

Drought Breaking

Focus Questions

1. Retell the BTN *Drought Breaking* story using your own words.
2. The kids in the BTN story live in Caragabal. Find Caragabal using Google Maps.
3. How long have some places in NSW been in drought?
4. Describe what drought-affected land looks like.
5. How did the kids feed their sheep during the drought?
6. Complete the following sentence. The kids in the BTN story had strict water _____.
7. How has the drought affected families?
8. How did the kids feel when they got rain in their town?
9. How much of NSW was declared drought free this month?
 - a. One quarter
 - b. One third
 - c. One half
10. Illustrate an aspect of the *Drought Breaking* story.

Activity

Class discussion

Hold a class discussion about the information raised in the *Drought Breaking* story. Create a class mind map with DROUGHT in the middle. Use the following questions to guide discussion:

- What is a drought? Create a class definition.
- What causes drought in Australia?
- Who is affected by drought?
- What impact does drought have on Australia?
- How can drought be managed?
- Why do we need to think about drought?



Students will then respond to one or more of the following:

- Think of a question you would like to ask the kids featured in the BTN *Drought Breaking* story.
- Leave a message in the comments section on the BTN *Drought Breaking* story page.
- Finish one or more of the following sentences:
 - The main causes of drought are....
 - Drought affects...

Key Learning

Students will investigate what drought is and how it impacts on people and places in Australia. Students will design a drought resistant garden using native plants.

Curriculum

Design and Technologies – Years 5 and 6

Investigate how and why food and fibre are produced in managed environments and prepared to enable people to grow and be healthy.

Design and Technologies – Years 7 and 8

Analyse how food and fibre are produced when designing managed environments and how these can become more sustainable.

Science – Year 5

Scientific knowledge is used to solve problems and inform personal and community decisions.

Science – Year 6

Scientific knowledge is used to solve problems and inform personal and community decisions.

Sudden geological changes and extreme weather events can affect Earth's surface.

Science – Year 7

Scientific knowledge has changed peoples' understanding of the world and is refined as new evidence becomes available.

Science knowledge can develop through collaboration across the disciplines of science and the contributions of people from a range of cultures.

Activity

Six Hat Thinking

As a class, use Edward De Bono's Six Hat Thinking to explore drought and sustainable farming. Make your own coloured hat cut-outs and place on the floor. Students will take it in turns answering questions in relation to what they already know about the issue, what they have learned from the BTN *Drought Breaking* story and what they want to learn further about the topic.

Print this worksheet (featured at the end of this activity) for students to respond to a range of questions about drought and sustainable farming.

Reflection

After this activity, ask students to reflect on what they have learnt. Students can include details about how their thinking on this issue has changed.

Activity

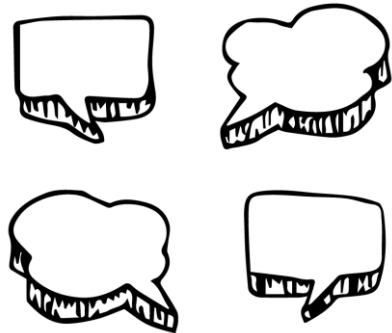
Drought-proof your garden

Challenge students to design a drought resistant garden using native plants to their area. In this activity students will investigate how a lack of water can affect plants, learn about plants that are native to their area, and then design a layout for a drought resistant garden in their school.

Research

Before starting this activity, students will work in small groups, and respond to one or more of the following questions. Students will then share their research with the class.

- Do all plants need the same amount of water to survive?
- Do you know any plants that can survive on little water?
- Which plants need a lot of water to survive?
- How does drought affect plants?
- What climate do you live in? Compare to other climates in Australia.
- What soil type do you have in your school garden? Take a sample to your local garden shop to help determine the soil type. Explain the characteristics of the soil type.
- What features do Australian plants have that enable them to conserve water? Choose one plant to explore in detail.



Design

Students will design a drought-resistant garden, using the following as a guide:

- Where will your drought resistant garden be located? Think about the best positioning for your garden (for example full sun or shaded). Will you add to an existing garden or plant a new garden?
- What will the layout be for your garden? Sketch a rough design of the layout of your garden.
- What size will your garden be? Measure the perimeter and area of your garden.

- What plants will you include in your garden? Choose plants that are native to your area and require little water. Choose a balance of plants for example, small trees, screening shrubs, ground covers and edible plants. Collect images and photos of the plants you choose to create an inspiration board for your design.
- How will you protect your plants during a heatwave or low rainfall? For example, add a layer of mulch to help retain water.
- What equipment and materials will you need to create your garden? Make a list.
- What jobs will need to be done before, during and after creating the garden? Write a procedural manual.
- What is unique or special about your garden? Does it incorporate indigenous bush foods, does it include a discovery walk, will it attract wildlife to the area, is it a place for mindfulness practise or does it use recycled water?
- Present your design for a drought resistant garden to your class. Explain your design and include a paragraph justifying the choices you have made in your plans.

Activity

Choose a project

Individually or in small groups, students will choose one of the following projects to work on and then present their findings to the class.

Persuasive writing

Write a letter to your school principal explaining why your school needs a drought resistant garden. Research the environmental benefits and include these points in your persuasive writing.

Water audit

Do you know how much water you use each day? Think of all the times you rely on water during the day. Audit your school's water usage over one week. How will you measure how much water your school uses? How can you use less water?

Native plant database

What plants grow best where you live? Investigate which plants are native to your area. Collect as much information about plants native to your area recording your findings in a database. Invite people in your community to add to your database.

Rain gauge

How do you think meteorologists measure rainfall? Investigate and then create your own school rain gauge. Record the daily rainfall and calculate the average daily rainfall.

Useful Websites

Drought Kids – BTN

<https://www.abc.net.au/btn/classroom/drought-kids/11599610>

Third of NSW declared drought-free after regular rain – ABC News

<https://www.abc.net.au/news/2020-08-12/third-of-nsw-declared-drought-free/12549046>

Kreative Koalas Project – Kreative Koalas

<http://kreativekoalas.com.au/>

What you need to know about droughts – ABC News

<https://www.abc.net.au/news/2018-08-01/what-you-need-to-know-about-droughts/10051956>

Drought Explained – BTN

<https://www.abc.net.au/btn/classroom/drought-explained/10488726>

School Water audit – Cool Australia

<https://www.coolaustralia.org/activity/school-water-audit-56/>

Six Hat Thinking

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feelings and emotions

How did the BTN *Drought Breaking* story make you feel?

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facts and information

What have you learnt about drought?

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positives

What are some of the positives that you learnt from the story?

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negatives

What are some of the challenges that you learnt from the story?

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creativity

What can we do to protect ourselves from drought?

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thinking about thinking

What do you want to learn further about this topic?

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