

# Student Worksheets

## Student Worksheet 1.1

Name: \_\_\_\_\_

### Describing a weed

In order to find out your ideas on weeds at this stage, imagine you are a weed detective! Your assignment is to correctly identify a weed as the villain in a crime and be able to justify to a court hearing how you came to your decision!

### Sketch

Draw what you think a weed looks like.

### Description of Weed Species

Describe why you feel your plant can be accused as a villain weed. In other words, why is it an unwanted plant?

# Student Worksheets

## Student Worksheet 1.2

Name: \_\_\_\_\_

### Procedure to press and dry weed samples

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Now you have collected some weeds, you will press and dry these weeds by following the procedure below. Make sure you read each step and then follow it carefully.

- 1 Press your specimens as soon as possible after collection, otherwise they go limp and yucky!
- 2 Cover the tables you are working on with newspaper.
- 3 Place the weed collected, with leaves flat, on top of 5 sheets of newspaper.
- 4 If you know, or you were able to find out the name of the weed, write this in pencil beside the weed on a small piece of paper.
- 5 Place 5 sheets of newspaper on top of the weed.
- 6 When all other students' have their weeds ready, work with your classmates to make a stack of weeds between newspaper.
- 7 Place something heavy on top. This could be heavy books, some bricks or whatever you can find.
- 8 Leave the weeds in the stack until the plants are dry.
- 9 Your teacher will remind you to check your weeds regularly until they are dry. Change the newspaper when it becomes moist, otherwise your weeds may go mouldy.
- 10 Once your weeds are pressed and dried, you will be able to make scientific drawings of the weeds, then present and display them. Your teacher will guide you to do this.

# Student Worksheets

## Student Worksheet 1.3

Name: \_\_\_\_\_

### Introducing weeds comprehension passage

1 When is a plant a weed?

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2 Name three different types of weeds described in the presentation.

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

3 What animals can be used to help control weeds?

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4 It has been suggested that other management strategies should be used together with biological control. Why won't biological control eradicate a weed infestation?

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5 Integrated weed management, or using a combination of different options, is usually the best approach. Why do you think this is the case?

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6 Who is responsible for weed control? Why?

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Name: \_\_\_\_\_

### Comprehension activity on *Mimosa pigra*

*Mimosa pigra* is an introduced plant in Australia. *Mimosa pigra* originated from South and Central America.

Plants and animals are 'introduced' when they are taken from their natural home and brought into another area. When a plant or animal is introduced into a new environment it usually has no natural enemies or predators and as a result its population may not be kept under control. These introduced plants and animals can become weeds and pests.

*Mimosa pigra* is a horrid, thorny and fast growing weed. Its thorns stop grazing animals eating it. The word *pigra* comes from the Latin word *piger* meaning 'lazy' or 'slothful'. However, do not be fooled by this sneaky and deceiving weed. In good conditions this plant can grow 1cm a day. Now that is not lazy! This fast growth helps this weed spread and cover huge areas.

*Mimosa pigra* could potentially be found in northern Australia, from Western Australia to Queensland. *Mimosa pigra* is a serious threat to Kakadu National Park in the Northern Territory.

This plant has an interesting habit. When touched the leaves move as if to close together. The reason for this reaction is still a puzzle to scientists.



Distribution of *Mimosa pigra* in Australia

- Current distribution
- Potential distribution



# Student Worksheets

## Student Worksheet 1.4a continued

Name: \_\_\_\_\_

### Questions

Q1 Where did *Mimosa pigra* originate from before it was introduced into Australia?

\_\_\_\_\_

Q2 Where in Australia could *Mimosa pigra* potentially be found?

\_\_\_\_\_  
\_\_\_\_\_

Q3 In favourable conditions how much could *Mimosa pigra* grow in one day? \_\_\_\_\_

Use a ruler to draw a line to show this length.

Q4 Why do some introduced plants and animals become problems?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Q5 This plant has special features to stop animals eating it and reacts when touched. Explain these features and the reaction of *Mimosa pigra*.

\_\_\_\_\_  
\_\_\_\_\_

Q6 List all the adjectives used in this passage to describe *Mimosa pigra*.

\_\_\_\_\_  
\_\_\_\_\_

Q7 Using the list of words you have written down for Q6, explain how the writer of this passage has made you feel about *Mimosa pigra*.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Q8 With another student, discuss all the characteristics which you feel make *Mimosa pigra* a weed, and then tell your teacher your ideas.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name: \_\_\_\_\_

### Comprehension activity on St John's wort

To many people the cunning and deceptively disguised St John's wort seems to be an attractive yellow flowering plant. It was for this reason that it was brought into Australia as a garden plant in 1875. What a huge mistake that was! DOH! Before 2001 it had infested an estimated 250 000 hectares.

