Aphids

Aphids are insects that live on leafy plants, such as roses, fruit trees, and vegetables. An aphid has a mouth that looks like a straw, and it uses it to suck the sap from new leaves. This harms the plants and can even kill them. We think of insects such as aphids as pests because they eat plants that we like.

Ladybirds

Fortunately for us, some insects, such as ladybirds, like to eat aphids. A ladybird is a non-stop eating machine. It can eat up to fifty aphids in an hour.

The poem “Māra”, which is also in this journal, uses te reo Māori words for several common garden creatures, including some of those mentioned in “The Jungle in My Garden”.

A PDF of the text is available at www.juniorjournal.tki.org.nz

The conversational style, with the writer addressing the reader directly and using the first person (“I”, “my”, “We”, “us”)
They can stay alive.

All living things have certain requirements so

Levels 1 and 2 – Living World: Recognise that

Science

English (Reading)
Level 2 – Ideas: Show some understanding of ideas within, across, and beyond texts.

Possible reading purposes
(What can the students expect to find out or think about as a result of reading this text?)

- To find out about spiders and insects in the author’s garden
- To think about why the author says there is a jungle in his garden

Possible learning goals
(What opportunities does this text provide for students to learn more about how to “read, respond to, and think critically about” texts?)

- They make connections between ideas in the text and between the text and the visual language features to form and test hypotheses and locate and track information.
- The students make connections between their prior knowledge (of jungles, gardens, and garden creatures) to identify main points and visualise how the insects and spiders catch and eat their food.
- They make inferences about how a garden might be like a jungle and form an opinion about (evaluate) the author’s point of view.
- They monitor their reading, and when something is unclear, they take action to solve the problem, for example, by rereading a sentence or looking for clues close by.

Text features
- Connecting words, phrases, and punctuation that clarify the links between ideas, for example:
  - the pronouns “they”, “them”, “you”, “my”, “it”, “This”, “We”, “us”, “itself”
  - phrases that draw attention to the similarities between things (for example, “such as”, “just like”, “that looks like”, “the same way”, “the same colour”, “Like the crab spider”).

Metacognition

How you can support your students to be metacognitive

Here are some ways you can build students’ awareness of the processes and strategies they are using as they make meaning and think critically.

- What are some words in this paragraph that helped you track the ideas about ladybirds?
- What helped you understand the connection between the idea of the “king of the jungle” and the praying mantis?
Introducing the text

- Use your knowledge of your students to ensure that your introduction to the text is effective in activating their prior knowledge and providing appropriate support for a successful first reading. Choose from the following suggestions.
  
  For English language learners, before reading the article with the rest of the group, you could use the illustration for the poem “Māra” to start a discussion about garden creatures and introduce their names. Then move onto the article and discuss the photographs, subheadings, and photo captions. If necessary, explain that the “ph” sound in “aphid” is the same “f” sound used in “phone”.
  
- Read the title and the author’s name. Discuss the possible meaning of the title: Can there really be a jungle in the author’s garden? In case the students are not sure what a jungle is, have some images to show them or use the illustrations from Two Tiger Tales.
  
- Have the students look through the article, using the photographs and subheadings, along with the title, to form hypotheses about what sort of text this is and what it will tell them. As they preview the article, draw out or feed in key words (such as “aphids”, “ladybirds”, “praying mantis”). Note that if you have students from North America in your group, they may know “ladybirds” as “ladybugs”.
  
- Have them read the first paragraph on page 16. (Expect them to infer that the “I” is the author, Dr Pollard). Draw attention to the phrase in the parentheses, which distinguishes between insects and spiders. This distinction may be new to students. How will you find out more about this?
  
- Return to the question of having a jungle in a garden. Encourage the students to share their ideas about the possible link between spiders and insects and a jungle.
  
- Share the reading purpose(s) and the learning goal(s).
  
- You could provide the students with sticky notes, or some other tool, to note ideas or questions about spiders and insects and how a garden can be like a jungle.

Reading and discussing the text

Suggestions for ways that you can support the students to achieve the learning goals are in the right-hand column of the table below. Select from and adapt the suggestions according to your students’ needs. These suggestions may apply to the first or a subsequent reading.

Encourage the students to read the text by themselves, intervening only if it’s clear that a student needs help. There will be many opportunities to provide support with word-solving and comprehension on subsequent readings.

