



Redback Spider

Introduction

Redback Spider looks at the life cycle of the redback spider and provides information about its habitat, diet and predators. The text also explains how redback spiders are adapted to survive in their environment and describes threats to their survival.

Australian Curriculum links

This text links with the Australian Curriculum in Biological Science at Years 1 to 3.

Understandings

- There are physical and behavioural differences and similarities between male and female redback spiders.
- Changes occur throughout the life of the redback spider as it reproduces and grows.
- Redback spiders have physical and behavioural adaptations and live in places that meet their needs.

Vocabulary

abdomen, antivenom, brood, clutch, fang, fertilise, hatchling, invertebrate, predator, scavenging, sperm, spiderling, spinnerets, venom

Focusing

Discussion questions

Have students complete these questions orally to focus on the text.

Literal:

- Where do redbacks live? (Across Australia in dark, dry places such as outdoor toilets, sheds, wood stacks and under dry fallen leaves)
- What predators do redback spiders have? (Other redback spiders, wasp grubs, other spiders such as white-tailed spiders, birds, insects such as praying mantises)
- Why do female redbacks build a web? (To trap their prey and store their egg sacs)
- What are egg sacs? (White or yellow balls of silk thread that hold the eggs)
- What usually happens to a male spider during the reproductive process? (The female kills and eats him.)
- How do spiderlings leave the web and travel to a new home? (They make their way to a high point, the breeze pulls a thread of silk from their abdomens, they drift into the air until the thread catches onto an object, they land wherever the wind takes them.)
- Why are redback spiders cannibals? (Because sometimes they eat each other – the female may eat the male, the mother may eat the spiderlings or the spiderlings may eat other spiderlings.)
- Are redbacks dangerous to humans? (Yes. People can get bitten when they accidentally put their fingers into a web. They need an antivenom to prevent illness or death.)

Inferential:

- Do redback spider parents care for their offspring?
- In what different ways does the redback spider use the silk thread it produces?
- Why do you think redback spiders can lay so many eggs so frequently?



- What differences are there between male and female redback spiders?
- Should people be frightened of redback spiders? Why or why not?

Evaluative:

- What is the most interesting aspect of the redback spider’s life cycle?
- Would you prefer to be a male or female redback spider? Why?
- What should you do if you see a redback spider?
- What should you do if you get bitten by a redback spider?

Engaging

Learning experience 7	There are physical and behavioural differences and similarities between male and female redback spiders.
Resources	<ul style="list-style-type: none"> • Pages 4–29 of <i>Redback Spider</i> • BLM 7 • Cards with facts from the text describing similarities and differences between male and female redback spiders
Language and literacy skills focus	<ul style="list-style-type: none"> • Comprehending • Locating and interpreting relevant information • Recording facts • Comparing and contrasting
Thinking skills focus	<ul style="list-style-type: none"> • Organising • Interpreting • Analysing • Making decisions
Activity	<ol style="list-style-type: none"> 1 Talk with students about the physical appearance and behaviour of the female and male redback spider. Lay the fact cards on the floor. Have students organise the facts into three piles – same, male only, female only. Have them justify their reasons for the placement of the cards. 2 Ask students to suggest other similarities and differences between male and female redback spiders. Ask them specific questions about the similarities and differences between male and female redback spiders to assist them in recalling facts from the book, e.g. Which redback spiders live in dark, dry places? Which redback spider makes an egg sac? Which redback spider makes a web? Which redback spider scavenges scraps of food? Which redback spider lives for only six or seven months? Which redback spider is found across Australia? Which redback spider eats its ‘mate’ during reproduction?
Going further	<ol style="list-style-type: none"> 1 Distribute BLM 7. Explain to students that they are to work in pairs to create a Venn diagram about the similarities and differences between male and female redback spiders. 2 Pairs of students share their Venn diagrams with the class, justifying their placement of each fact on their diagram.
Assessment	Assess students’ ability to compare and contrast the physical features and behaviours of male and female redback spiders and to justify their decisions.