Just one of these horrid plants is capable of producing up to 33 000 seeds each year. Being sticky the seeds can attach themselves to passing animals. This enables the cunning St John's wort to 'hitch hike' a ride and spread into new areas with ease.

This plant is particularly horrible and nasty. It is just like a wicked witch, who casts spells and makes poisons causing others to become sick. St John's wort contains a toxin called 'hypericin', which is like a witch's poison. Hypericin is found in its highest levels when the plant is flowering or forming seeds.

Animals that eat this flowering plant are affected, becoming quite sick and even die. Cattle are the most sensitive, while sheep suffer to a lesser degree. Research has indicated that merino sheep are able to safely eat the plant before it flowers and develop no ill effects. The hypericin makes animals very sensitive to sunlight. This means that the animals suffer what is like severe sunburn. The body temperature of the affected animals becomes abnormally high and the skin around the forehead and eyes becomes red and swollen. Any white patches on the animal's skin are very susceptible. These swollen areas of skin end up raw and bleeding, and eventually dry to form scabs.

There is one side to this weed of which you should also be aware. Some people eat the plant for its medicinal properties. It is sold in tablet form in some health food shops as an anti-depressant. Therefore weeds can have good as well as bad qualities.



# Student Worksheets

## Student Worksheet 1.4b continued

Name: \_\_\_\_\_

### Questions

**Q1** How many seeds (approximately) is one St John's wort plant capable of producing each year?

\_\_\_\_\_

**Q2** There are two reasons the seeds produced by this weed help it spread into new areas. One is the huge number of seeds. What is another characteristic of the seed that helps this plant spread?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Q3** Does this weed have any good qualities?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Q4** At what stage of the plant's lifecycle is the worst time to let animals eat the plant?

\_\_\_\_\_  
\_\_\_\_\_

**Q5** Affected animals must be removed from the group and held in a shady area for at least a week. Why do you think this is the best method of treating sick animals?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Q6** One method of controlling the weed is to let merino sheep graze the plant when it is young and not flowering. Then spray with herbicide when the plant has flowers. Describe why you think this would or may not work.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Q7** How has the writer of this passage made you feel about St John's wort?

\_\_\_\_\_  
\_\_\_\_\_

**Q8** With another student, discuss how this passage is written to persuade you to dislike this weed, and then tell your teacher your ideas.

\_\_\_\_\_  
\_\_\_\_\_

Name: \_\_\_\_\_

### Comprehension activity on bridal creeper

Bridal creeper, as the name indicates, is commonly used in floral arrangements especially bridal bouquets. Bridal creeper was introduced into Australia and many other countries around the world from South Africa. As a 'garden escape', bridal creeper has become a major environmental weed in many regions of Southern Australia.

A garden escape is a plant which is planted in a garden, but has managed to spread beyond the garden to other areas and become weedy. This can happen by birds spreading the plant's seeds, careless dumping of garden wastes and because plants introduced into new areas without their natural enemies often grow uncontrollably. Gardens are beautiful things we all enjoy, but garden escapes like bridal creeper cause huge problems.

Bridal creeper has many features allowing it to spread and become established in new areas. These are the features making it a weed.

Bridal creeper has red sticky berries which are attractive to birds. The birds eat the berries and the seeds are able to pass through the bird unaffected and are dropped with the bird's faeces into different areas. The sticky berries attach to bird's beaks and this is another way the seeds travel into different areas.

Bridal creeper has underground tubers. Tubers are like an underground stem/root which stores food reserves allowing the plant to survive difficult seasons. These underground tubers form a dense mat, which restricts other plant growth.

Bridal creeper seeds germinate much faster than many native plants and as a result, bridal creeper tends to establish sooner and then smothers existing vegetation.

Bridal creeper is a vigorous competitor and can climb up and over plants 2–3m high or even higher forming a dense canopy. This way bridal creeper out-competes and limits other plant growth.

We can avoid garden escapes by doing simple things. Some things smart gardeners do are: maintain their gardens, avoid dumping garden wastes where weeds can become established, avoid introducing plants into new areas and instead plant in our gardens the plants that naturally grow in our local area.



**Distribution of bridal creeper in Australia**

- Current distribution
- Potential distribution



# Student Worksheets

## Student Worksheet 1.4c continued

Name: \_\_\_\_\_

### Questions

Q1 How is bridal creeper commonly used?

