

Tutor notes

This module introduces the learner to:

- identifying some common trees and shrubs
- using a range of common garden tools and equipment
- planting a vegetable or flower bed, or container under supervision
- naming conditions that help plants flourish
- describing the four main stages of the life cycle of a plant
- describing some functions of a leaf and
- demonstrating safe working practice in the garden

Some of the Horticulture worksheets can also be used in the Writing and Quantity and Number modules. This module provides the learner with an opportunity to combine learning from other modules when completing worksheets and allows the tutor to monitor progress throughout the Learning through Gardening (LG) course.

The following is a summary of Learning Outcomes for this module:

1. Identify some common trees and shrubs.

The tutor can help learners identify trees, conifers, shrubs and bedding plants around their centre and on trips out to a local park or garden centre.

www.enfo.ie ENFO website has good photos of trees etc., which tutors can look at on the Internet in class on wet days.

www.futureforests.net is going to a garden centre online – lots of trees and shrubs photos



2. Use a range of common gardening tools and equipment.

The tutor can demonstrate the safe use of the garden tools to the learners before allowing them to be used and can also show the learners how to keep tools clean after use and store them in the correct place. (A useful way to store tools is to get learners to draw round the implements in their storage place (i.e. on hooks or between nails on the wall of the shed) and to fill in the shadow image with black paint - this helps to ensure that they will be returned to the same places. The tools can also be labelled in situ by the learners.

3. Plant a vegetable or flowerbed, or container under supervision.

The Tutor notes in this pack give hints on sowing radish seeds. Other seeds can be sown in prepared ground. Learners can plant up a window box, hanging basket or other container with annual bedding plants. An easy plant to grow is Jerusalem artichoke - the tubers can be grown in 20cm diameter pots. Spring bulbs can be planted in the autumn - note that the seasons will dictate when sowing and planting can be done.

www.gardenorganic.org.uk for organic gardening advice, look for the 10 easiest vegetables to grow.

www.primaryscience.ie for growing tomatoes from seed.

4. Name conditions that help plants grow and flourish.

For worksheets go to:

www.craftjr.com/plant-life – for 'How do plants grow' booklet of worksheets and quiz.

www.bbc.co.uk/schools/scienceclips/teachersresources – select growing plants, online exercises and also useful 'How do plants grow?' worksheets.

www.abcteach.com – for basic plant parts poster and flashcards.

www.classroomjr.com/plant-life-for-kids

www.coillte.ie for worksheets

www.primaryresources.co.uk/science and www.the-simplehomeschool.com

5. Describe the four main stages of the life cycle of a plant

See above websites for (4)

See Tutor notes Growing bean seeds

6. Describe some functions of a plant leaf

Photosynthesis is challenging to teach. For a tutor explanation go to;

<http://www.newtonsapple.tv/teacherguide> and for teaching tips go to;

www.proteacher.org/c/947 For learners go to; www.primaryresources.co.uk Also see 'Tutor notes - growing bean seeds'

7. Demonstrate safe working practice in the garden

Health and safety is an important topic for class discussion, you can;



- introduce discussion
- brainstorm ideas
- test ideas
- evaluate

The learners can look for possible dangers or hazards when using garden tools & equipment and use the Garden tools worksheets (2) to add their own safety notes in respect of the specific tools.

The learners can take photos and add notes of other safety precautions in the garden (i.e. putting plastic bottles upside down on bamboo canes to prevent eye injuries).

www.bordbia.ie/schoolgardens is highly recommended for tutors who want to learn how to practise organic gardening in schools.

www.instructorweb.com is helpful in explaining the scientific aspect of gardening to tutors.

Other useful websites are www.southtippals.com and www.bbc.co.uk/skillswise www.saps.plantsci.cam.ac.uk for science and plant information for primary schools.

When working in the garden, it is really important to keep a record of everything you plant and where, so that you know which plant is which. Use the record of seeds sown chart, either on the class notice board or learners can complete their own with help and use the garden diary.

