

Level
3



Container Gardening

Student Worksheets

Sample!



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Assessment Brief 1



Course: Container Gardening
Course Code: 3N0883
Assessment: Collection of Work
Title: **Gardening tools and equipment**
Weighting: Collection of Work 20%,
Skills Demonstration 80%

Guidelines

You will be expected to:

1. List the materials, tools and equipment required to grow ornamental plants and vegetables in containers, both indoors and outdoors.
2. List the type of plants and vegetables suitable for container gardening.
3. Describe the compost suitable for container gardening.
4. Select appropriate types of plants and vegetables to match container location and size.

Assessment criteria

- Exercises and tasks must be complete and correct.
- Explain key gardening vocabulary.
- Match garden tools and their uses.
- Consider the containers that can be used for container gardening.
- Include your own list of plants and vegetables you are considering to match your container location/s and size/s.
- Discussions may be recorded.
- Photographic and/or video evidence may be required.

Submission date:

Declaration of Authenticity: I confirm that this is my own original work.

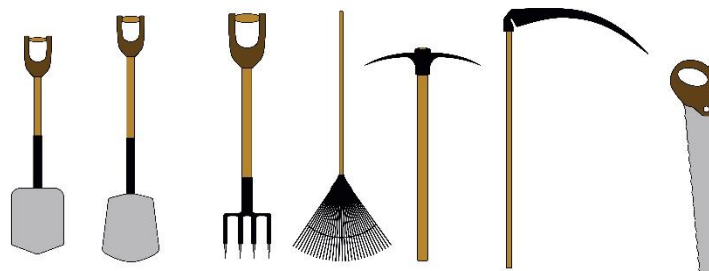
Signed:

Date:



. Are these indoor or outdoor gardening tools, materials and equipment. Fill in the table below by using ticks ✓:

	Indoors	Outdoors	Both
dibble			
hoe			
hand rake			
shears			
lawn rake			
shears			
lawnmower			
pitch fork			
wheelbarrow			
secateurs			
pesticides			
seedling tray			
shovel			
cultivator			
spade			
spading fork			
tree pruner			
trowel			
strimmer			
weeding hoe			
watering can			
hosepipe			
stakes, supports			
plant pots			
compost			
greenhouse			
seeds, seedlings			
saw			
broom			
axe			
plant food			
bucket			
gardening gloves			







A. Selecting a pot

1. Complete the sentences:

space, stockings, baskets, materials, water, cement

a) Most plants aren't fussy about the type of pot they grow in. All they want is enough _____ to spread their roots and a few good drainage holes to allow excess _____ to drain.

b) Pots come in a variety of _____. There are many creative and exciting choices for container materials, shapes, colours and finishes. Some common materials for containers include:

-  Cast _____
-  Clay (terra cotta pots, chimney tiles)
-  Metal
-  Moulded plastic, resin or fiberglass
-  Nylon _____
-  Plastic bags
-  Peat pots
-  Pottery (glazed or unglazed)
-  Stone
-  Stoneware
-  Wood (boxes, baskets, hollowed stumps, tree bark)
-  Wire
-  Recycled materials (like old boots, shoes, washtubs, furniture, milk crates, _____, wagons, carts, and toys)



B. What can you grow in a container?

You can grow almost anything you want in a container. For apartment dwellers and small garden owners, pots and containers are the only way to grow plants. With the right containers, compost, fertiliser, drainage and irrigation, you can grow almost everything from a small tree to bulbs, flowers, vegetables, herbs and fruit.

- Write down some plants you are thinking about for your container/s:

Trees	Shrubs	Vegetables	Fruit	Flowers	Herbs

- Label the vegetables that are good for container gardening; use words from the list below:

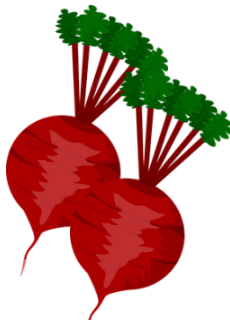
beetroots, broad beans, carrots, dwarf French beans, herbs, peas, potatoes, radishes, rocket, runner beans, chillies & peppers, salad leaves, salad onions, salad turnips, tomatoes.





