

What Is a Tree?

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Level 2
Gold 1



The Learning Progression Frameworks (LPFs) describe significant signposts in reading and writing as ākonga develop and apply their literacy knowledge and skills with increasing expertise from school entry to the end of year 10. This teacher support material describes the opportunities in “What is a Tree?” for ākonga to develop this expertise.

Overview

This report is designed to be used as an introduction to the topic of trees. It includes information about trees and a simple explanation of photosynthesis and its importance. This TSM includes teaching suggestions that can be built on when using the other texts in this journal.

A PDF of this article and an audio version as an MP3 file are available at www.juniorjournal.tki.org.nz

LPFs	Curriculum links
<ul style="list-style-type: none">• Making sense of text: using knowledge of text structure and features• Making sense of text: vocabulary knowledge• Acquiring and using information and ideas in informational texts	<ul style="list-style-type: none">• English• Science: The Living World

The New Zealand Curriculum

Key text features

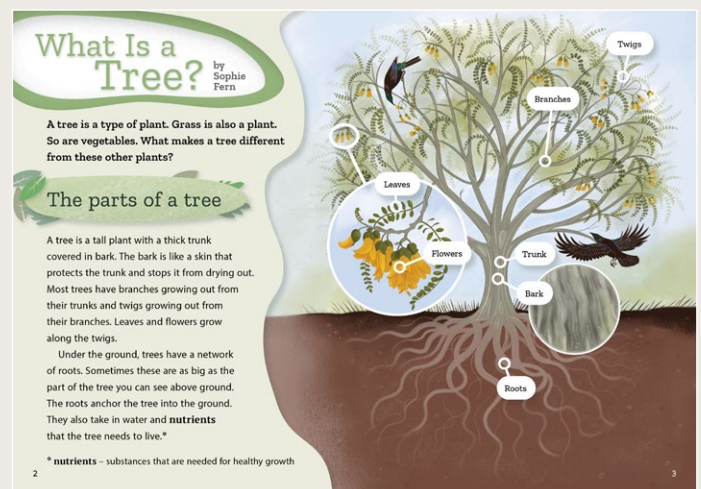
“What Is a Tree?” includes the following characteristics that help ākonga to develop the reading behaviours expected at Gold and to build their awareness of the features of non-fiction.

The structure of the text as a report with an introduction, a series of main points, and a conclusion

Design features typical of non-fiction: headings, photographs and captions, labelled diagrams, close-up images, text boxes, and footnotes

Language features typical of non-fiction, for example:

- definitions, indicated by:
 - punctuation (parentheses, dashes, bold print and an asterisk linked to a footnote)
 - words and phrases such as “which means”, “These”, “is called”
- explanations
- precise descriptive language including extended noun phrases (for example, “a tall plant with a thick trunk covered in bark”, “a network of roots”, “nutrients that the tree needs to live”, “rocky areas by the sea”, “energy from the sun”, “a mixture of gases”)



Some possibly unfamiliar topic-specific vocabulary (for example, “protects”, “network”, “anchor”, “nutrients”, “substances”, “healthy growth”, “perennial”, “annuals”, “biennials”, “endemic”, “native”, “introduced”, “evergreen”, “deciduous”, “autumn”, “including”, “soils”, “filter”, “harm”, “photosynthesis”, “energy”, “process”, “warmth”, “mixture”, “gases”, “oxygen”, “carbon dioxide”, “humans”, “sugars”, “produces”, “breathe”) and tree names, requiring ākonga to use their processing systems

Related Texts

Non-fiction with information about trees or other plants: “Pöhutukawa” (JJ 45); “Kākano” (a poem) and “Seeds” (JJ 50); “Rongoā Māori” and “Helpful Trees and Plants” (JJ 49); “Dig In!” (JJ 52); “Weaving Tukuruku” (JJ 55)

Activities: “Pine Cone Pals” (JJ 36); “Fold a Flower” (JJ 37)

Fiction about trees or with bush settings: *How Kiwi Saved the Forest* (RTR shared); *Did You Shake Your Tail Feathers?* (RTR Purple); “Autumn Leaves” (a poem, JJ 36); “Professor Clever” (a play) and “Rātā me te Rākau” (JJ 57)

Possible reading purposes

What can ākonga expect to find out or think about as a result of reading this text?