Visit www.irishseedsavers.ie for 'Why a School Garden?' and www.loveschoolgrounds.org.uk for making the most of your school grounds. www.noticenature.ie is a website with biodiversity centred nature information and downloadable resources.

Take lots of photographs of the work done in the garden, encourage the learners to take photographs too. You can make collages from the various projects and display these on the notice board.

Sequenced photos for the Garden Diary can be included to demonstrate what is achieved in the garden. Visual representation is useful for learners and they can also record their activities verbally on PC and CD.

Module 4 Horticulture; Life Science/Horticulture (M2528)










Learning Outcome & Worksheet Summary

Learning Outcome	How to achieve learning outcome	Completed Y/N
1. Identify some common trees and shrubs	<p>WS Tress and shrubs 1 – 4 WS Weeds 1 – 4 www.enfo.ie www.futureforests.net Tutor observation and class discussion</p>	
2. Use a range of common gardening tools and equipment, eg. <i>lawnmower, gardening gloves, rake, spade, trowel</i>	<p>WS Tools & Equipment 1 – 6 Tutor observation and class discussion</p>	
3. Plant a vegetable or flower bed or container under supervision	<p>WS Garden Diary WS Records of Seeds Sown WS Planting Seeds 1 – 3 (images from WS Planting Seeds 1 are pasted in order onto WS Planting Seeds 2) Tutor observation</p>	
4. Name the conditions that help plants grow and flourish, eg. <i>light, heat, soil, water</i>	<p>WS Plant growth and Plant Cycle For worksheets: www.craft.ir.com.plant-life www.bbc.co.uk/schools/scienceclips www.abcteach.com www.classroom.ir.com/plant-life-for-kids</p>	

	<p>www.coillte.ie www.primaryresources.co.uk/science and www.the-simplehomeschool.com Tutor observation</p>	
<p>5. Describe the 4 main stages of the life cycle of a plant</p>	<p>WS Plant parts and plant cycle 1 – 3 WS Plant growth and plant cycle For other worksheets: www.craft.ir.com.plant-life www.bbc.co.uk/schools/scienceclips www.abcteach.com www.classroom.ir.com/plant-life-for-kids www.coillte.ie www.primaryresources.co.uk/science and www.the-simplehomeschool.com Tutor observation</p>	
<p>6. Describe some functions of a plant leaf</p>	<p>WS Functions of a leaf 1 & 2 WS Plant growth and plant cycle Class demonstration www.primaryresources.co.uk Tutor observation</p>	
<p>7. Demonstrate safe working practice in the garden, eg. Manual handling, use of protective clothing</p>	<p>WS Safety colours and signs 1 & 2 WS Signs in the workplace WS Protective clothing 1 WS health and safety in the garden WS Tools and equipment 1 – 8 Tutor observation and class discussion</p>	

Tutor notes

Planting radish seeds

<p>1</p> 	<p>2</p> 	<p>3</p> 
<p>4</p> 	<p>5</p> 	<p>6</p> 
<p>7</p> 	<p>8</p> 	<p>9</p> 

1. Make holes in plastic tray	2. Fill with seed compost	
3. Level compost with ruler	4. Make 2 shallow furrows	
5. Pour seeds into hand	6. Sprinkle seeds sparingly in furrows	
7. Cover and pat down compost	8. Water	9. Put label in
10. Put in a warm and light position & keep moist, seedlings will appear in a few days		



Tutor notes

Growing bean seeds

Class demonstration

It is useful to have learners grow a couple of pea or bean seeds.

Put pea/bean seeds in a glass jar lined with damp paper towel (between the glass and the paper towel so that the learners can see the seed/bean germinating).

Keep paper damp in an indirectly lit place.

The seeds have germinated when a 'hook' sprout appears.

After germination plant out into small pots prepared with damp potting compost and water until soil is saturated

Place one pot in a well-lit place.

Place one pot in a dark area & leave in the dark for one week to ten days.

At the end of ten days remove the pot from the dark and the learners can compare it with the pot of seedlings grown in the light.