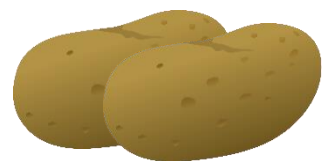












3. Most herbs can grow well in containers. Complete the sentences:

drainage, outdoors, grows, pot, mint, cooking, dry, herb

- a) If your container garden benefits from sunshine, a small _____ garden can be easily grown, even in small spaces.
- b) The beauty of herbs in pots is that they can be used in _____ and for aroma.
- c) Many of them will be Mediterranean in origin, so make sure your _____ is good.
- d) Don't let them _____ out- and remember that they won't need a lot of feeding.
- e) Rosemary is a great pot plant. It's tough, likes a sunny position and _____ in an upright form or trailing.
- f) Basil is a tender herb which can only live _____ in the summer. It should be grown freshly from seed each year.
- g) Mint can be invasive so it is best planted in a _____.
- h) There are many varieties, including chocolate-flavoured ones, but you can go for the original of species and enjoy _____ tea through the summer.
- i) Label the herbs below:



Sample



4. These are plants that are suitable for container gardening.
Match the names and plants.



Nemesia



Cleome



Nasturtium

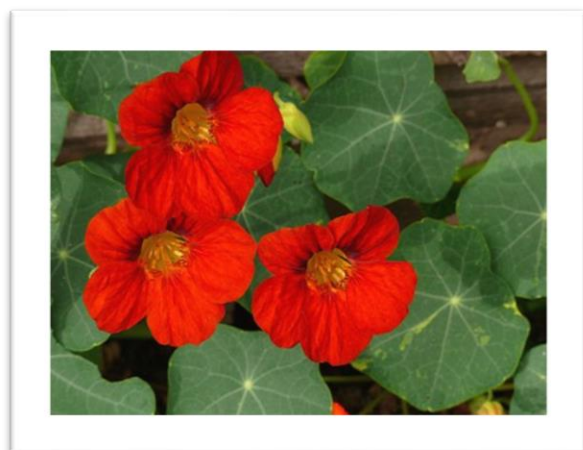
Daisies



Cosmos



Bacopa





A. Growth requirements of container plants

LIGHT



1. Complete the sentences:

dark, food, soil, light, grow, plants

- a) Plants need sunlight to _____.
- b) Light is used as energy for making _____, a process called photosynthesis.
- c) Too little _____ can make plants weak. They will also have fewer flowers and fruits.
- d) All _____ need light in order to produce food, but some seeds germinate in the _____.
- e) Some seeds must be covered with _____ whilst some other seeds need light to germinate.

2. Look at the table below:

Potted plant	Light requirement
Lavender	Full sun
Foxglove (poisonous!)	Full-Part sun
Peppers	Full sun
Spinach	Full-Part sun
Impatiens	Part-Full shade

Explain the light requirements of two plants above.

3. When selecting plants, read the plant tags before you buy so you know whether they grow best in sun or shade. You don't want to mix sun- and shade-loving flowers in the same pot.



Complete the table below. Add another two vegetables.

Vegetable	Part sun	Full-Part sun	Full sun
celery			
cabbage			
onion			
tomato			
radish			

RECAP OF GROWTH REQUIREMENTS

1. What are the answers to these questions? Write the letters from the answers below.
 - a) What do plants need in order to grow?
 - b) What is photosynthesis?
 - c) How do plants get their water and nutrients?
 - d) Why is water important to plant growth?
 - e) What could adversely affect plants to thrive?
 - f) Where does the carbon dioxide in the equation come from?
 - g) What are some ways plants adapt to their environments?
 - h) Why do plants need space and shelter?

