

Scene Setter:



Our Blue Planet (factual text)
pp. 4–5



Preparing for the Text

Orientation

- Ask: How important is water in your life? How many times in a day do you use water? What uses do you have for water? What would happen if there wasn't water for one day? Discuss how water affects every part of our lives.

Visual Literacy

- Ask: What type of text is this? What makes you think that?
- Ask: How important is the photograph to the text? Where was it taken from? How do you know?
- Discuss why the designer has placed the text boxes around the globe.

Reading the Text

Purpose of the Text

- Ask: Who do you think is the author's intended audience for this text? What key information is the author trying to convey? Why has the author used short sentences rather than longer explanations?

Modelled Reading

- Model reading the first text box. Discuss what is meant by 74 per cent. Students calculate how much of Earth's surface is not covered by water.
- Individuals or pairs read the other text boxes.

Making Connections

- Ask: Which fact did you find the most interesting? Which fact surprised you the most? How many of these facts did you already know?

Viewing



- Ask: Why do you think the globe is presented this way? What parts of the globe are missing? Why do you think other parts of the globe are not shown? How does the photograph support the facts that are written around it?

Responding to the Text

Speaking & Listening

- Ask: Why has the amount of water on Earth remained the same for four billion years?
- Ask: Why is the availability of fresh water so limited? Why can only one per cent of water on Earth be used as drinking water? What makes it difficult for us to access the fresh water?
- Discuss: 'A Tyrannosaurus Rex could have swallowed the water that is in your drink bottle today.' What does this statement mean? Is it true? Give reasons for your opinion.



- Discuss why the increase in world population affects the amount of available fresh water.

Spelling

- Begin a word bank of 'waterwise' words. Focus on words that have *c* making an *s* sound e.g. *ice*, *surface*. Compare them to words where *c* makes a *sh* sound e.g. *ocean*. Add to the word bank throughout the unit.



- Discuss the prefix *aqua* (Latin for *water*). Use a dictionary to find words with this prefix e.g. *aquamarine*, *aqualung*.

Grammar

- Discuss the formal style used in fact boxes. Students identify the precise language used in the fact boxes.

Writing

Modelled Writing

- Model writing the text for a fact box using a concise and exact description e.g. 'Water is carried around Earth by oceans, clouds and air'.

Collaborative Writing

- In pairs, students summarise the information in the fact boxes. Have them make a list of the facts.
- Using the information in the text, students write a report titled 'Water on Earth'.

Independent Writing

- Students write a paragraph on the water facts they found most interesting and what they would like to find out about the availability of water in the future.
- Students devise a fact sheet titled 'Water and Its Percentages' for distribution to other classes.

GRB Guided Reading

- Text A: *Watery Wisdom* pp. 4–5
 - Text B: *Amazing Worldwide Water Facts* pp. 6–7
 - Text C: *A Curtain of Power and Majesty* pp. 8–9
- (See the Guided Reading Notes on pp. 90–91.)

Scene Setter Related Text:

BIB *Watery Sayings and Proverbs (proverbs and sayings) pp. 6–7*

Watery Sayings and Proverbs

People around the world have made up proverbs and sayings about water for centuries. Some of these sayings are straightforward. But sometimes sayings about water just need to be explained. See if you can work out what these sayings mean.

You're walking on thin **ice**.
Don't make **waves**.
You're so deep **water**.
He **sweat**.
There's **water** under the bridge.
You can lead a horse to **water** but you can't make it drink.
That's just the tip of the **iceberg**.
When it **rains**, it pours.
You're in hot **water**.
So with the **flow**.

She is **swim**.
Water water negotiators, but not a drop to drink.
Save it for a **rainy** day.
Like a fish out of **water**.
Rain rain go away, come again another day.
Hot **waters** run deep.
A **drop** in the ocean.
He is still **wet** behind the ears.
Keep your head above **water**.
Don't **wash** your dirty laundry in public.
Blood is thicker than **water**.

Preparing for the Text

Orientation

- Ask: What is a proverb? What is a saying? What is the difference between a proverb and a saying?
- Ask: What proverbs or sayings do you know? What do they mean?