The learners can discuss & make drawings to compare both, noting the root structure.

Put a glass bottle over the seedlings and stand in sunlight, note the condensation (this is the vapour being given off when plants exchange oxygen for carbon dioxide)

Have learners take their own photos for this process and describe what they see happening.





Name:

Date:

Garden Diary ACSF Writing level 1

1. The weather today is:



2. Temperature in tunnel °C in garden °C

3. Today in the garden I learnt

4. The tasks I carried out were

5. Next class I will

6. I worked with



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Name:

Date:

PLANT/SEED NAME	DATE OF SEEDING	DATE OF POTTING ON OR PLANTING OUT	NOTES	PLANT CARE

VEGETABLE GARDEN – RECORD OF SEEDS SOW



Name:

Date:

Trees and shrubs 1 (ACSF Reading Level 1)

Match the word to the picture.

Number 1 is an example.

1. Oak



2. Blackberry



3. Pine



4. Holly





Name:

Date:



Trees and Shrubs 2 (ACSF Reading level 1)

Write the names below under the correct pictures:

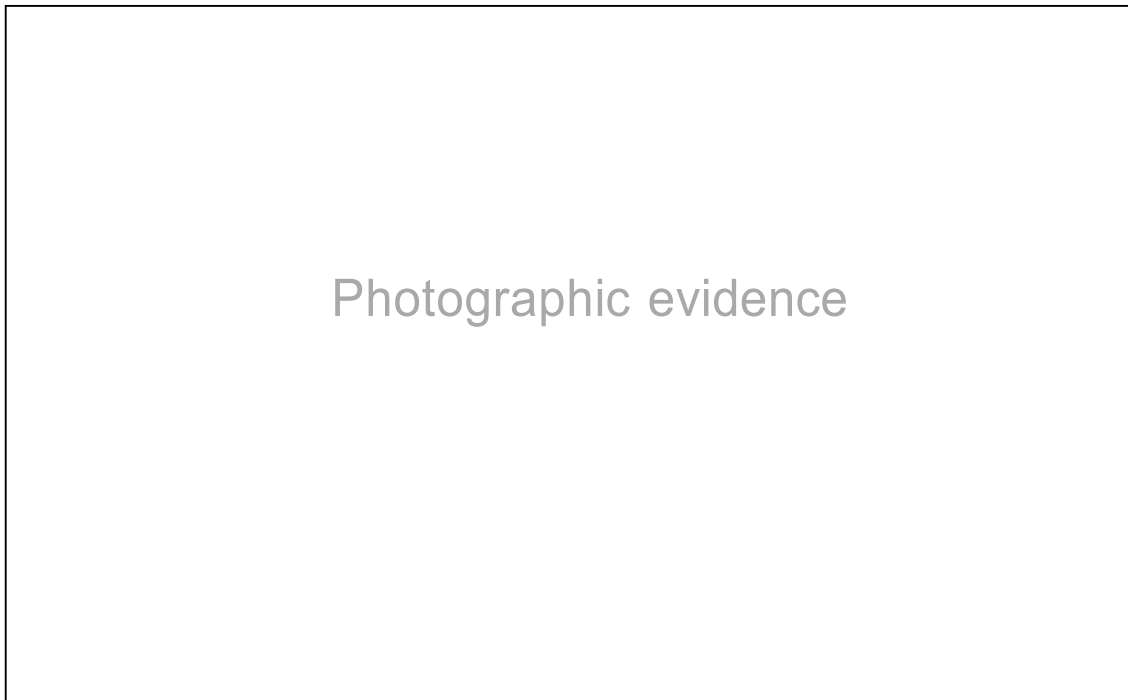
Oak	Holly
Pine	Blackberry
	
1.	2.
	
3.	4.



Name: _____

Date: _____

Trees and shrubs 3



I took this photo of: _____

An oak tree	A pine tree
A holly tree	A blackberry bush

Signed student: _____

Signed tutors: _____



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Name:

Date:

Trees and shrubs 4

Photographic evidence

I took this photo of:

Signed student: _____

Signed tutors: _____



Name:

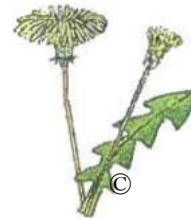
Date:

Weeds 1 (ACSF Reading Level 1)

Match the word to the picture

Number 1 is an example.