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Q2 Bridal creeper was introduced into Australia from what country?

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Q3 The seeds of bridal creeper can be transported into new areas when birds eat the fruit. Explain another way birds disperse the plants seeds.

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Q4 What is a 'garden escape' and what are some things we can do to avoid a 'garden escape'?

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Q5 What are four features of bridal creeper, mentioned in the passage, making it a weed?

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

Q6 Why is it suggested not to introduce plants into a new area?

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Q7 What is the message the writer of this passage is giving about the way we should do our gardening?

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Q8 With another student, discuss additional things gardeners can do to be smart gardeners. Explain your ideas to your teacher.

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Name: \_\_\_\_\_

### Comprehension activity on lantana

*Lantana camara* (common lantana), is a native plant from Central America. Lantana has pretty white, cream, yellow orange, pink or purple flowers. Lantana is an attractive plant that has been introduced into 47 countries and is now considered a weed in most. Lantana travelled into countries with the movement of people. Lantana was introduced into Australia early by the well known sheep producer John Macarthur in 1843 at Camden Park on the edge of Sydney New South Wales. By the 1850s lantana had become established along the Brisbane River in Queensland. Currently lantana is a prominent weed, found mainly along the east coast of Australia between Sydney in New South Wales and Cairns in Queensland. Lantana is also found in isolated pockets in the Northern Territory and Western Australia. (Refer to the map of Australia illustrating the current distribution of lantana). In Australia lantana occupies 4 million (4 000 000) hectares of land.

Lantana spreads in two main ways. Lantana forms dense thickets by layering. This means the stems send roots into the soil. This forms dense stands and allows it to spread very quickly. Another way lantana spreads is with the help of animals transporting the seeds into new areas. Mature plants can produce up to 12 000 seeds each year. Birds and other animals such as foxes consume the seeds and then travel to new areas, where they pass the seeds in their droppings. This way, if lantana is growing in a garden, it is very easy for the seeds to travel into new areas. Other features which make this plant a weed include the fact that lantana may be toxic to animals, causing photosensitisation in sheep and cattle. Also lantana is allelopathic. This means that it can release chemicals into the surrounding soils which limit the germination and the growth of other plant species. Lantana will grow in high rainfall areas, with tropical and subtropical climates.



**Distribution of lantana in Australia**

- Current distribution
- Potential distribution



# Student Worksheets

## Student Worksheet 1.4d continued

Name: \_\_\_\_\_

### Questions

Q1 From what area is lantana native?

\_\_\_\_\_

Q2 How much land in Australia is occupied by lantana?

\_\_\_\_\_

Q3 How many seeds can a mature lantana plant produce?

\_\_\_\_\_

Q4 Use the 3 dates provided to construct a timeline to display the introduction, spread and current distribution of lantana.

1843	1850s	Currently in 2006

Q5 What two main ways mentioned in this passage, describe how lantana is able to spread into new areas?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Q6 Which features described in this passage explain why lantana is a weed?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Q7 State two pieces of evidence indicating lantana is not likely to spread into the more arid central Australia?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Q8 With another student, discuss the reasons you think lantana was originally introduced into Australia and so many other countries. Explain your ideas to your teacher.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name: \_\_\_\_\_

### Comprehension activity on gorse

Gorse is also called furze, and is a native plant of Europe and the United Kingdom. The following two examples describe how gorse arrived and was recognised as a big problem in Australia and New Zealand. Gorse was introduced into Australia as a hedge plant in the early 1800's. Now the plant grows in all states and territories of Australia excluding Northern Territory. Gorse is particularly a problem in Tasmania and southern Victoria. This plant is also a weed in North America and New Zealand. In the early settlement of New Zealand, a condition of rental of crown land was to plant specified lengths of gorse. At this time, the hedges of this plant were considered beneficial and attractive. However, by 1859 legislation imposed a fine on anyone who did this.

Gorse is a problem weed due to its ability to invade ecosystems, and the difficulties and expenses required for its control. The initial cost for controlling gorse can be up to \$1500 per hectare each year.

Gorse has many other features making it a weed. This plant provides a home for pests especially rabbits. Gorse is highly flammable and increases the risk of bush fires. Sharp spines are found on the stems and leaves of this plant and if left undisturbed, it can grow to a height of greater than 3 meters. This plant forms dense thickets that limit access. Gorse has extensive roots which collect nutrients and moisture from the surrounding soil leaving little for other plants. This plant has a very high seed production. A mature infestation can produce up to six million (6 000 000) seeds per hectare each year. The seeds produced are capable of remaining dormant (sleeping in the soil, waiting for favourable conditions) for up to 30 years.