ANSWERS:

A. overcrowded areas increase competition for growth limiting

B. used in photosynthesis, transports nutrients, regulates

C. absorption by the roots

D. food manufacturing process in green plants

E. sunlight, water, air, proper temperature, nutrients

F. hard seed coats, chemical defence, thorns and spines

G. blocking the sunlight, lack of moisture, keeping out the air, improper

H. people and animals exhale carbon dioxide, plants and burning fossil fuels





2. Answer the questions. You can use the points below to help you.

Possible answers:

- soils that lack appropriate amounts of nutrients and water can limit growth
- loss of water vapor from a plant
- ground water sources, precipitation, fog, dew
- the amount of water on earth does not change, only the location and usability of the water changes.
- large soil particles (sand) allow water to quickly drain out of the soil while smaller soil particles (clay) hold moisture in the soil
- water, nutrients, space
- add nutrient rich soil, compost, or fertilizer to an area

a) How does the type of soil affect a plant's growth?

b) How does soil type affect its ability to hold water?

c) How could you improve the nutrient content of a soil?

d) Where do plants get their water?

e) What is transpiration?

f) Since plants, people, and animals are all using water, does the amount of water on earth decrease?

g) Besides competing for light, what other things do plants compete for?



A. Skills Demonstration 1: Selecting and preparing containers

You will demonstrate the following:

Selection and preparation of containers for planting with attention to suitable:

-  Lining material
-  Growing media
-  Drainage requirements
-  Container size
-  Container location
-  Positioning

*Include photographic or video evidence.



Did the learner?

- Select appropriate containers or pots for planting
- Consider how the material of the pot/s will affect the plants
- Check container/s for sufficient drainage
- Use lining material where necessary
- Elevate pots so that the water isn't blocked from exiting
- Fill pot/s with a quality potting soil mixture
- Water the soil generously in the pot/s
- Allow the pot/s to rest and drain
- Consider location for pot/s (exposure and sunlight)
- Consider convenience of chosen pot/s, plant/s and location/s
- Consider design of plant/s in pot/s
- Consider the plants and vegetables that are suitable for container gardening
- Other _____
- Other _____
- Other _____



B. Planting up containers

1. Tick off as you complete each step:

- Check that your container has sufficient drainage.
- Fill the pot about two-thirds full with potting mix.
- Sit the plants in the container and decide on your arrangement.
- Gently remove your plants from their pots.
- If the plant is stuck, squeeze the pot a little to help push it out gently.



- Disturb the roots as little as possible.
- Place the plants in the soil, keeping an eye on the depth to make sure they will be planted at the same level they were in their original pot.
- Make the soil surface about 2 inches below the rim of the pot, so that water will spill out instead of soaking in.
- Add soil between the plants, firming it gently with your fingers. Be gentle so you don't break the plants!
- Make sure everything is at the same level with no roots showing.
- Move your container to its chosen spot, and water the plant thoroughly until water runs out the bottom.
- Now, step back and admire your plant/s!



Your turn to grow vegetables

Fill in the table below:

Your choice of container	
Your choice of vegetable/s	
How you prepared your container	
How you prepared your soil	
What you used: seeds / seedlings / plant	
Tools / equipment / materials you used	
Comment - positioning, depth and watering	
How you used communications, team working and quality awareness	
How you applied appropriate health, safety and personal hygiene procedures	



C. Container gardening with bulbs

1. Read the notes.

You can display daffodils, tulips and hyacinths gathered together, or you can use layers of bulbs planted on top of each other.

Agapanthus prefer to be in a pot rather than the ground as they like to have their roots snug. This bulb has deep green foliage, and tall strong flowering stems which bear large bunches of purple-blue or white flowers. The flowers are particularly long-lasting throughout the summer and it requires little watering. Coming from Southern Africa, it loves a sunny spot in the garden.

Daffodils are a cheerful start to the spring. They pop up year after year, reliably and trouble-free. You need to leave the foliage to die after the flowers are gone to allow the bulb to recharge.

Tulips are ideal container plants which can be whisked away as soon as flowering has finished. There are many different colours and varieties available, however, many of the tulip bulbs that we buy are to be treated as annuals.