Visual Literacy

- Ask: Why are water droplets included in the design?
- Discuss why some of the words have a different font style and size.

Reading the Text

- Read the introduction to students. Students can then read the sayings and proverbs.

Responding to the Text

Speaking & Listening

- Discuss the highlighted word in each sentence. Discuss how they are related.
 - Discuss the meaning of each proverb and saying. (If assistance is required, students can go to the Scene Setter Information Text on the CD-ROM.)
- Ask: Which of these proverbs and sayings are literal? Which have nothing really to do with water?
- Ask: Which of the proverbs and sayings have you heard of before? Describe a situation when you might use one of the proverbs or sayings.

Spelling

- Students add the 'water' words from the proverbs and sayings to the list of unit words.
- In pairs, students brainstorm other water-related words that could be used in a proverb or saying.

Grammar

- In pairs, students identify if the highlighted words are nouns, verbs, adjectives or adverbs.
- Discuss figurative language. Identify the similes, metaphors and idioms used in proverbs and sayings.

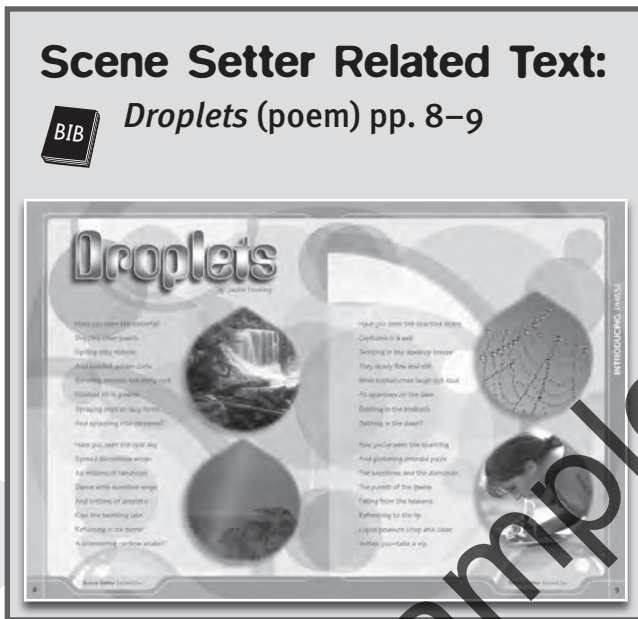
Writing

Collaborative Writing

- In groups, students use brainstormed water-related words in a saying or proverb. They write a meaning for their saying and describe a situation where it might be used.

Independent Writing

- Students write a definition of each of the proverbs and sayings in the text, and identify situations where they may be appropriate to use.
- Invite students to write a metaphor, simile and idiom related to water.



Preparing for the Text

Orientation

- Ask: Have you ever seen a waterfall in the bush? What words could you use to describe it? What sounds could you hear?
- Discuss where the water we drink comes from. Students relate their real-life experiences of drinking fresh water from a stream, lake or natural water source.

Visual Literacy

- Ask: What type of text do you think this is? What feature suggests this?
- Look at the photographs on pp. 8 and 9. Ask: Why do you think they have been included?

- Look at the background shapes. Ask: Why do you think the designer has added circles and arcs? Does this help you to know what the text will be about?

Reading the Text

- Group students in like ability groups and have them participate in a reciprocal reading activity (see p. 33).

Responding to the Text

Speaking & Listening

- Ask: How do the photographs support the text?
- Ask: What is the rhyme and rhythm of the poem? Do they remain the same?
- Ask: What words has the author used to describe the water?
- Ask: How well has the author described the water droplets? What parts of the poem gives the best description?

Spelling

- Discuss how compound words are made up of two smaller words e.g. *sunshine*, *raindrops*. Students brainstorm a list of compound words.
- The author has used the names of different jewels to describe the water droplets. Students list these jewels and suggest other jewels that could be used to describe a water droplet.

Grammar

- This poem contains many descriptive verbs e.g. *dripping*. Identify them and discuss how they add to the poem's imagery.
- This poem contains many metaphors. Students list metaphors used in the poem and identify what the author is referring to.
- In groups, students brainstorm other metaphors that could be used to describe water.