Learning experience 8	Changes occur throughout the life of the redback spider as it reproduces and grows.
Resources	<ul style="list-style-type: none"> • Pages 10–25 of <i>Redback Spider</i> • BLM 8 • A3 paper for each student
Language and literacy skills focus	<ul style="list-style-type: none"> • Researching factual texts • Reading and interpreting information • Sequencing • Explaining information
Thinking skills focus	<ul style="list-style-type: none"> • Remembering • Understanding • Analysing • Organising
Activity	<p>Reread pages 10–25 of <i>Redback Spider</i>. Draw a large circle on a whiteboard. Ask students to recall key stages in the life cycle of the redback spider. Write the facts suggested by students onto sticky notes and have them place the sticky note on the circle line to indicate the stage of the cycle they are describing. Demonstrate skimming the text of the book to check that the information is correct. Ask, Would you describe the redback spider as living as a ‘family’? Do the parents care for their offspring? Why or why not?</p>
Going further	<ol style="list-style-type: none"> 1 Distribute BLM 8. Ask students to read the fact boxes and then place them in sequence on an A3 sheet of paper to create a cyclic timeline of the redback spider’s life. Have students create an interesting heading and add diagrams where appropriate, e.g. an image of a male and female redback spider, an image of the spiderlings ballooning, an image of the egg sac in the web. 2 Have students read and present their cyclic timeline as an ‘expert’ about the life cycle of the redback spider to another group who have not been reading about redback spiders. Have them answer questions from the group.
Assessment	<p>Assess the ability of students to read and sequence facts to create a cyclic timeline about the redback spider. Assess their ability to interpret the information and explain the process to an audience.</p>



Learning experience 9	Redback spiders have physical and behavioural adaptations and live in places that meet their needs.
Resources	<ul style="list-style-type: none"> • Pages 4–29 of <i>Redback Spider</i> • BLM 9
Language and literacy skills focus	<ul style="list-style-type: none"> • Comprehending • Interpreting and analysing information • Writing facts to support a statement • Explaining
Thinking skills focus	<ul style="list-style-type: none"> • Remembering • Applying knowledge • Making decisions • Justifying
Activity	Play a true or false quiz about redback spiders. Say a series of true or false statements about redback spiders to pairs of students. The first to identify whether the statement is true or false and justifies their answer scores a point. For example, say, 'All redback spiders have a stripe on their back.' The first to answer 'False' (because only adult females have a red stripe on their back) scores a point. The first to 5 points wins.
Going further	Distribute BLM 9. Ask students to circle if they agree or disagree with each statement and then to complete the written response with factual evidence. Have them answer the 'Reflecting on my learning' question based on their understanding about the topic.
Assessment	Assess students' ability to make and justify a decision based on factual evidence.

Reflecting

On page 4 the author writes, 'This is probably the main reason why most people would rather run away from a redback than want to learn about its very interesting life cycle.' Why do you think the author makes this comment?

What do you think is interesting about the life cycle of the redback spider?

What similarities are there between the life cycle of the redback spider and the koala or little penguin? What are the main differences?

