the questions that follow.

4. What is the name given to groups of kangaroos?
a) Mobs
b) Herds
c) Packs
5. What are male kangaroos commonly called?
a) Flyers
b) Boomers
c) Jacks
6. What unique ability do kangaroos have compared to many other animals?
a) Flying
b) Hopping long distances
c) Climbing trees
7. Which colour can kangaroo fur **NOT** be?
a) Grey
b) Blue
c) Red
8. List two adaptations that help kangaroos survive in Australia's environments.

9. Why are kangaroos on Australia's coat of arms?



Animal Adaptation Comprehension - Kangaroos - Solutions

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Animal Adaptation Comprehension - Kangaroos - Solutions

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Powerful hind legs for hopping long distances



A pouch to carry their young

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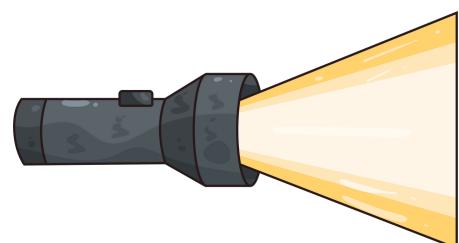
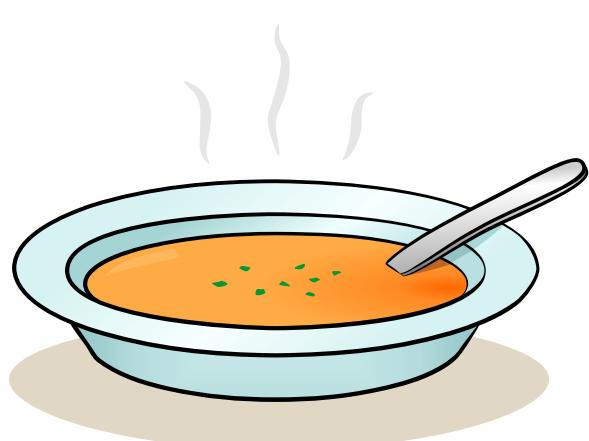
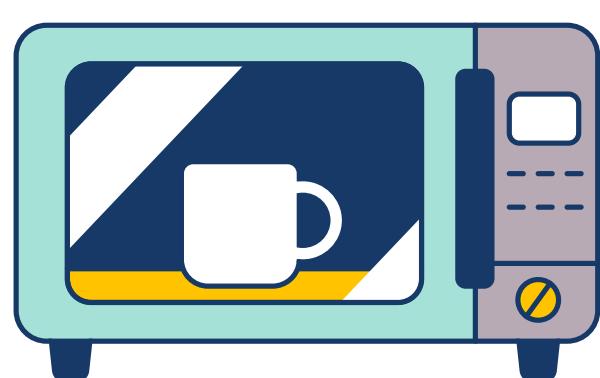
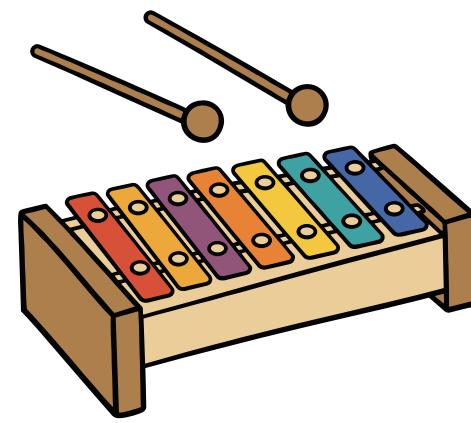
This is because they can only move forwards, symbolising national progress

Forms of Energy - Exercise 1

Upper Primary Advance Science

Match each description to the type of energy. Write on the lines provided.

Word Bank: Electrical Light Kinetic Sound Thermal



Forms of Energy Exercise 1 - Solutions

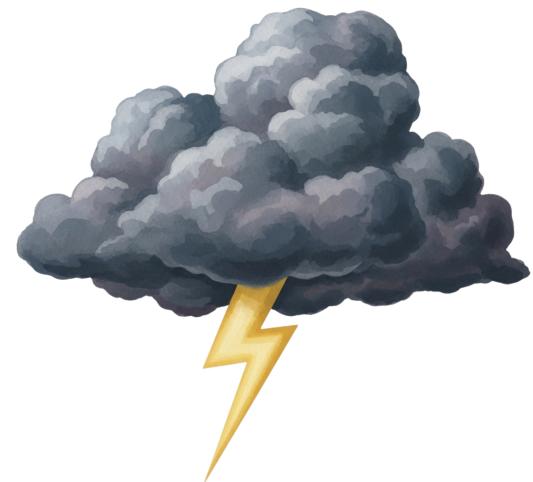
Upper Primary Advance Science

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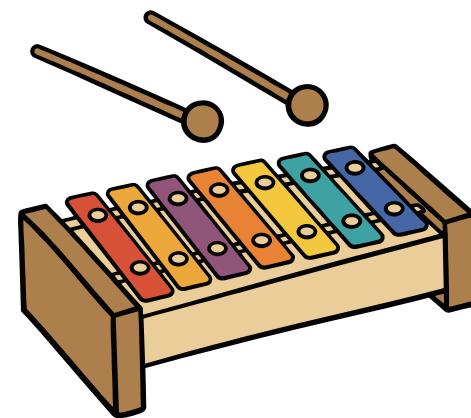
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Kinetic