Gorse is another example of a plant introduced into Australia without its natural enemies and as a result it has become a problem weed in many parts of the country.



**Distribution of gorse  
in Australia**

- Current distribution
- Potential distribution



# Student Worksheets

## Student Worksheet 1.4e continued

Name: \_\_\_\_\_

### Questions

Q1 Gorse is a native to what area?

\_\_\_\_\_

Q2 Where in Australia is this plant currently found?

\_\_\_\_\_

\_\_\_\_\_

Q3 How many seeds per hectare is a mature infestation of gorse capable of producing?

\_\_\_\_\_

Q4 For what purpose was gorse initially introduced into Australia and New Zealand?

\_\_\_\_\_

\_\_\_\_\_

Q5 Describe the facts included in this passage that indicate that this plant has become a serious problem in New Zealand and Australia.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Q6 What features described in this passage, explain why gorse is a weed?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Q7 Gorse seeds can remain dormant in the soil for up to 30 years. Explain why you think this is a problem.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Q8 With another student, discuss the reason why plants which are introduced into a new area without their natural enemies/predators often become weeds. Explain your ideas to your teacher.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# Student Worksheets

## Student Worksheet 1.5

Name: \_\_\_\_\_

### Work out the secret messages

#### 1 Using the code below, do the calculations to work out the secret message

A	C	D	E	H	I	L	M	N	O	P	R	S	T	U	V	W
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

$37 - 20 = \underline{\hspace{2cm}}$

$12 - 8 = \underline{\hspace{2cm}}$

$16 - 12 = \underline{\hspace{2cm}}$

$16 - 13 = \underline{\hspace{2cm}}$

$25 - 12 = \underline{\hspace{2cm}}$

$27 - 26 = \underline{\hspace{2cm}}$

$3 \times 4 = \underline{\hspace{2cm}}$

$95 - 91 = \underline{\hspace{2cm}}$

$3 \times 5 = \underline{\hspace{2cm}}$

$36 - 27 = \underline{\hspace{2cm}}$

$5 + 12 = \underline{\hspace{2cm}}$

$15 - 14 = \underline{\hspace{2cm}}$

$3 \times 3 = \underline{\hspace{2cm}}$

$7 + 7 = \underline{\hspace{2cm}}$

$48 - 44 = \underline{\hspace{2cm}}$

$68 - 65 = \underline{\hspace{2cm}}$

$33 - 22 = \underline{\hspace{2cm}}$

$3 + 4 = \underline{\hspace{2cm}}$

$4 - 3 = \underline{\hspace{2cm}}$

$17 - 8 = \underline{\hspace{2cm}}$

$30 - 16 = \underline{\hspace{2cm}}$

$19 - 6 = \underline{\hspace{2cm}}$

Secret message: \_\_\_\_\_

# Student Worksheets

## Student Worksheet 1.5 continued

Name: \_\_\_\_\_

### 2 Using the code below do the calculations to work out the secret message

A	C	D	E	H	I	L	M	N	O	R	S	T	U	V	W
10	15	20	30	42	50	64	70	85	99	120	240	460	580	640	800

<p>400 x 2 = _____</p> <p>3 x 10 = _____</p> <p>15 x 2 = _____</p> <p>4 x 5 = _____</p> <p>120 x 2 = _____</p> <p>99 - 84 = _____</p> <p>460 ÷ 46 = _____</p> <p>17 x 5 = _____</p> <p>7 x 6 = _____</p> <p>120 ÷ 12 = _____</p> <p>60 x 2 = _____</p> <p>35 x 2 = _____</p> <p>116 x 5 = _____</p> <p>12 x 20 = _____</p> <p>155 - 56 = _____</p> <p>5 x 92 = _____</p> <p>84 ÷ 2 = _____</p> <p>900 ÷ 30 = _____</p> <p>20 x 6 = _____</p> <p>400 ÷ 40 = _____</p> <p>Half of 170 = _____</p> <p>200 ÷ 4 = _____</p> <p>35 x 2 = _____</p> <p>230 ÷ 23 = _____</p> <p>8 x 8 = _____</p> <p>Half of 480 = _____</p>	<p>2 x (3+2) = _____</p> <p>5 x (8+9) = _____</p> <p>5 x (2+2) = _____</p> <p>10 x (20+26) = _____</p> <p>6 x (3+4) = _____</p> <p>3 x (4+6) = _____</p> <p>600 ÷ 20 = _____</p> <p>510 ÷ 6 = _____</p> <p>3200 ÷ 5 = _____</p> <p>3000 ÷ 60 = _____</p> <p>(7+5) x 10 = _____</p> <p>(6+5) x 9 = _____</p> <p>(7+10) x 5 = _____</p> <p>(6+4) x 7 = _____</p> <p>(7+8) x 2 = _____</p> <p>(11+6) x 5 = _____</p> <p>(16+30) x 10 = _____</p> <p>Secret message:</p> <p>_____</p>
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# Student Worksheets