Writing

Collaborative Writing

- Model writing another verse for the poem beginning with: 'Have you seen the trickling stream'. Brainstorm descriptive verbs and metaphors that could be used.



Independent Writing



- Students write another verse for the poem using descriptive verbs and metaphors, and following the same rhyming pattern.

Introducing Phase Further Activities

CD-ROM

- Scene Setter Information Text: Students investigate the meanings of the proverbs and sayings about water.
- Scene Setter Interactive Activity: Students match the saying/proverb with its meaning.

Listening Post

- Text: *Water, Water Everywhere* (a report about the water cycle)
- BLMs: LP1, LP2, LP3

Reflection & Assessment

Assessment

- Collect samples of students' writing. Focus on the accuracy of the summary of water facts; the use of similes, metaphors and idioms; the use of descriptive verbs and metaphors; and the retention of rhyming in the verse of the poem.
- Students retell the water facts to a younger class using water percussion in the background.

Reflection

Student Self-assessment

- Introduce the Student Response Journal and the Reading Checklist (see pp. 116–118 of this book). Students record their achievements and the keywords and phrases they have noticed.

Whole-class Activities

- Students listen to one of the suites from Handel's *Water Music* and list reasons why water is important.
- In groups, students brainstorm books and films they know that are related to water. Have them make a list of suggested reading and viewing for other students.

INTRODUCING THE CHALLENGE

Discuss the *Challenge*. Ask the students to consider:

- what they know about the water problem and the need for reducing the amount of water wastage
- what they need to find out about water conservation and alternative ways of providing water to communities
- what resources they can use to locate the information
- the information a premier would need to make a decision about the water crisis
- things a premier would need to consider when making their speech.

Teacher Evaluation

- Have I introduced the main learning goals for *Waterwise*?
- Have I shared with students the value of the unit learning and its relevance to their lives?
- Has the classroom talk ensured students are aware of what is expected of them for *Challenge* achievement?
- What additional skills do students need to learn to be able to plan their election speech?
- What additional lessons do I need to plan to develop these skills?

Pacing Text 1:



Where Can Water Be Found?
(information report) p. 11



Preparing for the Text

Orientation

- Ask: Where do we get our water from? Discuss different water sources for different Australians e.g. some people rely on rainwater collected in water tanks, others may have a bore, while others have water supplied directly to their homes from a water company.

Visual Literacy

- Ask: What type of text do you think this is? What elements make you think this?
- Look at the title and the photograph. Ask: What information do you think may be contained in the text?

Reading the Text

Purpose of the Text

- Ask: What key information do you think the author wants to get across to the audience?
- Ask: Who do you think is the author's intended audience for this text?
- Ask: Why do you think the author wanted to convey this information?

Modelled Reading

- Model skimming the text to predict the information. Read the first paragraph aloud. Use self-questioning strategies to ascertain the accuracy of the predictions.

Shared Reading

- Students read the remainder of the text with a partner. Encourage students to use a dictionary for unfamiliar words.

Making Connections

- Discuss any information that students may not have been aware of.
- Have students suggest areas of Australia where groundwater is the main source of water.

Responding to the Text

Speaking & Listening

- Ask: What is the difference between groundwater and surface water? Do most Australians get water from groundwater or surface water?
- Ask: Does groundwater have the same taste as surface water? Why not?
- Discuss the problems in accessing groundwater. How do scientists know where groundwater might be located if they cannot see it?
- Indigenous Australians don't use machinery or maps to find groundwater. Ask: How do they know where to find water?

Spelling

- Add any additional words to the word bank created in the Introducing Phase.
- Look at the word *aquifer*. Discuss its meaning and add it to the list of 'aqua words' developed in the Introducing Phase.
- Discuss the use of technical nouns in the text. Students locate their meanings in a dictionary.

Grammar



- Students list prepositions in the text that describe place (e.g. *in*, *on*, *beneath*, *under*, *below*) and add others they know. They then write a sentence using some of the prepositions.
- Identify phrases and clauses found in the text. (A clause must contain a finite verb.) Students identify prepositions that can start the phrases and clauses e.g. 'before these inventions'.