1. Daisy



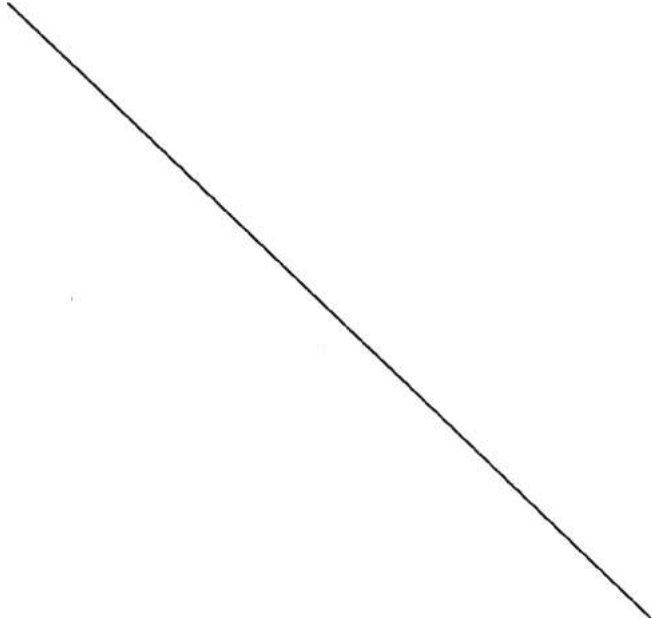
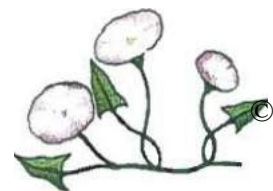
2. Dandelion



3. Bindweed



4. Buttercup



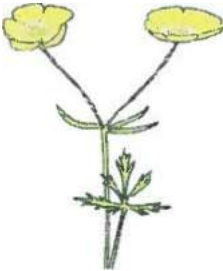


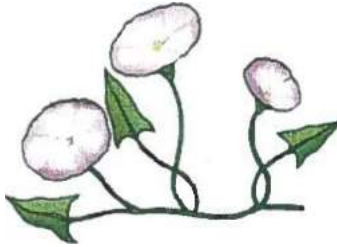
Name:

Date:

Weeds 2 (ACSF Reading Level 1)

A weed is a plant growing in the wrong place.

Match the word below with the correct plant.

Dandelion	Buttercup
Bindweed	Daisy
	
1.	2.
	
3.	4.

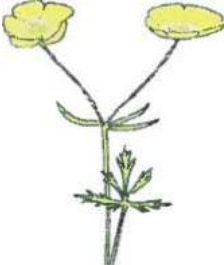


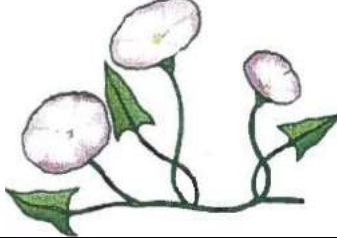
Name:

Date:

Weeds 3 Answer

A weed is a plant growing in the wrong place.

Match the word below with the correct plant

	
1. Buttercup	2. Daisy
	
3. Dandelion	4. Bindweed



Name: _____

Date: _____

Weeds 4

Photographic evidence

I took this photo of

a daisy

a buttercup

a dandelion

bindweed

Signed student: _____

Signed tutors: _____



Name:

Date:

Garden tools and equipment 1 (ACSF Writing Level 1)

Can you name this tool and state what it is used for?



Name:

Used for:

Photographic evidence
of skills demonstration in using this tool

This is a photo of:



Name:

Date:

Garden tools and equipment 2 (ACSF Writing Level 1)

Can you name this tool and state what it is used for?