## Student Worksheet 2.1 continued

### Results:

The results describe what you see at the end of your experiment.

Write 2–3 sentences to describe the difference in the size, shape and colour of the one seedling growing as the control and the seedling growing with the weeds and sharing the water, light and nutrients available.

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### Conclusion:

Finish the following sentences.

If plants are grown too close together then...

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If there are many weeds growing in the one place, other plants suffer because...

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To stop weeds invading, we can plant many desirable plants. This will help because...

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# Student Worksheets

## Student Worksheet 2.2

Name: \_\_\_\_\_

### Seed dormancy

'Seed dormancy' is when seeds remain alive for long periods, waiting for favourable conditions before starting to grow. Weeds often have seeds that remain dormant in the soil for very long periods of time (sometimes many years).

1 Predict (or make a sensible guess) how many weed seeds you think will germinate and emerge from the soil.

\_\_\_\_\_

2 After approximately 21 days, record the number of seeds that have germinated and emerged from the soil in each pot.

<b>Pot 1</b>	<b>Pot 2</b>
<b>Pot 3</b>	<b>Pot 4</b>

3 Calculate the average number of seeds germinated in the 4 pots. \_\_\_\_\_

#### Step 1

Add the number of seedlings emerged from each pot.

(  +  +  +  ) = **Total**

Pot 1          Pot 2          Pot 3          Pot 4

#### Step 2

Divide the total by 4 to give the average of the 4 pots = **Average**

4 Was this more or less than you expected? \_\_\_\_\_

5 Why do you think weeds with seeds that have long seed dormancy become long term problems?

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

### Results

Number of weed seedlings emerged

Day/ pot	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1																					
2																					
3																					
4																					

