In Australia, the four seasons are summer, autumn, winter and spring. The seasons are identified by the group of calendar months that they belong to.

Season	Months	Weather
Summer	December, January and February.	The weather is hot. Some parts of Australia are humid and other parts are dry.
Autumn	March, April and May.	The weather becomes cooler.
Winter	June, July and August.	The weather is cold. Rain and storms are common. Some places in Australia get snow.
Spring	September, October and November.	The weather becomes warmer however it is still very mixed. There can be rain, wind and cool days.

#### Animals in Summer

Native Australian animals have adapted to survive the Australian heat. Koalas stay still in the shade of a tree and wait for the heat to pass. Sugar gliders are nocturnal so they are active during the cooler nights. During the day, they curl up in the shade of the tree. In summer, kangaroos do not sweat so, instead, they lick themselves to keep cool. Snakes are most active in summer because they are cold-blooded and they need the heat to warm their bodies.



Plants in Summer

Australian native plants have adapted to the summer weather in Australia. Plants with smaller leaves or spikes lose less water through evaporation. If a plant has spikes, it is less likely to be eaten by animals. Some plants will stop growing during summer. They may even look dead; however, they are just in a resting state so they can save energy in the heat. Finally, soft fruits, such peaches, tomatoes and strawberries, ripen. This means that they

are ready to eat in summer. This explains why these fruits are eaten during the summer.





# Questions

1.	low long is summer?		
2.	Which season comes after summer?		
3.	Describe the weather in summer.		
4.	Name one way an animal might keep cool in summer.		
5.	Why do you think a plant may stop growing in the summer?		
6.	Why are snakes most active during the summer?		
7.	Which fruits ripen during summer?		
8.	From what you have read in the text, which plant or animal adaptation is the most effective? Explain your answer.		





- 1. How long is summer?
   Summer is three months long.
- 2. Which season comes after summer? **Autumn comes after summer.**
- 3. Describe the weather in summer.

  In summer, the weather it is hot and dry. Some parts of Australia can be humid.
- 4. Name one way an animal might keep cool in summer.

  Answers will vary but will include one of the following: Animals will keep cool in summer by staying in the shade, hardly moving, being active at night and licking themselves.
- 5. Why do you think a plant may stop growing in the summer?

  Answers will vary but may include: A plant might stop growing in summer to save energy and not use a lot of water.
- 6. Why are snakes most active during the summer?

  Snakes are most active in summer because they are cold-blooded and they need the heat to warm their bodies.
- 7. Which fruits ripen during summer?

  During summer, soft fruits, such peaches, tomatoes and strawberries, ripen, which means that they ready to eat.
- 8. From what you have read in the text, which plant or animal adaptation is the most impressive? Explain your answer.

  Answers will vary.





#### Seasons in Australia

Most people in Australia refer to the European four seasons: summer, autumn, winter and spring. Each season lasts for three months. In the tropical areas of Australia, many people refer to the wet and dry season, each lasting about six months. Indigenous communities have their own descriptions of seasons based on the weather and the impact this has on the animals, plants and land. These descriptions vary for different communities based on location. Some communities have five or six seasons. Overall, the number of seasons an area has depends on where a person lives in Australia.

#### The Weather in Summer

During summer, there is more daylight than nighttime hours. This is because of the tilt of the Earth's

axis. In summer, the weather is generally hot and dry. However, it can be humid closer to the equator. The sun is extremely strong in the southern hemisphere compared to the northern hemisphere during summer so the risk of getting sunburnt is much higher. Australia is also prone to natural disasters like bushfires and cyclones during summer. As a result, the weather can be hostile

during the summertime.

### Why Do We Have Seasons?

Seasons occur because when the Earth orbits the Sun, it is tilted 23.5° on its axis. For six months of the year, the South Pole is tilted towards the Sun. As a result, the days are

longer and the weather is warmer in

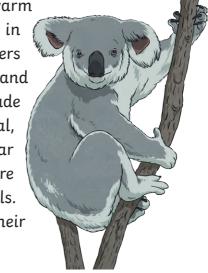
the southern hemisphere. During the Australian summer, the southern hemisphere is tilted towards the Sun. When the North Pole is tilted towards the Sun, the days are shorter in the southern hemisphere. The temperature will be cooler as well. This explains the changes between the seasons.