Electrical



Sound



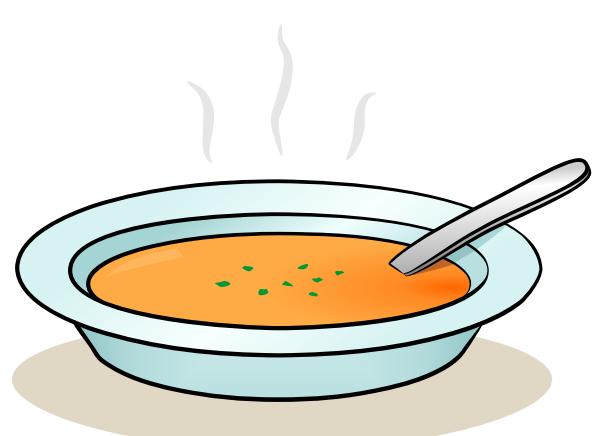
Light



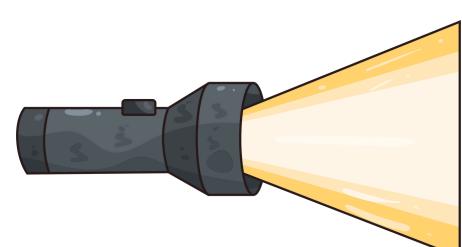
Electrical/ thermal



Sound



Thermal



Light



Kinetic

Natural Disasters in Australia

Upper Primary Advance Science

Read the passage carefully and answer the questions below.

Australia is known for its beautiful beaches, vast deserts, and amazing wildlife, but it is also a land that experiences many natural disasters. These are powerful events caused by nature that can harm people, animals, and the environment. Some of the most common natural disasters in Australia include bushfires, floods, cyclones, and droughts. Each of these disasters affects the country in different ways, but Australians have learned to prepare for and recover from them.



One of the most dangerous natural disasters in Australia is the bushfire. Bushfires are common during the hot, dry summer months, especially in states such as New South Wales, Victoria, and Western Australia. A bushfire can start from a lightning strike, strong winds, or even human activities like campfires left unattended. Once it starts, it can spread quickly through dry grass and forests. Bushfires destroy homes, farms, and wildlife habitats, and the thick smoke can make it hard to breathe. The Black Summer fires of 2019-2020 were some of the worst in Australian history, burning millions of hectares of land. Firefighters worked day and night to protect communities and save animals.

Floods are another natural disaster that often affect parts of Australia. After heavy rain or tropical storms, rivers can overflow and flood nearby towns. Floods can wash away roads, crops, and buildings, leaving families stranded and communities damaged. For example, in early 2022, large floods hit Queensland and New South Wales, forcing thousands of people to leave their homes. However, floods can also help the environment by bringing water to dry land and supporting new plant growth.

In northern Australia, tropical cyclones are a major threat. Cyclones are strong, spinning storms that form over warm ocean waters. They bring heavy rain, strong winds, and large waves. When a cyclone reaches land, it can knock down trees, damage houses, and cut off electricity. Cyclone Tracy, which struck Darwin in 1974, destroyed most of the city and changed the way Australians prepared for storms. Today, early warning systems and emergency shelters help keep people safer during cyclone season.

Droughts are another problem that Australia faces, especially in inland areas. A drought happens when there is very little rainfall for a long time. This causes rivers and dams to dry up, making it difficult for farmers to grow crops or feed their animals. Droughts also increase the risk of bushfires and make water conservation more important than ever. Australians have learned to use water wisely by installing water tanks, planting drought-resistant plants, and recycling water where possible.

Although natural disasters can cause great damage, they also bring out the best in communities. People come together to help one another, rebuild homes, and protect the environment. By understanding natural disasters and preparing for them, Australians can stay safe and resilient in the face of nature's challenges.



Natural Disasters in Australia

Upper Primary Advance Science

Questions

Decide if each statement is True or False. Circle it.

1. Bushfires in Australia only happen in winter. (True / False)
2. The Black Summer fires occurred in 2019–2020 and burned millions of hectares. (True / False)
3. Floods do not always harm the environment; they can also benefit it in some ways. (True / False)

Answer these questions.

4. Name two causes of bushfires mentioned in the passage.

5. Give one way Australians save water during droughts.

Fill in the blanks.

6. Cyclones form over warm _____ waters in northern Australia.
7. During a drought, rivers and _____ dry up.
8. Floods in 2022 affected Queensland and _____.



Natural Disasters in Australia - Solutions

Upper Primary Advance Science

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unattended campfires.

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Forms of Energy - Exercise 2

Upper Primary Advance Science

Circle the correct answer.

1. Which situation shows kinetic energy?

- a) A book on a table
- b) A parked car
- c) A rolling soccer ball
- d) A cold ice bag



2. Which device mainly uses electrical energy to produce light?

- a) Candle
- b) Torch with batteries
- c) Campfire
- d) Matchstick

3. Which is the best example of light energy?

- a) Drum beating
- b) Radio playing
- c) Lightning in the sky
- d) Steam from hot soup

4. When you touch a metal spoon in hot soup and it feels hot, what form of energy moved into the spoon?

- a) Sound energy
- b) Thermal (heat) energy
- c) Light energy
- d) Electrical energy

5. Which device uses electrical energy to make sound energy?

- a) Solar panel
- b) Headphones playing music
- c) Campfire
- d) Rolling skateboard



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