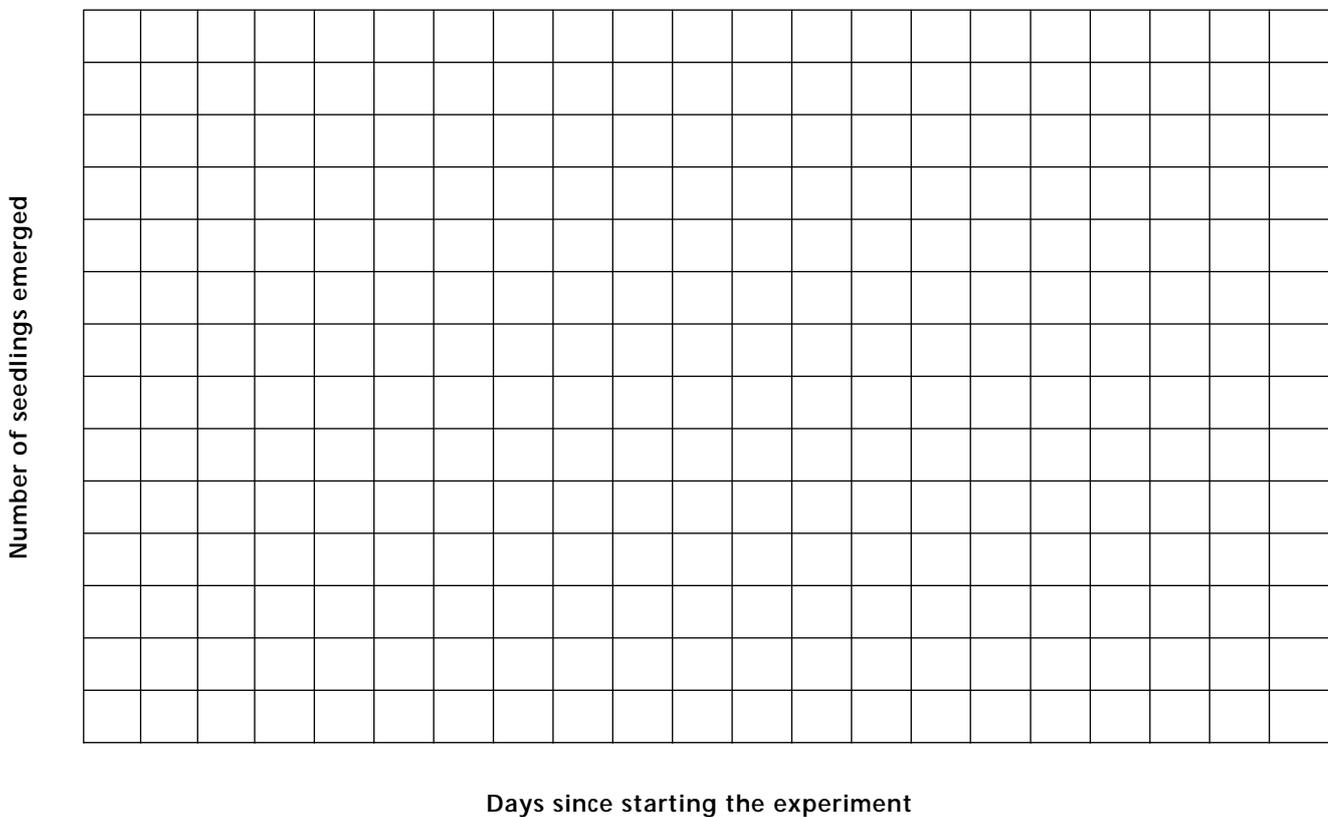
# Student Worksheets

## Student Worksheet 2.2 continued

### Extension

On the graph paper below use a line graph to plot your results. Your teacher will guide you through the steps below.

- 1 Use 5 different colour pencils, one for each pot and one for the average.
- 2 Add numbers to the axes of the graph.
- 3 Use your results in the results table to add dots in the correct spots to show the number of seedlings which emerged each day.
- 4 Join the dots with straight lines.
- 5 Colour the boxes in the colours used for each pot at the bottom of the page. This is to provide a key for others to understand your graph.



### Key

- |                                |                                |                                  |
|--------------------------------|--------------------------------|----------------------------------|
| <input type="checkbox"/> Pot 1 | <input type="checkbox"/> Pot 3 |                                  |
| <input type="checkbox"/> Pot 2 | <input type="checkbox"/> Pot 4 | <input type="checkbox"/> Average |

Name: \_\_\_\_\_

### The impacts of introduced plants

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#### Exercise 1: Drawing foodchains and foodwebs

*Foodchains* and *foodwebs* can be drawn to show the way living things get their food and are interrelated.

In foodchains and foodwebs, an arrow points towards the consumer.

The arrow means "...is eaten by ..."

**Water reed**                                            **cod (fish)**                                            **hawk**

This means \_\_\_\_\_

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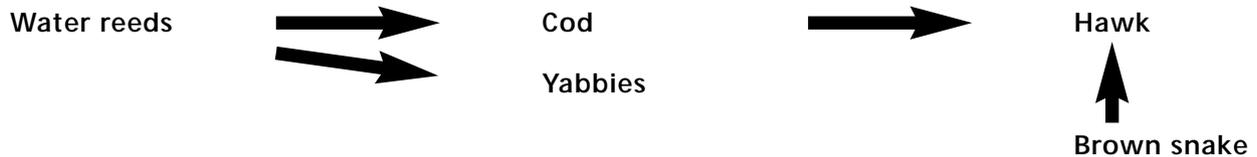
A *foodweb* is a combination of foodchains.

For example:

In the river below my house, the **water reeds** are eaten by the **cod** and also **yabbies**.

The **cod** and the **brown snake** are eaten by the **hawk**.

This feeding relationship can be drawn as the food web below.