Name:

Used for:

Photographic evidence
of skills demonstration in using this tool

This is a photo of:



Name:

Date:

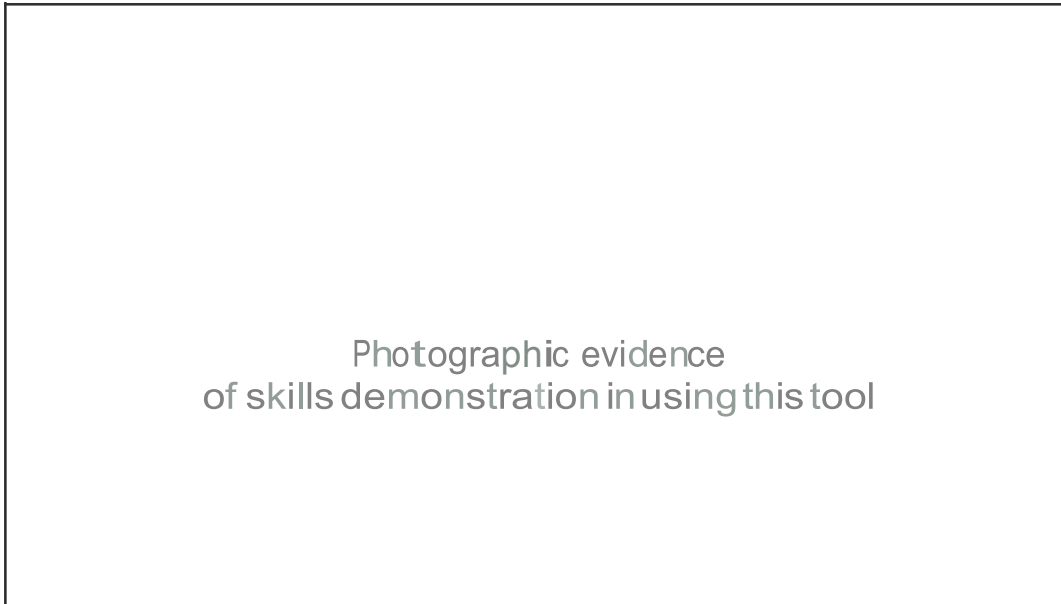
Garden tools and equipment 3 (ACSF Writing Level 1)

Can you name this tool and state what it is used for?



Name:

Used for:



This is a photo of:



Name:

Date:

Garden tools and equipment 4 (ACSF Writing Level 1)

Can you name this tool and state what it is used for?



Name:

Used for:

Photographic evidence
of skills demonstration in using this tool

This is a photo of:



Name:

Date:

Garden tools and equipment 5 (ACSF Writing Level 1)

Can you name this tool and state what it is used for?



Name:

Used for:

Photographic evidence
of skills demonstration in using this tool

This is a photo of:



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Name:

Date:

Garden tools and equipment 6 (ACSF Writing Level 1)

Can you name this tool and state what it is used for?



Name:

Used for:

Photographic evidence
of skills demonstration in using this tool

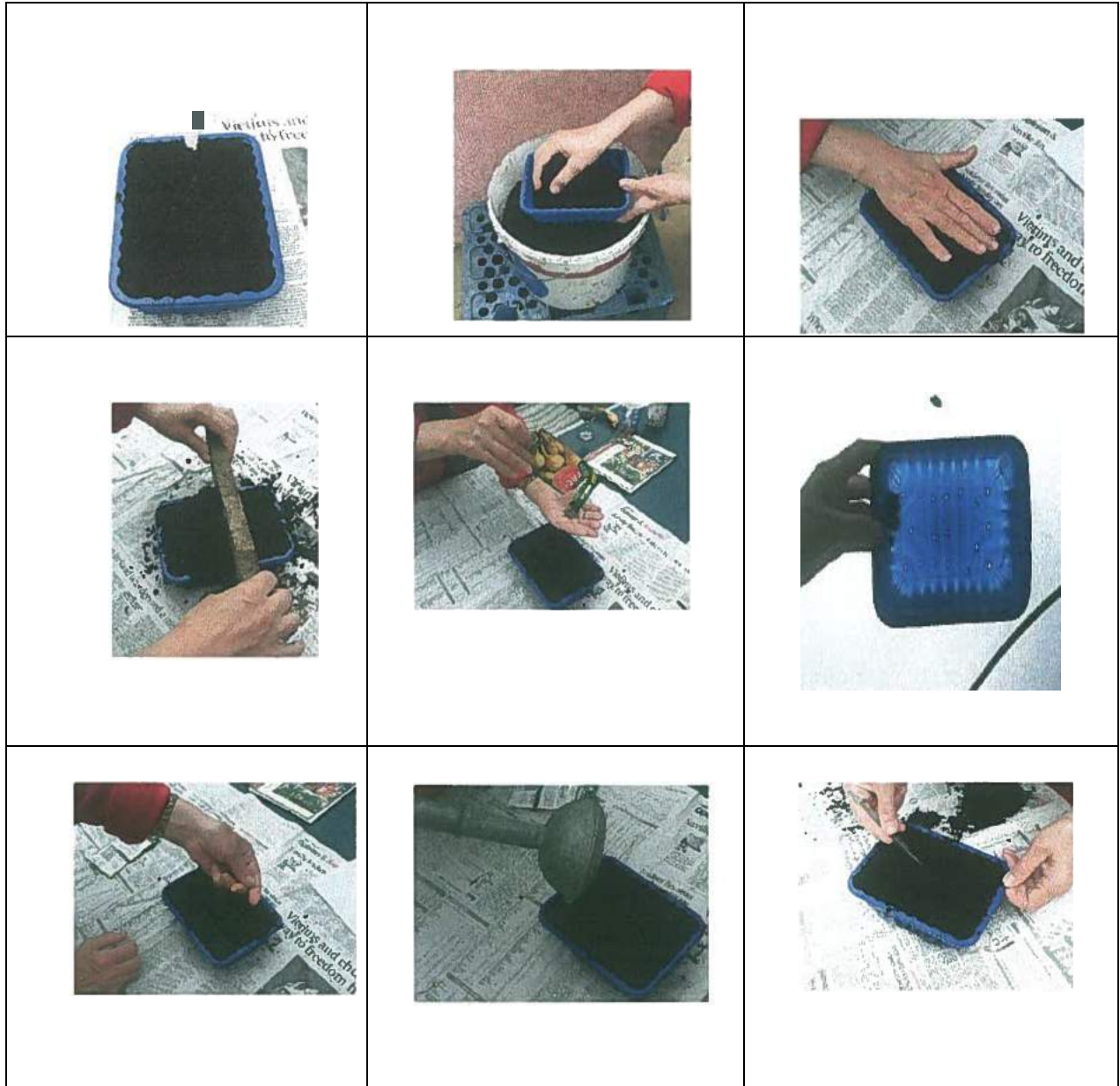
This is a photo of:

Name:

Date:

Planting Seeds 1

Cut out the pictures and put them in order on Planting seeds 2 worksheet.





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Name:

Date:

Planting Seeds 2 (ACSF Numeracy Level 1)

Finish numbering the squares, and then put the pictures from Planting seeds 1 in order.

1	2	-
4	-	6
-	8	9



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Name:

Date:

Planting seeds 3

Photographic evidence

I took this photo of:

Signed student: _____

Signed tutors: _____



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Name: _____

Date: _____

Plant growth and plant cycle (ACSF Writing Level 1)

Photographic evidence

I took this photo of:

Signed student: _____

Signed tutors: _____



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Name:

Date:

Plant parts & plant cycle 1 (ACSF Reading Level 1)

Match the words to the plant parts, then cut out the four cards and put them in order on worksheet 2 to show how a bean grows.