Writing

Modelled Writing

- Model writing a sentence about groundwater using phrases and clauses with prepositions that indicate place e.g. 'Indigenous Australians found water under the soil in dried creek beds'. Have students identify the prepositions.

Collaborative Writing

- In pairs, students write phrases and clauses using prepositions that indicate place.

Independent Writing



- Students use prepositions in sentences that describe where water can be found.



Guided Reading

- Text A: *Go with the Flow* pp. 10–12
- Text B: *Clouds, Rain and Snow* pp. 13–14
- Text C: *Precipitation* p. 15

(See the Guided Reading Notes on pp. 92–93 of this book.)

Pacing Text 1 Related Texts:



The Water Cycle

(information report) pp. 12–15

Thinking about Groundwater

(quiz) pp. 16–17



Preparing for the Texts

Orientation

- Have students recall the information they know about the water cycle and the fact that the amount of water on Earth is constant.
- Look at the photographs and headings. Have students use them to predict what words and phrases may be contained in the text.

Visual Literacy

- Ask: What type of text do you think this is? What can you see that makes you think this?
- Look at the background design of clouds. Ask: How important do you think clouds will be in the water cycle?

Reading the Texts

Viewing



- Look at the diagram on p. 12. Ask: Is there a starting or ending point in the diagram? Why not? Invite students to interpret each part of the diagram, and suggest what is taking place. Discuss how the graphics assist our understanding of the water cycle.

Shared Reading

- Have students read p. 12 individually or in pairs.
- On p. 12, it says the water from our taps may have been drunk by a dinosaur billions of years ago. Explain how this could be.
- Read the section on condensation. Have students discuss how evaporation and transpiration are connected to condensation.
- Read the section on precipitation. Ask: How do you think groundwater may become polluted or contaminated?
- Read p. 15. Ask: Why do you think the water in our reservoirs needs to be treated before it is safe to drink?
- Read *Thinking about Groundwater*. Discuss why some of the breakfast food students eat was probably grown with the help of groundwater. In pairs, students complete the quiz on p. 17 and justify their responses.

Responding to the Texts

Spelling

- Look at the word *hydrologic* (p. 12) and discuss its meaning. Ask: What does the prefix *hydro* mean? Students use a dictionary to find other words with this prefix.
 - Investigate the technical nouns used in the texts. Students use a dictionary to find the definitions and compile a list of technical nouns, adding the words to the unit word bank.
- Discuss how water leaves the Earth's surface through evaporation and transpiration. Ask: What is the difference between these two processes?

Grammar

- Discuss the use of labels in a diagram. Why is this a concise way of showing the information? What information is not contained in a diagram? How does presenting information this way make it easier for the reader?

Writing

Collaborative Writing

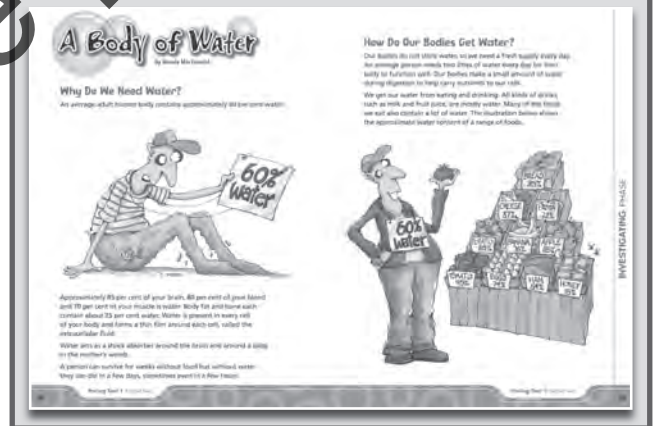
- In pairs, students write a short explanation of the water cycle using the technical nouns and explaining how each part of the cycle is reliant on another part.
- Students write a true or false quiz about different parts of the water cycle.

Independent Writing

- Students write a short text on water using technical nouns and abstract vocabulary.
- Students complete BLM 1 on p. 102 (content: identifying prepositions describing place, writing definitions of technical nouns, reproducing a diagram of the water cycle, imaginative writing using descriptive words).