- To find out about trees
- To think about the importance of trees.

Possible learning goals

What opportunities does this text provide for ākonga to learn more about how to “read, respond to, and think critically” about texts?

This text provides opportunities for ākonga, over several readings, to:

- use information in the text and visual language features to identify and track information (**summarise**)
- **make connections** to what they already know about trees
- **ask questions** and look for or think about possible answers
- **identify and discuss main ideas** about trees
- **monitor** their reading and, when something is unclear, take action to solve the problem.



Sounds and Words



The Literacy Learning Progressions

Introducing the report

Use your knowledge of your ākonga to ensure that your introduction to the report builds or activates their prior knowledge and provides appropriate support for a successful first reading. Several options are provided below for you to **select from and adapt**.

For English language learners, you could talk through pages 2 and 3 to introduce some of the topic vocabulary, drawing on their knowledge of these terms in their first language. You could use the diagram on page 3 to make a word-matching activity. You can find further information about features of texts that may need support at [The English Language Learning Progressions ELLP](#).

- Read the title and support ākonga to create their own definition or description of what a tree is. You could quickly create a labelled sketch together. Then have them read pages 2–3 to compare.
- Share the reading purpose(s). This TSM suggests an initial “to find out” purpose to build background knowledge, followed by a deeper purpose (“to think about ...”) when rereading and discussing the text.

- Browse through the report, using the headings as a guide to what ākonga will find out. Provide support in decoding the new topic words in the headings and captions and discuss their meanings. Draw attention to the asterisks on pages 2 and 4 that link the words in bold print to the footnotes. Explain that footnotes provide further information. Record any questions arising from this text preview.
- You could build support for topic vocabulary by creating a KWL word chart. Choose up to six words from the headings or the words in bold print. Record ideas from ākonga about the meanings of the words and discuss ways they might find out more about their meanings as they read.
- Spend some time exploring pages 8 and 9 to build understanding of the ideas that trees make their own food (“sugars”) and that the air around us is a mixture of gases.
- Remind ākonga of the reading purpose. Give them sticky notes to mark aspects they might want to return to or discuss later.

Reading the article

Encourage ākongā to read the article by themselves, intervening only if needed. Much of the processing ākongā do at this level is “inside their heads” and may not be obvious until the discussion afterwards. The focus of the first reading is to identify key information and ideas relevant to the initial reading purpose. Allow for several sessions to read and discuss the text, to investigate other reading purposes, and to explore ideas and language features more deeply.

Reading behaviours to look for and support

Examples of the sorts of behaviours (often overlapping and developed over several readings) that will support ākongā to meet the reading purpose(s).

Ākongā use information in the text and visual language features to identify and track information.

- They use the headings to clarify the focus of each new section and keep this in mind as they read the supporting detail.
- They use the labelled diagrams on pages 3 and 8–9 to support their understanding of the information in the body text.
- On pages 2 and 4, they use the asterisks to track the words in bold print to the explanations in the footnotes.
- They notice the use of dashes (for examples, on pages 2, 4, 5, 6, and 8) to indicate links to further information.

They demonstrate self-monitoring and problem solving.

- They draw on their phonics knowledge and other word-solving strategies. For example, they:
 - break words into chunks or syllables (“pro-TECTS”, “net-work”, “grow-th”, “per-en-ni-al”, “ever-green”, “photo-syn-the-sis”)
 - use their knowledge of variations in the sounds of letters and letter combinations to help solve “anchor”, “introduced”, “deciduous”, “photosynthesis”, “oxygen”, “sugars”
 - draw on their knowledge of “anchor” (page 2) as a noun and reread the sentence to clarify its meaning as a verb
 - read on and think about the overall meaning of the sentence to work out extended noun phrases
 - search for further information, for example, definitions, the photographs, and/or the diagrams to support word meanings.
- They mark words, phrases, and ideas they want to come back to.