2. Write a planting tip for each of these bulbs:

Daffodils

Agapanthus

Tulips



1. Do you recognise these herbs?



Your turn to grow herbs



Fill in the table below:

Your choice of container	
Your choice of herb/s	
How you prepared your container	
How you prepared your soil	
What you used: seeds / seedlings / plant	
Tools / equipment / materials you used	
Comment - positioning, depth and watering	
How you used communications, team working and quality awareness	
How you applied appropriate health, safety and personal hygiene procedures	



D. Working as a team

1. Maintaining your plants can be a group effort! Complete the sentence about team working:

group, speaking, tools, effort, roles, follow, others, turns, time, discussions, Help, opinions, clear

- a) Hold _____ in your group about your choices of containers and plants / vegetables.
- b) Take part in _____ discussions.
- c) Give you own _____ in a clear and polite way.
- d) Assign _____ to group members if this helps.
- e) Understand and _____ your agreed upon role.
- f) _____ to make decisions and settle disagreements.
- g) Share resources, e.g. garden _____, materials and equipment.
- h) Use correct terminology and _____ language.
- i) Take _____ to speak.
- j) Listen attentively when others are _____.
- k) Be open to the opinions and ideas of _____.
- l) Complete your tasks on _____.
- m) Make an _____ to help others in the group.





E. Maintaining your plants



1. Write a summary sentence for each tip.

**Fertilize regularly. Renew and replace. Clean up before winter.
Remove faded blooms. Water frequently.**

a) Container plants require more frequent watering than those growing directly in the garden.



b) To keep flowers and vegetables in top form all summer, you'll need to fertilize them. Some potting soils have slow-release fertilizer already mixed in.

c) Annual and perennial flowers will look better when their old, faded blooms are removed. This process, called "deadheading," will encourage a whole new crop of flowers to form.



d) Even with excellent care, some annuals and perennials will begin to look tired by late summer. Instead of trying to revive them, carefully remove the plants from the pot and pop in one or two replacements to give your container a second life.

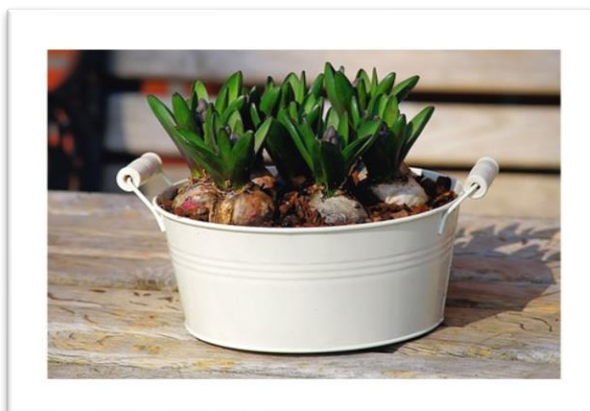
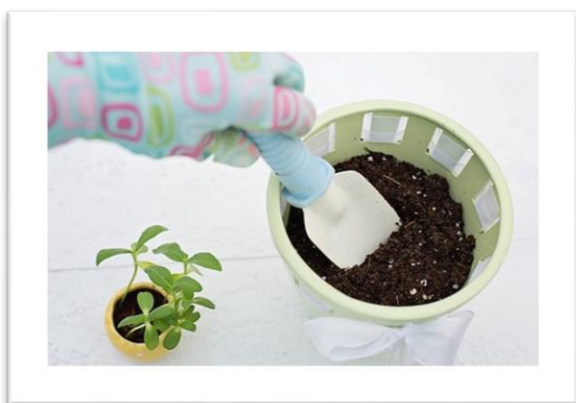
e) A hard frost marks the end of the gardening season across much of the country. Once your annuals and vegetables have died, toss them on your compost pile and empty your containers.



2. Complete the tips on caring for your container plant/s:

fertilizer, blooming, summer, mix, regularly, stems, nutrients, plant

- a) Water your container every 2-3 days. In the heat of _____, you may need to water it every day.
- b) If you want to feed your plants, use an all-purpose _____ food every couple of weeks according to package instructions.
- c) As you water, remove spent blooms to encourage more _____.
- d) If your plants are looking spindly, pinch off the tips of the _____ to stimulate them to produce more branches.
- e) Most potting soil has no accessible _____ for your plants, so you need to add those.
- f) Most plants will need _____ added to the soil.
- g) A slow release fertilizer can be added to the potting _____.
- h) Check in on your plants _____, preferably every day, and see how they're doing.