Pacing Text 1 Related Text:

BIB *A Body of Water* (information report) pp. 18–21



Preparing for the Text

Orientation

- Review different water facts students know. (Remind students of the Scene Setter text.) Ask: Do we have water in our bodies? How much of our body is made up of water? Do other living things contain water?

Visual Literacy

- Ask: What type of text do you think this is? How do you know that?
- Look at the title of the text. Ask: When have you heard the phrase 'a body of water'? What do you think this text is about?
- Ask: What do the illustrations tell you about this text? Students use the illustrations to help predict words or phrases that may be in the text.

Reading the Text

Shared Reading

- Students read and discuss the text in pairs.
- Ask: What water percentages do you find interesting? Why?
- Ask: What types of food would you expect to have a high percentage of water? Why do you think this?
- Ask: What foods surprised you in the amount of water they contained?
- Ask: How much water do you drink per day? What other drinks or foods do you have that contain water? Discuss times when you need more water than usual.

Responding to the Text

Speaking & Listening



- Discuss the passage of water through the body and how our bodies use water each day.

Viewing

- Discuss how the graphics have enhanced the text and added to the understanding.

Spelling

- Have students skim the text to locate the medical terms e.g. *perspiration*, *dehydration*, *extracellular*, *digestion*, *urination*, *strenuous*, *nephrons*, *kidneys*, *bladder*. They then decode the words based on their context in the sentence.
- Ask: What is a shock absorber? Where is this term commonly heard? Investigate what a car's shock absorber does and relate this to the function of water surrounding the brain.

Grammar


- Classify each of the medical terms as nouns, verbs, adjectives or adverbs.

Writing

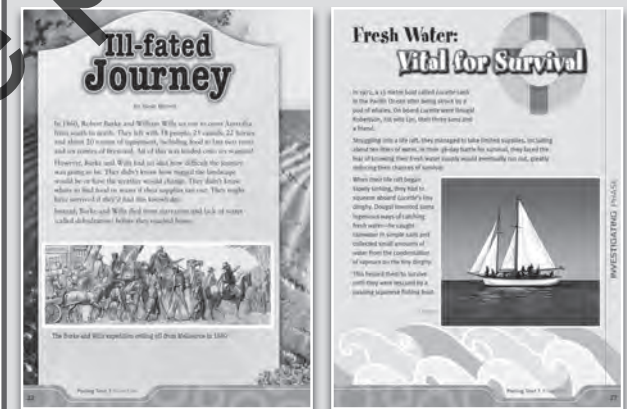
Independent Writing

- Students write a list of facts about water in the body and in the foods we eat.
- Students draw a cause and effect graphic organiser to present the information about the effects of dehydration on the body.
- In their Response Journals (see p. 117), students record how the facts presented in the text relate to their own experiences.

Pacing Text 1 Related Texts:

 *Ill-fated Journey* (recount)
pp. 22–26

Fresh Water: Vital for Survival
(recount) p. 27



Preparing for the Texts

Orientation

- Have students recall the information they know about early exploration of Australia. Ask: What were some of the hardships endured by the early explorers? What impact do you think early exploration had on the development of Australia?

Visual Literacy

- Ask: What type of texts are they? What can you see that makes you think this?
- Look at the titles. Ask: What do they tell you about what might happen in the text?
- Ask: Where might these journeys have been taken? Why do you think this?

Reading the Texts

Making Connections

- *Ill-fated Journey*: Students read the text individually or in pairs. Discuss the ‘spirit of adventure’ that often led early explorers to set off into uncharted parts of Australia. Ask: Do you think this is the reason Burke and Wills set off to explore inland Australia? Give reasons for your response. How important do you think the illustrations are to this recount? How do you think the group felt as they left Melbourne? Do you think Burke did the right thing to go ahead of the rest of the group at Menindee and push on further with only three men from Cooper’s Creek? When Burke and Wills reached the Gulf of Carpentaria, they couldn’t see the ocean because thick mangroves blocked the view. Do you think they knew they had reached the Gulf of Carpentaria? Why or why not? Do you think Burke and Wills were foolish or just unlucky? What would *you* have done differently?
- *Fresh Water: Vital for Survival*: Students read the text individually or in pairs. Ask: Do you think the family knew they would have to wait 38 days to be rescued? How do you think they would have been feeling while on the life raft? Describe how you think they felt when they first saw the Japanese fishing boat that rescued them. Students investigate and discuss different ways Dougal Robertson may have collected fresh water through condensation.