They ask questions and look for or think about possible answers.

- They use their sticky notes to record questions they think of as they discover new information, for example, they might wonder:
 - how people know how old Tāne Mahuta is, considering that they can’t count the rings
 - why most endemic and native New Zealand trees are evergreen
 - about connections to trees in their neighbourhood
 - why it’s good for trees to have “sugars”.

Deliberate acts of teaching

How you can support individual ākongā (if needed).

- Remind ākongā of strategies they can use for word-solving (for example, looking for the biggest known word chunk, applying their knowledge of letters, sounds, and word structure) and for clarifying meaning (rereading or reading on, referring to the photos or diagrams, using the footnotes, looking for definitions, and thinking about the overall meaning of the sentence). If necessary, provide specific support, for example, with the tree names. Explain, if necessary, that a macron (as in Tāne, Pōhutukawa, Mānawa) means that the vowel sound is drawn out.
- Explain that when reading non-fiction, they may sometimes need to read more slowly, reread parts, and/or check aspects such as photos, captions, or footnotes to build their understanding.

Thinking, talking, reading

You can revisit this article (and the linked articles in this journal) several times, providing opportunities for ākongā to build comprehension, vocabulary, and fluency. **Select from and adapt** the following suggestions. Some of the suggestions overlap, and several can be explored further as independent reading activities. For some suggestions, you may find it helpful to project the PDF of the article so that you can zoom in on relevant sections.

- Invite ākongā to share their initial responses and connections to their own knowledge and experiences of trees. They might:
 - add any new information to the sketch of the parts of a tree created when introducing the text
 - share their knowledge of other types of trees and environments that trees are suited to, for example, palm trees and banana trees in the Pacific
 - share any new questions or ideas arising from their sticky notes.
- Explore the section on photosynthesis in more detail. Enlarge the diagram, and together track the connections between the diagram and the supporting information in the text on pages 8 and 9. Explain the importance of close, repeated reading (and talking) to build understanding of new ideas.

- Return to the KWL vocabulary chart (if created before reading) and ask ākongā to share what they have found out. Find and read the sentences that include the words and discuss ways the meanings are supported. Add new topic words ākongā have discovered from their reading. You could also discuss familiar words such as “anchor”, “rings”, “energy”, or “sugars” that are used in less familiar ways in this article. This is also an opportunity to demonstrate how to use a dictionary to find word meanings.
- Remind ākongā of the initial reading purpose and have them record what they have found out on a summary table for pages 2 to 7, such as the partially completed one below. Work through one of the sections together, with ākongā using highlighter pens on a printout of the report to identify the main points under each heading. Model how to write the main points as a list of bullet points. Alternatively, you could model how to write a summary sentence. Ākongā could work in pairs on the other sections (one section per pair) and then share their summary with another pair.

Page	Heading	Main points
2	What is a tree?	<ul style="list-style-type: none"> • a plant • not like grass or vegetables (Or as a summary sentence: A tree is a plant but it's not like grass or vegetables.)
2	The parts of a tree	
4	How long do trees live?	(and so on)

- Prompt ākongā to think critically about trees. (They could also come back to this activity after reading “Trees and Us”.) For example:
 - Clarify that the giant kauri Tāne Mahuta is named for Tāne Mahuta, atua of the forest. *Why has this tree been given such an important name?*
 - Share-read “Pōhutukawa” (JJ 45) and ask ākongā to notice any information that supports or adds to what they have read in this report about the importance of trees.
 - Write the word “air” in the centre of a page and ask ākongā to find all the facts about it (for example, it’s a mixture of gases, we breathe it, trees use it, it gets into leaves through tiny holes, it mixes with water and energy to make food for trees, trees use the carbon dioxide in it).
 - Ask ākongā to discuss which idea in this article they think is the most important to the writer and also to them. They might use examples from the text or their own experience to help explain their opinion.