# Student Worksheets

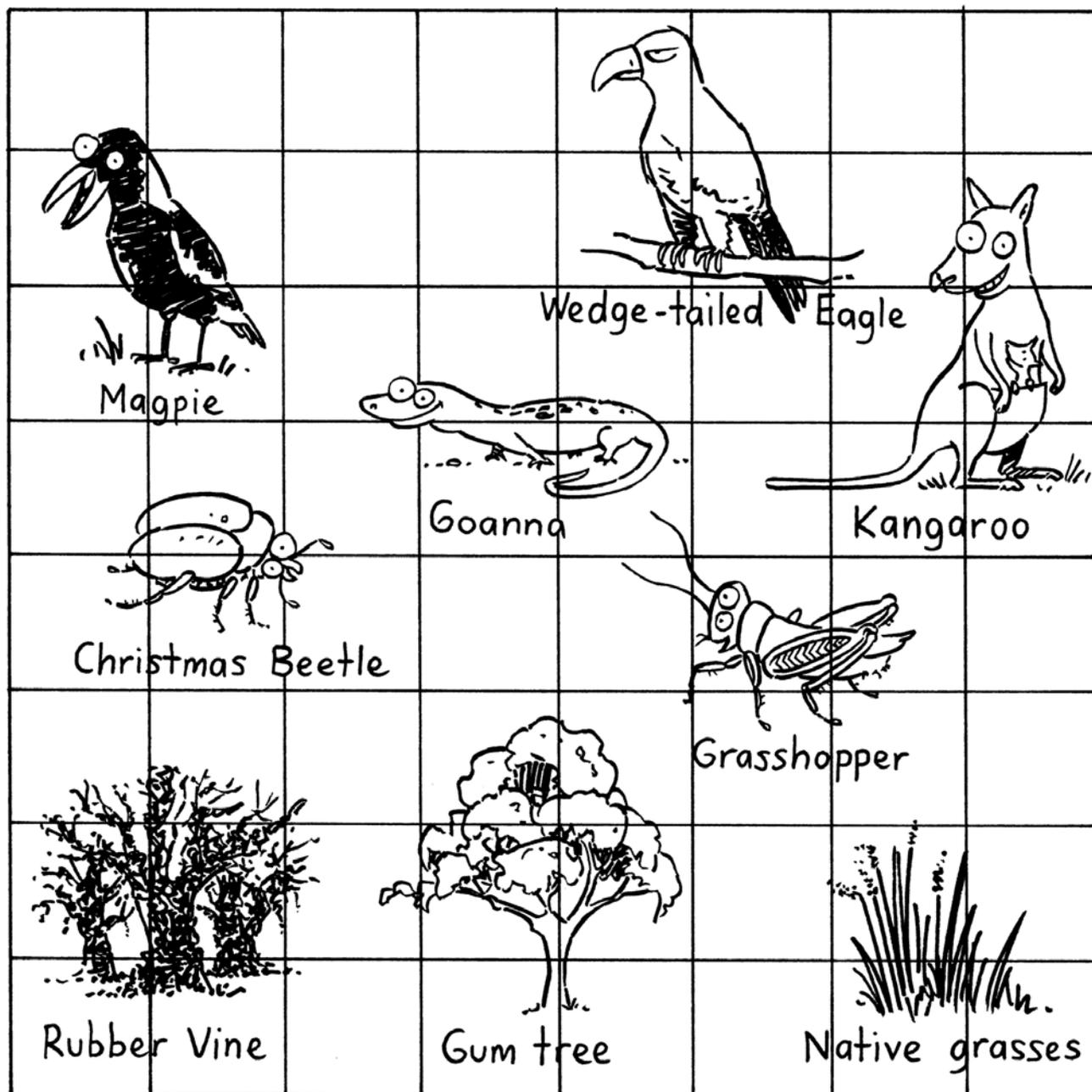
## Student Worksheet 2.5 continued

Name: \_\_\_\_\_

### Exercise 2: Completing a foodweb

Use the information below to design a foodweb by drawing the arrows on the diagram below.

- The kangaroo eats native grasses.
- The grasshopper also eats the native grasses.
- The goanna and the magpie eat the grasshoppers.
- The wedge-tailed eagle eats the goanna.
- The Christmas beetle eats the leaves of the gum tree.
- The magpie eats the Christmas beetle.





# Student Worksheets

## Student Worksheet 2.6

Name: \_\_\_\_\_

### Weed spread activities

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Using the poster of weed spreading activities, write the letter found on the poster that corresponds to each description below.

- Birds spread weeds by eating fruit and disposing seeds in other places. \_\_\_\_\_
- Waterweeds can result from thoughtless dumping in rivers. \_\_\_\_\_
- Vehicles travelling from farms can carry weed seeds. \_\_\_\_\_
- Stock feed brought onto farms may contain weed seeds. \_\_\_\_\_
- Weed seeds can be carried on muddy boots. \_\_\_\_\_
- Disposing of garden clippings irresponsibly may lead to weed spread. \_\_\_\_\_
- Weed seeds can be carried in the wind. \_\_\_\_\_
- Weed seeds can be carried in animal fur. \_\_\_\_\_