#### **Animals in Summer**

Native Australian animals have adapted to survive the warm summertime temperatures in Australia. Koalas stay still in the shade of a tree and wait for the heat to pass. Sugar gliders are nocturnal so they are active during the cooler nights and avoid being active during the day by curling up in the shade of the tree. The kangaroo, another native Australian animal, does not sweat and instead licks itself to maintain a regular body temperature. Finally, snakes living in Australia are active in summer because they are cold-blooded animals. Therefore, they need to be outside in order to warm their bodies.



#### **Plants in Summer**

Australian native plants have adapted to the weather conditions during summer. Plants with smaller leaves or spikes lose less water through evaporation. Some plants have adapted by growing spikes, which prevents them being eaten by primary consumers. Some plants cease growing during summer and, in some instances, appear to be dead; however, they are just in dormant state so that they save energy in the heat. Soft fruits, such peaches, tomatoes and strawberries, are ripe and ready to eat in summer.





# Questions

1.	How long is summer?		
2.	Thinking about where you live, which way of describing seasons suits your home best? Why?		
3.	Describe the weather in summer.		
4.	Explain why the seasons occur.		
5.	What are two ways an animal might keep cool in summer?		
6.	Why do you think a plant may stop growing in the summer?		
7.	Animals and plants change to stay cool in the summer. How do people stay cool in summer?		





8.	Why do some plants grow spikes?		
9.	Why are soft fruits eaten widely during the summer?		
10.	Using information given in the text, which plant or animal adaptation do you think is the most effective?		





- 1. How long is summer?
   Summer is three months long.
- 2. Thinking about where you live, which way of describing seasons suits your home best?

  Answers will vary.
- 3. Describe the weather in summer.

  In summer, the weather is hot and dry. Some parts of Australia can be humid.
- 4. Explain why the seasons occur.

  Seasons occur because when the Earth orbits the Sun, it is tilted 23.5° on its axis.
- 5. What are two ways an animal might keep cool in summer?

  Answers will vary but will include two of the following: Animals will keep cool in summer by staying in the shade, hardly moving, being active at night and licking themselves.
- 6. Why do you think a plant may stop growing in the summer?

  Answers will vary but may include: A plant might stop growing in summer to save energy and not use a lot of water.
- 7. Animals and plants change to stay cool in the summer. How do people stay cool in summer?

Answers will vary.

- 8. Why do some plants grow spikes?

  Some plants have adapted by growing spikes, which prevents them being eaten by primary consumers.
- 9. Why are soft fruits eaten widely during the summer?

  Soft fruits are eaten widely during the summer because they ripen, which means they are ready to eat.
- 10. Using information given in the text, which plant or animal adaptation do you think is the most effective?

Answers will vary.

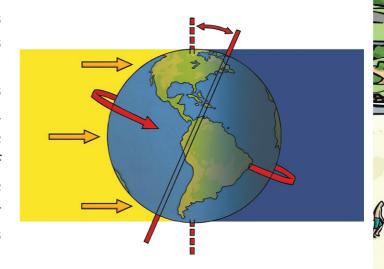




When considering the seasons, most Australians divide the year into four periods: summer, autumn, winter and spring. Each season lasts for three months. However, Australia is a diverse country with six different climate zones. In tropical regions, the year is divided into two seasons: the wet and dry season, which each last six months. Indigenous communities have their own distinct seasons, which are based on the weather and the impact it has on the animals, plants and land. Each community has their own seasons. Some communities have five or six seasons.

Seasonal changes happen due to the 23.5° tilt of the Earth's axis. For a six-month period, the South Pole is tilted towards the Sun. Consequently, the days are longer and the weather is warmer in the southern hemisphere. During the Australian summer, the southern hemisphere is tilted towards the Sun. When the North Pole is tilted towards the Sun, the days are shorter in the southern hemisphere. The temperature will be cooler as well. This is when winter happens.

Summer happens in different months around the world. Once again, this is due to the tilt of the Earth's axis. When the southern hemisphere is tilted towards the Sun, the northern hemisphere is angled away from the sun, so it experiences the opposite of summer: winter. Therefore, if you live in the northern hemisphere, summer is in June, July and August, whereas in Australia, winter occurs during these months.