Building language knowledge

As ākongā reread and discuss the text, note opportunities for explicit instruction and to explore language features in more detail.

For example:

- discuss how ākongā worked out new vocabulary (or tried to)
- explore the structure of some of the topic-specific vocabulary
 - the prefix “photo” (meaning “light”) in “photosynthesis” – support ākongā to generate other examples using the prefix (photocopy, photograph)
 - the suffix “th” in “warmth” and “growth” – identify the root words and explore other examples (deep/depth, wide/width, long/length, true/truth, strong/strength).
 - the addition of prefixes and a change to the root word “annual” to create the words “perennial” and “biennial”. Enjoy finding further examples and their meanings (triennial, centennial, bicentennial, and so on).
- remind the students of the importance of reading on to the end of a noun phrase to clarify meaning. Demonstrate how extended noun phrases provide precise detail, for example, not just “a tall plant” but “a tall plant with a thick trunk covered in bark”; not just “energy” but “energy from the sun”.

Further activities

- Ākongā can build their comprehension and fluency by listening to the audio version as they reread the article

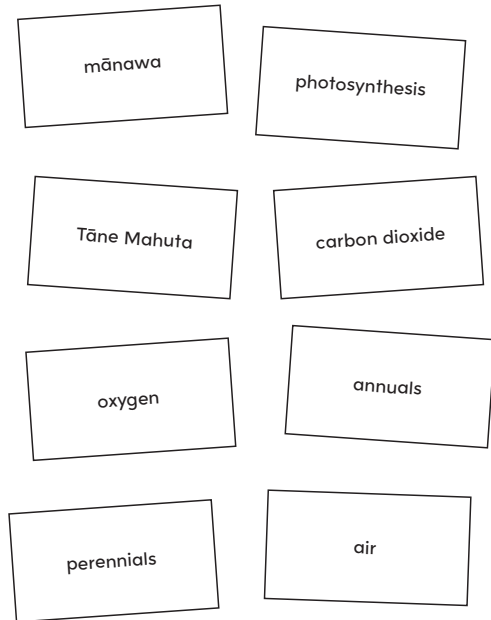
Audio versions are particularly supportive for English language learners because, as well as clarifying pronunciation, they provide good models of the prosodic features of English, such as intonation and phrasing.

- Explore other linked texts in this journal.
- Reinforce understanding of topic vocabulary and noun phrases. Write words and definitions on cards for ākongā to match up. Some words might match up with more than one definition. Add cards to the collection from this article and as ākongā read further texts.

Further activities CONTINUED

- Support ākonga to research questions arising from their reading, making use of the school library, other texts in the journal, and other related texts. They could also use the [Any Questions](#) website or the “Build a tree” or “Experiencing native trees in your green space” activities at the Department of Conservation [Education Resources](#) webpage.

Topic vocabulary



Definitions



- Identify a significant local tree and support ākonga to find out why this tree is important (for example, through talking with their whānau, asking local experts, or searching local websites). Alternatively, ākonga could photograph and describe a tree that is special to them or talk with whānau about a tree (not necessarily a New Zealand tree) that is special in their lives.
- Find out how ākonga might become involved in any local tree-planting activities.
- Encourage ākonga to do the “Leaf Art” activity on pages 30–32.
- Ākonga could take photos of a tree or parts of a tree and add labels or use them as a reference to do labelled sketches.
- Enjoy viewing and discussing “The Golden Bearing”. Find out more at:

[Christchurch Art Gallery: The Golden Bearing](#)

[Govett-Brewster Art Gallery: The Golden Bearing](#)

For English language learners, [SELLIPS](#) and the [Teaching Strategies](#) section of [ESOL Online](#) also have ideas for purposeful and relevant tasks.