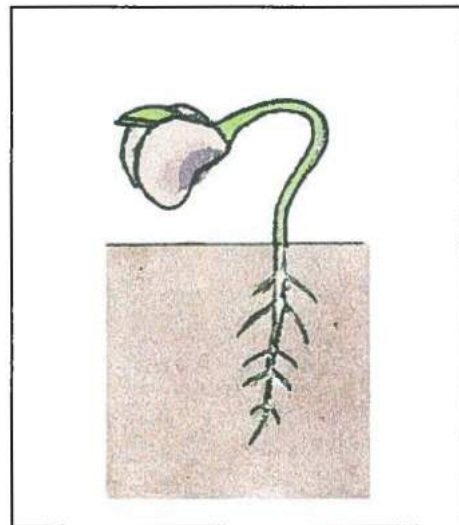
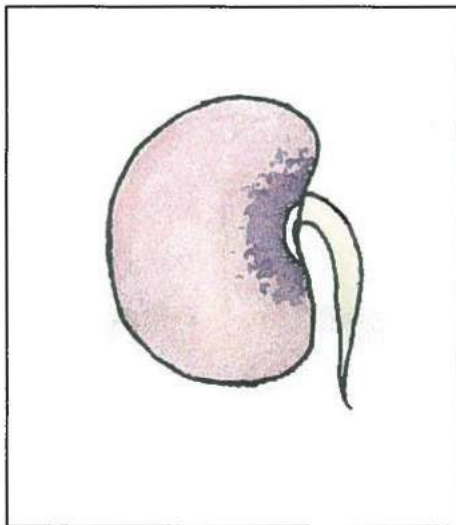
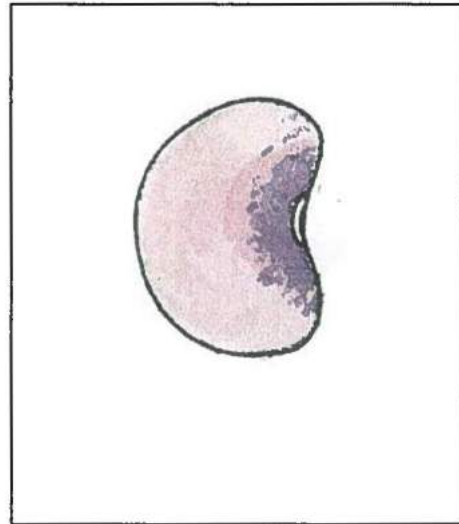
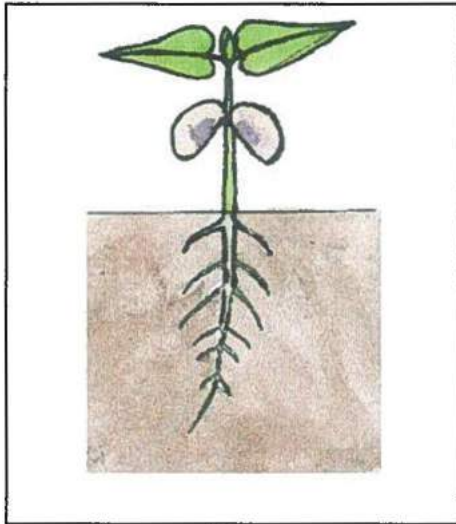
seed/bean

leaf

root

sprout

stem





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Name:

Date:

Plant parts and plant cycle 2

Put the plant part cards you have cut out, in order to show how a bean grows. Match the words to the plant parts