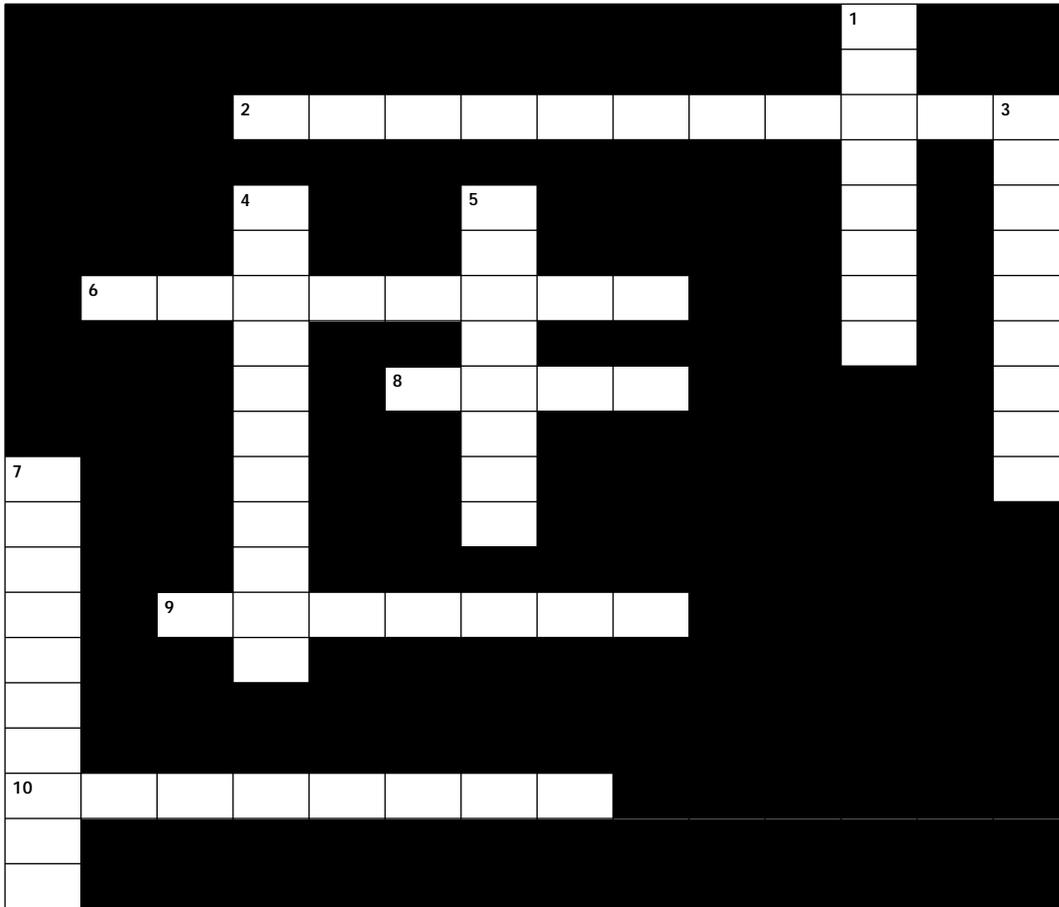
Think how these activities cause weed spread and discuss your ideas with your teacher.

# Student Worksheets

## Student Worksheet 2.7

Name: \_\_\_\_\_

### Why are weeds such ghastly guests?



#### Clues for crossword

##### Down

- 1 Many weed seeds have hooks or spikes. These seeds are able to 'hitch hike' a ride into new areas. They do this by \_\_\_\_\_ onto moving objects.
- 3 Weeds growing in an area limit the growth of other desirable plants through plant competition. This means that the weeds will use the limited water and \_\_\_\_\_ available in the soil.
- 4 When seeds sprout and start to grow this is called \_\_\_\_\_.
- 5 Weeds growing in an area can shade the soil. This limits the amount of \_\_\_\_\_ other plants have to grow.
- 7 Plants or animals that are brought into Australia from another country often have no natural enemies and may become pest animals or weeds. These are \_\_\_\_\_ plants or animals.

##### Across

- 2 As brothers and sisters may fight over toys, plants growing in the same area as weeds have to fight for the limited amount of light, water and nutrients. This is called plant \_\_\_\_\_.
- 6 Many weed seeds are able to stay alive in the soil just sleeping until conditions are right to grow. This is called seed \_\_\_\_\_.
- 8 The weed dandelion has seeds that travel to new areas with ease as they are light weight and designed to be carried by the \_\_\_\_\_.
- 9 We use a \_\_\_\_\_ with arrows pointing to the consumers to show all the feeding relationships in an environment.
- 10 A living thing which eats another plant or animal is called a \_\_\_\_\_.

