

Elephant stories

Marvel at these magnificent creatures

These teachers' notes are to be used with Project Pull-out #38, which is found in issue 91 of DMAG. Students will learn about elephants and develop research, mapping, and writing skills.

This supplement encourages students to:

- Appreciate that living things have common needs
- Realise that although we know a lot about different species, there is still a lot we don't know
- Empathise with another species
- See that human activities impact other species
- Appreciate that animals play a big part in many cultures
- Learn about maps and mapping

Science and Technology: Living things and English

As a class, read pages 48-49. Discuss some of the needs of living things. There are basic things like food, water and habitat. But what else do living things need? What things do humans need – for instance family? Do elephants share some of these needs? How can we tell?

Discuss how amazing elephants are and ask students to research one of the following with relation to elephants:

- Self-recognition
- Mourning the dead
- Remembering



An African elephant. Photo courtesy *Elephant Diaries*.

- Problem solving
- Music appreciation

Each student is then to write and present an **information report** about the above.

When everyone has completed their report, as a class, discuss the results. Then ask each student to write an opinion piece, or **exposition**, about what amazes them the most about elephants.

Extension exercise: devise an experiment

As a class, discuss how scientists work out whether an animal can recognise itself in the mirror. What sort of things might they do? Brainstorm some ideas about what an experiment to assess self-recognition would involve.

Ask the class to split into pairs, and find out how researchers test for self-recognition. Discuss the results with the class in light of their previous hypotheses.

Now ask each pair to come up with a similar experiment they'd like to carry out to assess some measure of an elephant's intelligence. For instance, they might want to test if elephants are good at undoing locks. Or if elephants can put square pegs in square holes rather than round ones. Each student is to describe how they would carry out the test with the elephant. How would they draw conclusions from the result?

When describing the experiment they would do, students should set it out as a **procedure**, with each step in the experiment detailed.

Elephant stories

Marvel at these magnificent creatures

Science: Environment matters

As a class, read the rest of the pull-out, particularly page 54. Discuss the elephants' habitats. How has their environment been affected by man? For instance logging, clearing, houses blocking migration routes etc. What other threats do elephants face?

Discuss what can be done in Australia. For instance, would buying furniture made from timber from rainforests in their habitat affect them? Discuss what can be done when visiting overseas countries, e.g. not buying ivory products.

Science and Technology: A change for the better

Discuss how elephants are suited to their environment. What are some traits that have helped elephants survive (e.g. long memories)?

Investigate the elephants' family tree, how were woolly mammoths related?

In what way were woolly mammoths better suited to a cold, ice age environment compared to today's elephant? Why do scientists think that woolly mammoths died out?

Maths: Mapping

Ask the class to find out where the African and Asian elephants are found. Then ask them to complete the exercise on the student activity sheet and map these locations. They should use two different colours on the map to depict the two different species.

As a class, discuss the maps. What are continents? What are countries? Why do they think the Asian elephant is a better name than the Indian elephant for that species?

Ask them to add to each of their maps, the names and borders of the countries that the elephants inhabit. Do they think animals like elephants are aware of borders between countries? Do elephants move around much? What might it mean for elephants if one country is better at protecting elephants than another?



Asian elephants.
Photo courtesy Taronga Zoo.

Extension exercise: Maps and History

Tell the class about Hannibal, one of the greatest military commanders in history. He lived 2200 years ago in the Kingdom of Carthage, which is now Tunisia. He led an army against the Romans. One of his most famous achievements was to march a massive army, complete with war elephants, across north Africa, through Spain and France and into Italy. Ask your students to draw a map showing the route Hannibal's army took. Also ask them to find out what the countries used to be called (discuss how names of countries change).

How far did his army march and how long did it take? What were the war elephants like? How would the people of Europe have reacted to seeing an elephant at that time? Would they have known what elephants looked like? How?

HSIE: Other cultures

As a class, read page 50 about elephants in Asia. Ask the class what being revered means?

How can someone prove that the elephant is revered? Does it feature in legends or religious stories? Do any cultures have an elephant god? Is it involved in ceremonies? What about paintings, sculptures and statues? Ask the class to split into pairs and find four different examples that show that elephants are revered in Asia.

Before starting the research, discuss key words students might use for a search engine (e.g. Google).

Tell students they only have an hour to find the examples so they must be quick. After an hour, ask each pair to tell or show their four items. As a class, pick three of the most interesting cases and then look at these in more depth. The class can then carry out activities around them like painting pictures depicting scenes, re-enacting stories, telling stories, and rewriting tales in their own words.

About DMAG

These Teachers' Notes have been written by the staff at DMAG and may be reproduced for use in school classrooms. To subscribe to the magazine they refer to, call 1300 887 795 (Australia) or 612 8296 5413 (int.).