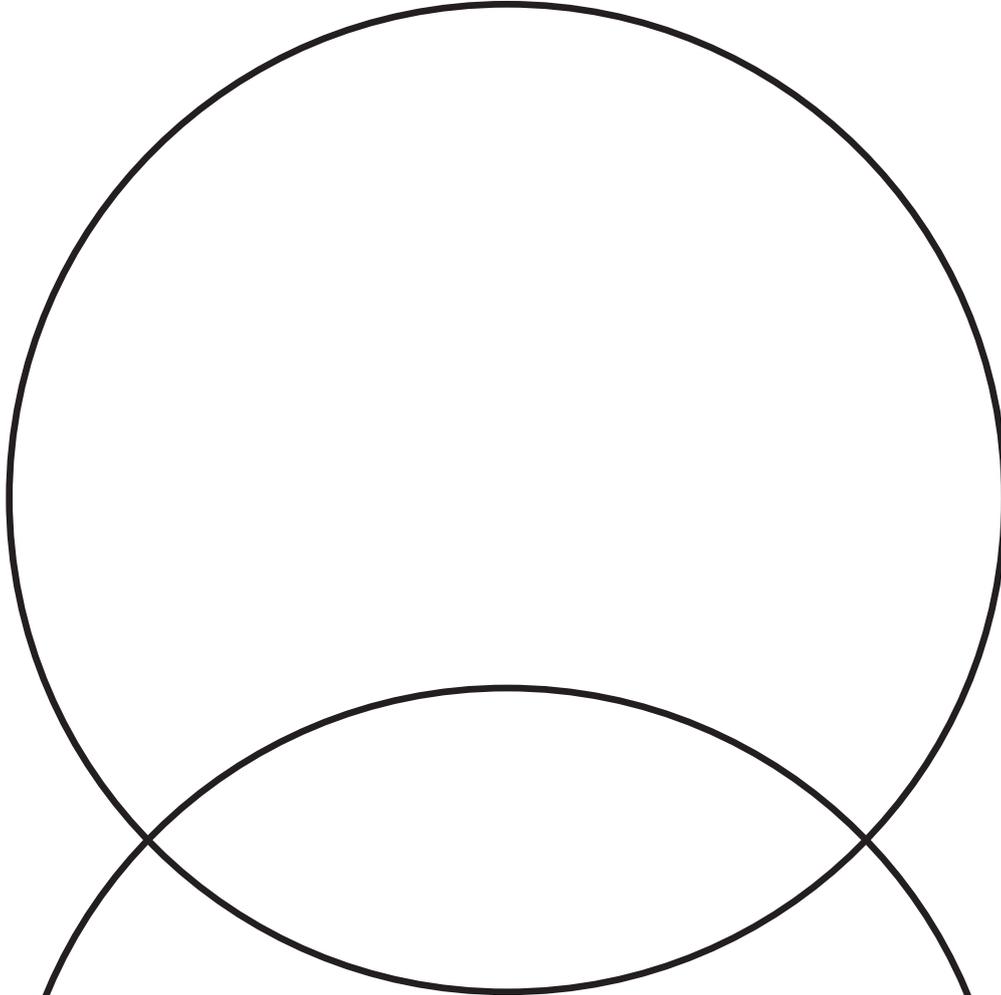


Redback Spider

BLM 7

Name _____

Male redback spiders



different

same

Female redback spiders

different



Redback Spider

BLM 8

Name _____

Cut out these fact boxes and paste them in order in a circle on a large sheet of paper to create a redback spider cyclic timeline. Write an interesting heading and draw a picture of a female and a male redback spider in the centre of the cycle.

When they are strong enough, the spiderlings make their way to a high point such as the tip of a blade of grass.

The male redback spider delivers a parcel of sperm to the female redback. She stores the sperm in her body. The female usually kills and then eats the male.

The spiderlings release a thread of silk from their abdomen. When the thread is long enough, the spiderling drifts in the wind.

The spiderlings hide from predators and build their own webs.

After 14 days, the eggs hatch. Spiderlings break through the egg sacs and swarm over the web.

The spiderlings land when their thread catches on something. Some land in places where they will die, such as in water. Others land in places where they can shelter.

The female lays between 40 and 300 eggs in each egg sac. She fertilises the eggs with the sperm stored in her body.

The female redback makes egg sacs to hold the eggs. The sacs are held on the web with silk.



Redback Spider

BLM 9

Name _____

1 Agree or disagree with each statement.

All redback spiders have a red stripe on their back.

I agree/disagree because _____.

Redback spiders can be found around the backyard.

I agree/disagree because _____.

People need to be careful if they see a redback spider.

I agree/disagree because _____.

Redback spiders can kill and eat prey larger than themselves.

I agree/disagree because _____.

Redback spiders live in families.

I agree/disagree because _____.

Male and female redback spiders spin webs.

I agree/disagree because _____.

Young redback spiders look the same as their parents.

I agree/disagree because _____.

It would be better to be a female redback spider than a male redback spider.

I agree/disagree because _____.

2 Answer this question to reflect on your learning:

I think that I have learned a lot of new information about redback spiders.

I agree/disagree because _____