F. Container garden problems!

Can you offer advice?

1. I water my plants regularly, but wilting still occurs. They are getting the right amount of sunlight and fertilizer. Help!

Andrew



2. I am working hard for my container plants with regular watering, feeding and sunshine. But my plant has stopped flowering! Any advice?

Susan

3. I have been looking after my container plants, but I have noticed that the leaves are riddled with small holes. Does anyone know why?

Lorraine

4. I thought I was doing a great job with my plants but I am worried about the yellowing and rotting of leaves! What am I doing wrong?

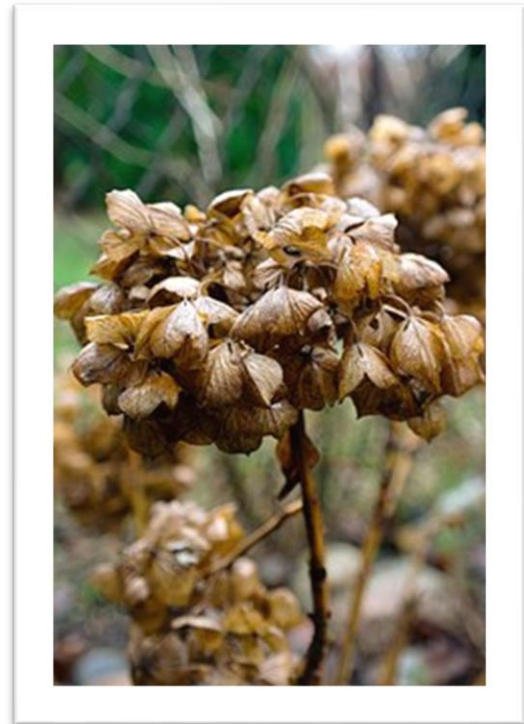
Kevin



5. Sometimes plants die.....
The more plants you grow, the more plants you will kill. Sometimes even the best gardeners will kill plants. It's a fact of gardening life. The trick is to know when to give up on a plant.



When a plant starts looking dreadful, there are a few things you can do, for example: trim the leaves, trim back dead branches and stems, consider repotting, check temperature and sunlight, add nutrients, etc.



What are some of the reasons why plants die?



1. Answer the questions about container gardening safety:

a) How can you protect yourself from electrocution when gardening?

b) How can you avoid chemical burns when working with garden chemicals?

c) How can you avoid heavy lifting?

d) How can you ensure that you are using tools correctly?

e) How can you avoid sunburn when working outdoors?

f) How can you avoid injury from sharp garden tools?

g) How can you ensure that you are using weed killers correctly?

h) How can you protect your feet while you are gardening?

Group Evaluation Checklist

As a team, decide which answer best suits the way your group worked together.

Yes No

We finished our course on time. Yes No

We completed our gardening tasks each week. Yes No

We took instruction from the tutor. Yes No

We focused on what needed to be done. Yes No

We shared responsibilities. Yes No

We encouraged each other. Yes No

We cooperated with each other. Yes No

We communicated well with each other. Yes No

We each shared our ideas. Yes No

We listened and valued each other's ideas. Yes No

We had good conversations / discussions. Yes No

We shared information with each other. Yes No

We worked together positively. Yes No

We helped each other with gardening tasks. Yes No

We were considerate to each other. Yes No

We shared tools, equipment and materials. Yes No

We did best at

We could improve at



Mapping of learning outcomes

1 List the materials, tools and equipment required to grow ornamental plants and vegetables in containers both indoors and outdoors Pages 8 and 9 (garden vocabulary), Pages 10 to 14 (garden tools and equipment), Pages 15 to 17 (selecting pots), Pages 28 and 29 (preparing for container gardening)

2 Describe the growth cycle of a variety of summer and winter flowering plants- no differentiation of summer and winter growth cycle Pages 32 to 37 (growth cycle of flowering plants)

3 Explain the growth requirements of container grown plants and vegetables Pages 38 to 48 (growth requirements of container plants, e.g. sunlight, water, nutrients, etc.)