During summer, there is more daylight and each day is becoming longer. This is because of the tilt of the Earth. In summer, the weather is generally hot and dry. The warmest temperatures occur during summer and the highest temperature ever recorded was on 2nd January 1960 when 50.7°C was reached at Oodnadatta Airport in South Australia. By contrast, in tropical areas, humid weather is common during summer. The sun is much stronger in the southern hemisphere compared to the northern hemisphere during summer. Consequently, the risk of getting sunburnt is much greater. Australia is also prone to natural disasters during summer, such as bushfires and cyclones, which occur in tropical regions.



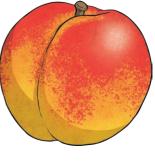




Native Australian animals have developed many adaptations to survive extremely warm temperatures. Koalas stay still in the shade of a tree and wait for the heat to pass. Sugar gliders are nocturnal so they are active during the cooler nights. During the day, they curl up in the shade of trees. Kangaroos do not sweat; instead, they lick themselves to keep cool. Reptiles, such as snakes, are particularly active throughout Australia in summer due to them being coldblooded animals. As a result, they need to lie in the sun in order to warm their body so they can be active. Pets need extra care in summer: pet owners should provide their animals with extra water and shade to keep cool.



Australian native plants have also adapted so they can survive the extreme heat of summer. Plants with smaller leaves or spikes lose less water through evaporation. Spikes act as a deterrent to potential consumers. Some plants will stop growing during summer. They may give the appearance of being dead; however, they are just in a dormant state to conserve energy during extreme temperatures. Soft fruits, such as peaches, tomatoes and strawberries, are ripe and ready to eat in summer.



# Questions

1. Fill in the missing information about the different ways of describing the seasons.

				Indigenous Seasons
Number of Seasons		2		
Legnth of Seasons			Varied	
2.	. Why do the seasons vary across Australia?			
3.	Why do seasonal changes happen?			
4.	What are two ways an animal might keep cool in summer?			
5.	Why do you think a plant may stop growing in the summer?			
6.	Explain why the southern and northern hemispheres have opposite seasons.			
7.	Animals and plants	change to stay cool in	the summer. How do p	people stay cool in

8. Why would a kangaroo lick itself instead of sweating during summer?



summer?



9.	Snakes are cold-blooded animals. How does this affect their behaviour during summer?
0.	Why are strawberries a common ingredient in summer desserts? Use evidence from the text to explain your answer.





1. Fill in the missing information about the different ways of describing the seasons.

	European Seasons	Wet/Dry Seasons	Indigenous Seasons
Number of Seasons	4	2	5-6
Legnth of Seasons	3 months	6 months	Varied

2. Why do the seasons vary across Australia?

The seasons vary across Australia because there are six climate zones in the country.

- 3. Why do seasonal changes happen?
  - Seasonal changes happen because due to the 23.5° tilt of the Earth's axis. For a sixmonth period, the South Pole is tilted towards the Sun. Consequently, the days are longer and the weather is warmer in the southern hemisphere. During the Australian summer, the southern hemisphere is tilted towards the Sun.
- 4. What are two ways an animal might keep cool in summer?

  Answers will vary but will include two of the following: Animals will keep cool in summer by staying in the shade, hardly moving, being active at night and licking themselves.
- 5. Why do you think a plant may stop growing in the summer?

  Answers will vary but may include: A plant might stop growing in summer to save energy and not use a lot of water.
- 6. Explain why the southern and northern hemispheres have opposite seasons.

  The northern and southern hemisphere have different seasons because when the lower part of the Earth tilts towards the Sun, the upper part of the Earth is away from the Sun.
- 7. Animals and plants change to stay cool in the summer. How do people stay cool in summer?

Answers will vary.





- 8. Why would a kangaroo lick itself instead of sweating during summer?

  Answers will vary, for example: Kangaroos lick themselves as it's a faster way to cool down.
- 9. Snakes are cold-blooded animals. How does this affect their behaviour during summer? It affects their behaviour because they need to go outside to warm their bodies.
- 10. Why are strawberries a common ingredient in summer desserts? Use evidence from the text to explain your answer.
  - Strawberries are a common ingredient in summer desserts because during the summer, soft fruits, such as tomatoes, strawberries and peaches, are ripe and ready to eat.



