

BTEC Level One Introductory Unit : Land Based Skills – Growing plants.

Core Aim: to explore the factors and requirements to successfully propagate and establish young plants.

To carry out the propagation and establishment of young plants and looking at the environmental conditions needed to grow.

Key pedagogical principles for this SEN setting:

- Visual support: use of pictures, symbols and real life objects.
- Practical and experiential learning: hands on activities and visits to local facilities.
- Repetition and consolidation: Key concepts revisited weekly.
- Structured routines: Clear beginning and endings to lessons, use of visual timetables if needed.
- Differentiated outcomes: A range of success criteria (e.g “I can identify” vs “I can describe” vs “I can create”).
- Simplified language where necessary.

Week 1 - Introduction to this year’s topic and assignments.

- How we can link our lessons into our Work Experience placement.
- Short you tube clip on “How do plants grow?”.
- Discussion about plant “medium”, what we will plant our seeds and propagated plants into.
- Activity: Identify 5 different plants that we could grow in the spring – worksheet.

- Outcome: Learners can match the plants to the correct 'medium'.
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Week 2 – What do plants need to survive and thrive?

- Activities – spider diagrams to make a note of the different things that a plant will need to survive and grow.
- What might happen to plants if they have
- Activity 1 – oxygen but no light
- Activity 2 – water but no oxygen
- Activity 3 – oxygen but no water

Outcome: learners have gained a knowledge of what plants need to survive ready for next week's lesson.

Week 3 - Cress Experiment.

- Introduction to the lesson.
- Instructions on what to do in order to grow the cress seeds.
- Each student can use an egg carton, cotton wool, compost and seeds.
- Activity 1 - Each student to take it in turns to add their wet cotton wool and their seeds to their carton.
- Activity 2 - Staff and students can make some extra so we can use them for the actual experiment.
- We will discuss where is best to store the seeds once planted, to match the criteria on the list.

Outcome: each student will have an egg carton with seeds in ready to grow. They will monitor the growth throughout the week.

Week 4 – Cress Experiment Findings.

- Discuss what the seeds have done over the last week.
- Activity 1 – recording our findings – student to see what has happened to each pot of seeds.
- Activity 2 – recording on our worksheets the height, colour and appearance of each set of seeds.
- Outcome: Which ones grew the best? What did they have to survive?

Week 5 – Visiting a local garden centre

- Students are to take part in a field trip to a local garden centre.
- Students are able to walk around the centre looking for various plants and the medium needed to grow the plants.
- Discussion and interaction with staff to assess which plants can be planted and when.
- Outcome: students are able to socialise in a safe and supervised manner in order to learn about the various plants.

Week 6 – Looking at our own areas within school to work out where would be best to grow our plants.

Activity – think about the soil, the area and lighting and how we can water the plants in a convenient and safe manner.

Discuss as a group the types of things that we could grow.

Week 7 - Propagating our first plants.

- Identifying which parts of the plant are best for propagating.
- What do we need in order to let them grow?
- Activity 1 – cuttings to be placed in jars of water in order to let the roots grow. Students to be supervised.
- Activity 2 – repotting already established plants into new pots, Aloe Vera plants.
- Outcome: students will be able to gain confidence and knowledge of plants and how to re pot their propagated plants in the future.

Week 8 – Planting the rooted plants into a new pot and caring for our other plants.

- Activity 1 – students to observe what has happened to their propagated plants from the previous lesson.
- Activity 2 – students can pot their cuttings into a new pot.

Week 9 – School visit to local garden centre (B and Q)

- Students to locate and buy compost and pots if needed.
- Check out the prices of items to do a comparison

Week 10 – health and safety when using tools whilst gardening.

Activity 1 – to discuss and complete the allocated worksheets in relation to health and safety, using the equipment safely.

Week 11 – Re-planting of fruit trees

Activity 1 – to move the plants to the gardening area

Activity 2 – to find the correct sized pots and replant the fruit trees.

Students to work in pairs and to use the health and safety procedures when handling prickly plants

Week 12 – Visit to Port Sunlight garden centre

Activity 1 – Students to find the correct medium for growing garlic.

We will buy some compost to promote growth of garlic plants at the front of school.

Week 13 – Looking at seeds

Activity 1 – discussion about where seeds come from

Activity 2 – research what types of seeds there are

Activity 3 – recognising different types of seed – worksheets to be completed

Week 14 – Planting garlic bulbs

Activity – Turn over the soil in the planters and plant the garlic bulbs.

Add enough plant medium to cover the bulbs

Outcome – Bulbs to be planted evenly spaced to allow growth.

Week 15 – Garlic plant progress after the holidays!

Activity - students to check on the progress of the plants

- Watering of the plants
- Growth of plants if any?
- Record progress

Week 16 – Plant sale?

Aloe vera plants will be well established so can be sold on to staff?

Activity - tidy up the plants and the pots.

Students to carry out a sale of the plants.

Week 17 – Planting vegetables

Activity – students to research which plants can be sown this month.

Carrot tops to be planted into compost to see if they will grow into a new carrot plant.

Week 18 – Check on plant growth

Activity – students to check on the progress of their plants. These include the carrots that they planted and also the fruit bushes that were planted before Christmas.

- Watering
- Recording progress (photo)
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Week 19 – Outing to local garden centre

Activity – Travel to garden centre to purchase bulbs for planting.

Previous research will assist with purchases

Week 20 – planting bulbs

Activity – preparing soils and pots for planting

- Ensuring correct compost/soil is used
- Plant bulbs in the correct way
- Water when needed