4 List the type of plants and vegetables suitable for container gardening Pages 21 to 27 (plants suitable for container gardening)

5 Describe the compost suitable for container gardening Pages 18 to 20 (choosing soil, compost)

6 Prepare containers for planting with attention to suitable lining material, growing media and drainage requirements Pages 51 to 52 (preparing containers), Page 56 (Skills demonstration 1: Selecting and preparing containers)

7 Select appropriate types of plants and vegetables to match container location and size Page 27 (selecting plants and vegetables), Page 53 (choosing location), Page 56 (Skills demonstration 1: Selecting and preparing containers)

8 Plant selected plants and vegetables with attention to positioning, depth and watering Pages 57 to 60 (planting), Pages 61 to 66 (planting vegetables), Pages 67 to 70 (growing succulents), Pages 75 to 77 (growing herbs), Pages 78 to 80 (growing roses), Page 81 (Skills demonstration 2: Planting)

9 Demonstrate the application of communications, team working and quality awareness in a horticultural environment Pages 54 and 55 (container gardening design), Pages 82 to 84

(team work), Page 85 (quality awareness), Pages 86 to 87 (maintaining plants), Pages 88 and 89 (container gardening problems), Page 90 (Skills demonstration 3: Garden maintenance and team work), Page 100 (Group self-evaluation checklist), Page 101 (Self-evaluation checklist)

10 Apply appropriate health, safety and personal hygiene procedures when growing plants Pages 91 to 97 (health, safety and hygiene procedures), Page 98 (Skills demonstration 4: Gardening safety)



Weighting example

Collection of work

1. Gardening vocabulary – Pages 8 and 9
2. Tools, materials and equipment – Pages 10 to 14, Pages 18 to 20, Pages 28 and 29
3. What can you grow in a container? – Pages 21 to 26
4. Life cycle of flowering plants – Pages 32 to 37
5. Growth requirements of container plants – Pages 38 to 48
6. Group and self-evaluation checklists – Pages 100 and 101

Skills demonstration

1. Selecting pots – Pages 15 to 17
2. Selecting plants and vegetables to grow – Page 27
3. Preparing for container gardening – Pages 28 and 29
4. Preparing contents – Pages 51 and 52
5. Choosing location – Page 53
6. Choosing design/s – Pages 54 to 55
7. Skills Demonstration 1: Selecting and preparing containers (including lining materials, growing media, positioning, etc.) – Page 56
8. Planting up containers – Pages 57 to 60
9. Container gardening with vegetables – Pages 61 to 66
10. Container gardening with bulbs – Pages 67 to 70
11. Growing succulents – Pages 71 to 74
12. Growing herbs in containers – Pages 75 to 77
13. Growing roses in containers – Pages 78 to 80
14. Skills Demonstration 2: Planting (using all correct gardening techniques) – Page 81
15. Working as a team – Pages 82 to 84
16. Quality awareness – Page 85
17. Maintaining your plants – Pages 86 to 87
18. Container gardening problems discussion – Pages 88 and 89
19. Skills Demonstration 3: Garden maintenance – Page 90
20. Skills Demonstration 3: Team work – Page 90
21. Are you safe when gardening? Pages 91 to 97
22. Demonstrate safe lifting – Page 97
23. Skills Demonstration 4: Gardening safety – following all health and safety procedures – Page 98
24. Skills Demonstration 4: Gardening safety – following all hygiene procedures – Page 98

*Note! It is not necessary that learners have to grow succulents, bulbs, herbs, etc. The Skills Demonstrations can be balanced by removing these and adding elements of growing and maintaining plants, e.g. weeding, watering, adding plant food, trimming leaves, etc. Ensure that all learning outcomes are covered though.