Responding to the Texts

Spelling

- Discuss the word *ill-fated*. The first part of the word indicates something bad. Students use a dictionary to find other hyphenated words that use *ill* in this way.



- Discuss how the prefix *il* is often added to a word to create an opposite meaning e.g. *legal/illegal*, *literate/illiterate*.

Students find other words whose opposite can be made by adding this prefix.

- Look at the word *dinghy* (p. 27). Students use a dictionary to find the root of the word. Compare the pronunciation and meaning of this word to *dingy*.

Grammar



- Discuss the use of connectives in the texts that connect the series of events e.g. *instead*, *eventually*. Students identify and list other connectives. Classify the connectives as those that connect: through adding information (e.g. *and*); by comparing and contrasting (e.g. *however*); through time (e.g. *while*); through cause and effect (e.g. *so*).

Writing

Collaborative Writing

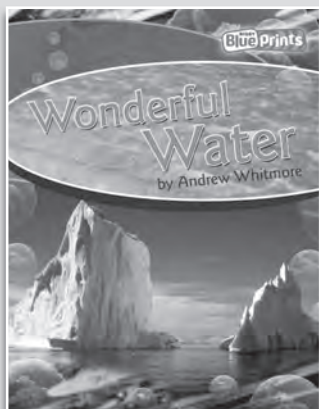
- In pairs, students use a Venn diagram to compare the hardships experienced by the people involved in each recount.

Independent Writing



- Students select one of the recounts and write diary entries to describe how people may have been feeling during different parts of their journey.
- Students draw a labelled diagram to show how Dougal Robertson may have collected fresh water from condensation.

Topic Book 1: *Wonderful Water*



Preparing for the Text

Orientation

- Discuss the title and the front cover photograph. Ask: What is the location of the front cover photograph? Why do you think it depicts an iceberg?
- Students read the contents page and predict what type of information might be in each section. Later, compare students' predictions to the actual information in the text.

Visual Literacy

- Students skim the pages of the book. Ask: What type of text do you think this is? Focus on features such as headings, bolded words, photographs, captions, boxed text, and the glossary and index.

Reading the Text

- Students read the text independently or in pairs.
- Have students predict the content of each section and then check their predictions when they've finished reading.
- Create a Before and After Chart (see p. 33) using the keywords located in the glossary. Independently or in pairs, students write what they think each word means before reading the text. After reading, students confirm or modify their definitions.

Questioning

- *Introduction/Magic Formula* section—Ask: What is the purpose of the Introduction? Discuss the scientific terms e.g. *atoms, chemical formula, molecule, gravity, solvent, nutrients*. Look at the diagram of the water molecules (p. 6). Ask: What colour are the hydrogen atoms? What colour are the oxygen atoms? How many water molecules are shown in the diagram? How does gravity cause the raindrops to be teardrop shaped? How does water affect the plant's ability to obtain nutrients from the soil?
- *Water, Water, Everywhere* section—Ask: Why does the author say Earth should be called 'Water'? If more than two-thirds of Earth is covered with water, why is there a lack of water in the world? What are some of the ways humankind affects the supply of fresh water? If we captured rainwater in a clean water tank, why wouldn't we need to purify it before drinking? How important are plants to the water cycle? What effect does pollution have on the water cycle?
- *Vital Fluid* section—Look at the list of ways we use water (p. 17). Discuss: It is recommended we all have 50 litres of water a day, yet people in Somalia make do with less than nine litres a day. What differences in their lifestyle do you think they would have to only use that amount of water? Why do you think people in developed countries use so much more water? Do you think this is fair? Why or why not? Look at a map of Australia. Why do you think towns have not been built in many desert regions of Australia?
- *Finding Water* section—Discuss: Indigenous Australians do not use scientific equipment to detect where underground water may be found. How do you think they know where to find it? Do you think water diviners can really find underground water? Why or why not? If you lived in a rural area and wanted to find underground water, would you use water divining or scientific methods? Give reasons for your choice. How important are geologists in helping to find underground water? What sort of rock formations do scientists seek when looking for underground water?
- *Moving Water* section—Ask: Why did Indigenous Australians make water carriers from items found in their natural environment? How did the