<table>
<thead>
<tr>
<th>Student behaviours</th>
<th>Deliberate acts of teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Examples of what to look for and support as the students work towards achieving their learning goal(s).</strong> Much of the processing that students do at this level is “inside their heads” and may not be obvious until after they have read the text and you are discussing it as a group.</td>
<td><strong>Examples of how you can support students as they work towards achieving their learning goal(s).</strong> Often this will involve individual students rather than the whole group.</td>
</tr>
</tbody>
</table>

**The first reading**

- The students use the text box to clarify the difference between spiders and insects.
- On page 17, they begin to notice and record references to the “jungle” idea.
- They make connections between the phrase “eat to live” and the ellipsis at the end of the last paragraph to infer that the following pages will have information about how the insects and spiders in the author’s garden also “eat to live”. (They may also notice this link to the idea of wild creatures in the jungle.)
- The students make connections between the life-size drawing of the aphid, the information about aphids living on leafy plants, the reference on page 16 to making photos look bigger, and (possibly) their prior knowledge, to infer that the photograph on page 18 has been enlarged. They build on this thinking (and their prior knowledge of ladybirds) to infer that the page 19 photograph has also been enlarged.
- They infer from the final sentence on page 19 that spiders eat ladybirds and predict that the next section of the text will be about spiders.
- The students demonstrate monitoring and self-correction. For example, on page 20, they use the contrast between “crawling” and “flying” to help clarify the meaning of “scuttling”; and they use surrounding words in a sentence (“to make a web”, “spins silk out of”) and the photograph to attempt the meaning of “spinnerets”.
- They make connections between the information on page 20 and the supporting explanation in the first paragraph on page 21 to visualise how the spider catches insects in its web.
- The students attempt the identification activity on page 23 then look in the back of the journal to check their answers.
- Remind them to use the text box to clarify their understanding.
- Remind them of their reading purpose(s) and that they can use their sticky notes to mark or record ideas.
- Draw attention to the ellipsis. Prompt the students to think about the link to the last sentence of the previous paragraph.
- If necessary, draw attention to the statement on page 16 and to the labelled drawing of the actual-size aphid.
- Prompt them to make connections between ideas: I notice the author has used another ellipsis here. What does this suggest to you about what he is going to tell you about next?
- Remind the students of the strategies they can use when meaning is unclear.
- If necessary, point out that the information about how the orb web spider catches insects continues on page 21.
- Encourage the students to try the identification activity.
With support, the students reflect on their learning.

- The students identify a challenge in the text and explain how they solved it, for example, using the context of the sentence to infer the meaning of “pests” and rereading the previous sentence to confirm.
- The students describe strategies such as rereading, looking for words that link ideas, and/or making connections (for example, on page 21, drawing on their own experiences of using a trampoline).

Remind the students of the learning goal(s).

- Have the students share with a partner one or two words or phrases they found difficult and the strategies they used to work them out. Listen in to the discussions and note anything that may need to be followed up.
- What helped you visualise how orb web spiders catch insects?

Explore word structure. Record the verbs from the text that describe movement. Encourage them to act them out to clarify the meaning and to generate further examples.

<table>
<thead>
<tr>
<th>Name of creature</th>
<th>What it eats</th>
<th>How it catches or eats its food</th>
<th>What it is eaten by</th>
</tr>
</thead>
<tbody>
<tr>
<td>aphid</td>
<td>leaves</td>
<td>• lives on leaves</td>
<td>ladybirds</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• sucks out the sap from leaves (and sometimes kills the plant)</td>
<td></td>
</tr>
<tr>
<td>ladybird</td>
<td>aphids</td>
<td>• can eat fifty aphids in an hour</td>
<td>spiders</td>
</tr>
</tbody>
</table>

Use the chart to build awareness of verbs, such as “sit” and “fly”, that are irregular in their past-tense form (“sat”, “flew”) and of the need to adapt word endings (for example, removing the “e” from “scuttle” to form “scuttling”, doubling the “b” in “grab” to form “grabbed”, and changing the “y” in “fly” to form “flies”). To support English language learners, create oral sentences together to help students identify which endings are in the present tense and which are in the past.

Practise reading aloud together some multi-clause sentences, using punctuation and the linking words to support phrasing and intonation. (For example, “Like the crab spider, this creature uses camouflage by matching the colour of the leaves it sits on.”)