Teacher Resource Endangered Seeds

Q Focus Questions

- 1. Discuss the main issues raised in the BTN Endangered Seeds story?
- 2. How many plant species in WA are threatened with extinction?
- 3. What is a seed bank?

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- 4. Where is the biggest seed bank in the world located? Find using Google Maps.
- 5. How many different types of seeds does it hold?
- 6. What type of plants does the seed bank in WA focus on?
 - a. Native plants
 - b. Exotic plants
 - c. Indoor plants
- 7. What are the kids in the BTN story doing?
- 8. What is the name of the plant they are looking after?
- 9. How do the kids know when to harvest the seeds from the plant?
- 10. Why is it important to collect seeds?

Activity

Class Discussion

Discuss the BTN *Endangered Seeds* story as a class, using the following questions to guide the discussion.

- Why do we need plants?
- What is the difference between a native and an introduced plant?
- What native plants do you know?
 Make a list.
- What things are threatening our native plants?
- What are seed banks?
- Why is it important to collect seeds?



Glossary of key terms

Students will create a classroom glossary of key words for the BTN *Seed Kids* story. Students will start by brainstorming words as a class using a mind map to record their responses.

endangered	threatened	native
conservation	biodiversity	species

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C Key Learning

Students will learn more about the importance of seeds and plants and create a profile of a native Australian plant.

Curriculum

Science – Year 4 Living things have life cycles.

Living things, including plants and animals, depend on each other and the environment to survive.

Science – Year 5

Living things have structural features and adaptations that help them to survive in their environment.

Science – Year 6

The growth and survival of living things are affected by the physical conditions of their environment.



Research Project: Native Plant Species

Students will choose a native Australian plant and create a profile. They can use the following structure to help guide their research.

Research project – Native Australian plant		
Scientific and common name		
Describe its appearance What does it look like (shape, size, colour, special features)?		
Locate where this species can be found using Google Maps		
How does it survive in its environment? What are some of its adaptations?		
Conservation Status If this species is threatened or endangered, what are its threats?		
 Interesting facts What is your favourite thing about this species? What surprised you about your research? 		
Photograph or illustration		





Get to know the plants in your school yard

- Students choose a plant in their school grounds.
- Describe the plant they have chosen using words and an illustration. Describe the different parts of the plant and any other interesting features.
- Can students identify what type of plant it is? Find its botanical name.
- Is the plant native or an introduced species?
- What are the plant's measurements?
- Are there any bugs or wildlife on or near the plant? Describe.
- How much sun, shade and water does the plant get?

Improve the biodiversity in your school yard

Students will work together to plant and care for native plants in their school yard. Ask them to consider the following:

- What kind of native plants will you plant and where will you plant them? Which plants are native to your area?
- Where will the plants get a good balance of sun and shade?
- Where will it look the best?
- Where will it be most appreciated?
- What materials and tools are needed?
- Predict and record the growth rate, for the first days/weeks/months, and see whose predictions are most accurate.
- Include an information label next to the plant for other students to learn more about it and the biodiversity of your school yard. Include the botanical name, when it was planted and some basic information.
- Prepare a map of your school yard which highlights important plants in your school yard.

Activity

Flower Power

Students watch the video, <u>Flowers: living factories</u> for making seeds and answer the following questions:

- What role do flowers play in seed production?
- What adaptations do plants have to attract insects?
- Explore the different ways plants spread seeds such as wind, water or animals.



Activity

Start Collecting!

Get your class involved in seed collecting. Students collect samples of plants and remove the seeds for storing. Seeds need to be kept cool and dry in either cloth or paper (not plastic).



Image: Australian National Botanic Gardens



Students can learn more about the <u>Doomsday Seed Vault</u> by watching the BTN story then answer the following questions:

- 1. Describe the Doomsday Seed Vault. What does it look like?
- 2. Why was the seed bank created?
- 3. Why is the seed bank also called the Doomsday Seed Vault?
- 4. How many different types of seeds are stored in the bank?
- 5. List some of the types of seeds that are stored in the seed bank.
- 6. Australia is about to make its biggest deposit to the seed bank. True or false?
- 7. How old is the Doomsday Seed Vault?



O Useful Websites

BTN – Plant Bank https://www.abc.net.au/btn/classroom/plant-bank/10529572

BTN – Doomsday Vault https://www.abc.net.au/btn/classroom/doomsday-seed-vault/10521828

Australian National Botanic Gardens – National Seed Bank http://www.anbg.gov.au/gardens/living/seedbank/index.html

ABC Education – Curious Kids: Where did the first seed come from? http://education.abc.net.au/newsandarticles/blog/-/b/3045789/curious-kids-where-did-the-first-seed-comefrom