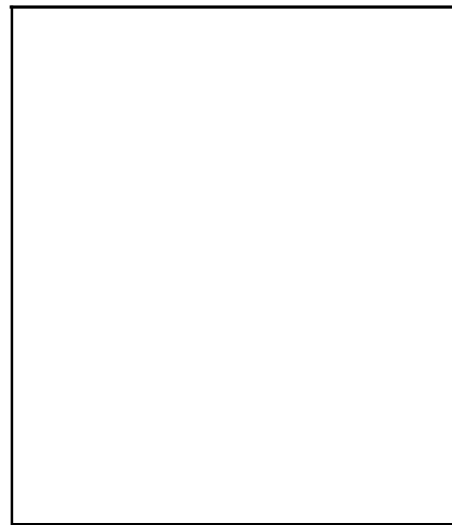
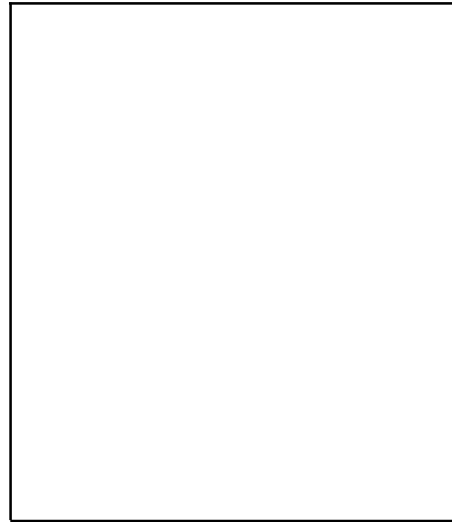
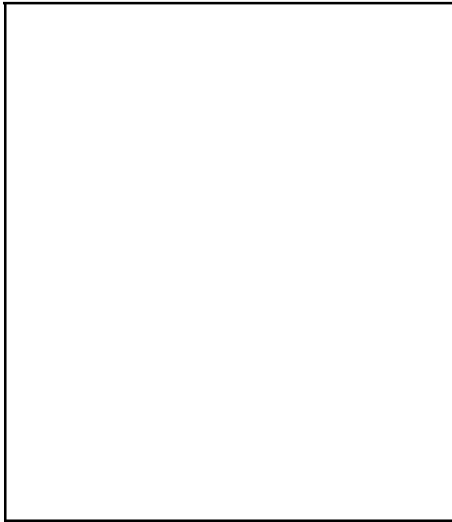
seed/bean

leaf

root

sprout

stem





Name:

Date:

Plant parts (ACSF Reading Level 1)

What parts of plants do you eat?

Match the plant part on the left with the food on the right.

Roots

Bulbs

Flowers

Seeds

Leaves

Fruits

Stalks

Cauliflower

Sweet corn

Parsnips

Leeks

Tomatoes

Lettuces

Rice

Carrots

Cabbages

Celery

Broccoli

Oranges

Peas

Onions

Spinach





Functions of a plant leaf 1 (ACSF Reading Level 1)



Leaves make their **energy** by taking in **carbon dioxide** from the air.

Leaves absorb **light** from the sun.

Leaves give off **oxygen** when they make food.

Leaves give us **shade**.





Name:

Date:

Functions of a plant leaf 2 (ACSF Reading Level 1)



Fill in the missing words using words in the box at the bottom of the page.

Leaves help to make _____ for a plant.

Leaves take in a gas called _____

They absorb _____ usually from the sun.

Energy is made for the plant and _____ is given off by the leaves.

Leaves give us _____



oxygen

carbon dioxide

shade

light

energy



Name:

Date:

Safety colours and signs 1 (ACSF Reading Level 1)

There are lots of signs around the place we work. The signs are in different colours - red, green, yellow and blue.

We can understand different things from the different colours.

Example	Meaning	Colour
	Stop (Do not)	Red
	Danger (Beware, Caution)	Yellow
	Escape Routes First Aid Safety Area (No Danger)	Green
	You Must (Information)	Blue



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Name:

Date:

Safety colours and signs 2 (ACSF Reading level 1 & Writing level 1)

Complete the sentences below with the correct words from the box.

red	safe
yellow	blue

1. A _____ sign tells you that there is danger.
2. A _____ sign tells us that we must not do something.
3. A green sign tells you where you can find a _____ place.
4. A _____ sign tells us that we must do something.








Name:

Date:

Signs in the Workplace (ACSF Reading Level 1)

What signs are used in your workplace? Tick the ones you can find

Count the ticks. How many signs did you find?

I found signs in my workplace.



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Name:

Date:

Protective clothing (ACSF Writing Level 1)

Photographic evidence

I wear this kind of clothing because:



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Name:

Date:

Health and safety in the garden (ACSF Writing Level 1)

Photographic evidence
