

About the book

Deadly Science: Animal Adaptations is an informative text that explores a variety of native species and the way they have adapted, sometimes in the most astounding ways, to survive in the Australian environment.

Deadly Science: Animal Adaptations

Edited by Corey Tutt

Curriculum links

Deadly Science: Animal Adaptations is suitable for use in primary school classrooms and links to a range of subject areas across the curriculum, including science and humanities and social sciences. It offers opportunities to explore Australian animals and the way they have adapted to live in the harsh Australian environment. Students can learn about and compare different adaptation methods, including anatomical, behavioural, and physiological adaptations and how they impact survival rates. Students will develop an understanding of Australian flora and fauna and its importance to the environment. They will also learn about the various ways Indigenous Australians have observed, celebrated, and protected our native species for thousands of years

Themes include: Adaptation, evolution, native species, Indigenous history and culture

Before reading

Read out the title of the text to the class (*Deadly Science: Animal Adaptations*) and ask them what they think the words tell us about the book and what it might be about. Follow up with showing the front cover and ask the following questions:

- Can you name some Australian animals?
- What is the difference between a 'native' animal and an 'introduced species'?
- What does the word 'adaptation' mean?
- Why might an animal need to adapt?

During reading

Vocabulary: After an initial reading of the book go through each page and highlight some specific words used in the text. Words of interest may include; 'adaptation', 'organism', 'anatomical', 'camouflage', 'venomous', 'seasonal', 'hibernation', 'nocturnality', 'habit', 'continent'.

Visual literacy: Working with the illustrations and imagery, discuss with students what we can learn by looking at the different animals. What features can we identify that may be an adaptation or that may help the animal survive?

General comprehension questions

- What is an 'adaptation' and why is it important?
- There are three main types of adaptations, what are they?
- What are some anatomical adaptations we commonly see in Australian animals?
- What are some other tactics animals might use to survive in their environment?
- Some animals can change the way they look to escape predators. What is one example of this kind of adaptation?
- If you were an animal living in the wild, what do you think you'd like to develop to help you to survive?

After reading

Subject specific activities

English

After reading the text together, discuss with the class what animal adaptation is and why it is so important to the continued survival of Australian native flora and fauna. Students can then brainstorm different animals from the text or their own knowledge and choose one to plan, research and write an informative text about which explores the animal and how and why it has had to adapt.

(ACELY1682, ACELY1694, ACELY1704)

Maths

Using the 'Cane Toad Case Story' students can create a timeline of the adaptation and migration of the Cane Toad in Australia. Students can then plot dates and events as well as interesting facts about the cane toad and its history.

Students can also sort and classify a selection of animals into different groupings based on their types of adaptation (i.e., behavioural, anatomical, physiological). Students can then use this data to create a graph or chart showing things like the most and least predominant adaptation type.

(ACMMG065, ACMNA005)

Humanities and social sciences

Students develop their research skills by using an atlas or map to locate the different environments featured in the story (rainforests, grasslands, alpine areas) and where they're found in Australia. Students can then create a fact file that details each environment, where to find it, the typical conditions and climate and species found there. This information can then be presented to class as a poster or PowerPoint presentation.

(ACHASSK069, ACHASSK068)

Visual Arts

Students can use various resources to plan and create a model of an animal featured in the text putting emphasis on its adaptations using different materials and/or techniques. Students can then present and explain their model including how they created it and why these chose the method and material that they did.

(ACAVAM107, ACAVAM108, ACAVAM111, ACAVAM112, ACAVAM15, ACAVAM16)

Science and technology

Students can explore the impact of the environment on the growth and survival of living things. What would happen if the animals featured didn't evolve and what would the greater implications be? Students can then choose a particular environment i.e. the desert and explore both animal and environmental adaptations, developing a hypothesis for why these have occurred.

(ACSSU094, ACSSU043)