invention of pottery help to develop methods of moving water? Why are pipes a better solution for moving water than channels or canals? Explain how water can move against gravity and travel uphill in a pipe. Drainage systems can remove excess water from cities, however flooding can still occur where a city has an underground drainage system. Explain why this can happen. Why are windmills so important in Holland? What would happen in Holland if there weren't any windmills?

- **Conclusion**—Ask: Why does the author say we need to stop pollution and reduce our waste if we want to protect our supply of fresh water?

Responding to the Text

Spelling

- Students find and list the compound words in the text. They identify the two smaller words used to make up the compound word.
- Students list the scientific words used in the text, and use a dictionary to find their pronunciations and meanings.
- Students select five words from the index and locate them on the appropriate pages. They then use the context of the text to determine the meaning of each word.

Grammar

- Discuss the use of headings and subheadings in an information report. Ask: How relevant are the subheadings to each of the section headings?
- Discuss the use of diagrams to enhance the information contained in the text. Compare the diagram of the water cycle (p. 14) with the one on p. 12 in the *Big Ideas Book*. Ask: Which diagram do you think gives the information more clearly?
- Discuss the elements of the water cycle on p. 14. Identify the general statement and the sequence of events. Discuss: How important is the diagram to the text?

Writing

Independent Writing



- Have students write an explanation about the three faces of water, depicting the different forms and how each one is used.
- Have students develop a 20-minute radio program called 'All about Water', which includes information about the chemical formula for water, how we use it, the importance of water for our wellbeing, how human activity has an effect on our water supply, and finding and moving water. Students can record their program and share it with others.
- Students modify their Before and After Chart.
- Students complete BLM 2 on p. 103 (content: using the glossary and index, drawing a diagram, writing an explanation, drawing a map including the water cycle).

Section 1 Further Activities

CD-ROM

- Pacing Text 1 Information Text: Students investigate the scientific debate about Australia's largest aquifer, the Great Artesian Basin.
- Pacing Text 1 Interactive Activity: Students click and drag labels and matching descriptions to complete a diagram of the water cycle.

Listening Post

- Text: *Water, Water Everywhere* (a report about the water cycle)
- BLMs: LP1, LP2, LP3

Reflection & Assessment

Assessment

- Collect students' writing samples. Focus on the use of prepositions to indicate place, the use of technical nouns, the ability to explain the water cycle, evidence of empathy with characters and the explanation of different forms of water.
- Students make up a quiz for their peers titled 'Water Facts'.

- Students complete a Let's Consider activity (see p. 35) to record information they have discovered.
- Students complete CD-ROM Assessment Task 1 by writing a narrative about a drop of water passing through the water cycle.

Reflection

Student Self-assessment

- Students continue the Student Response Journal and the Reading Checklist (see pp. 116–118 of this book).
- Provide anecdotal comments to students in their Response Journals.

Whole-class Activities

- In reflection groups, prepare and debate the topic: 'It is the responsibility of every person to protect our water supply for the future.'
- In pairs, students make a diorama of the water cycle with plasticine or play dough.

MONITORING THE CHALLENGE

At this stage students should have:

- discussed our needs for water and why it is vital for life on Earth
- discussed places where fresh water is available
- investigated the water cycle and the impact industry has on it
- started drafting the speech to include the understanding of our need for water.

Teacher Evaluation

- Is literacy learning occurring throughout the unit?
- Am I scaffolding student learning by explicitly demonstrating and modelling new skills and knowledge?
- Have I provided sufficient resources for students to find out about our need for fresh water?
- Do students have sufficient time to complete the tasks?
- Do students understand the learning paths to achieving the *Challenge*?