



Pearson BTEC Sample Set Assignment Brief

Single Part Assessment

Unit 1 – Plant and Soil Science

For use with:

Pearson International BTEC Level 3 qualifications in Agriculture/Horticulture/Land-based Studies

Certificate / Subsidiary Diploma / Foundation Diploma / Diploma / Extended Diploma

Advised hours	13 hours
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For completion by the centre

Qualification (select as appropriate)	Certificate / Subsidiary Diploma / Foundation Diploma / Diploma / Extended Diploma
Assessment date	



Instructions to Teachers/Tutors and/or Invigilators

The Pearson Set Assignment will be assessed internally by the centre using the unit assessment criteria detailed in the qualification specification. The Set Assignment will be sampled by the Standards Verifier as part of the standards verification annual centre visit.

Conditions of supervision

The Pearson Set Assignment should be undertaken in conditions that assure the authenticity of outcome. This may require supervision.

We advise that the Pearson Set Assignment be completed in sessions that come to a total of 13 hours. The Pearson Set Assignment should not be shared with learners prior to the start of the assessment period. Teachers/tutors are responsible for security of the Pearson Set Assignment and materials.

Outcomes for Submission

Learners may submit handwritten or word-processed evidence. Learners must save their work regularly and ensure that all materials can be identified as their work.

Learners must submit their own, independent work as detailed in the set assignment. Each learner must complete an authentication sheet.



Instructions to Learners

Read the Set Assignment carefully.

You will be asked to carry out specific activities using the information provided. You will be given a specific time period to complete the assignment.

At all times you must work independently and must not share your work with other learners. You must complete an authentication sheet and submit this along with your work.

Set Assignment Information

Your school/college is planning to develop an area where it can grow crops to help in their science lessons.

You have been asked to help develop some information materials to show open day visitors about this project.



Set Assignment

You must complete ALL activities.

ACTIVITY 1

You need to research detailed information about plant processes.

You are also required to select a crop to grow from seed at your school/college.

You must work independently on your research which should include:

- identification of the soil and growing conditions needed by your chosen crop
- details on the characteristics of the soil at your school/college
- ways in which the soil could be adapted to meet the needs of the crop and retain fertility
- you will use the results from simple soil texturing and pH tests on your local soil.

ACTIVITY 2

You have been asked to produce an information guide that discusses the processes involved in transpiration.

Your answer may include:

- plant cell structures and specialisations
- plant structure and function
- plant processes
- plant nutrition
- reproduction systems
- diagrams.

This activity covers learning aim A.

A. A.P1, A.P2, A.M1, A.D1.

ACTIVITY 3

Your school/college plans to develop an area to grow a crop from seed for use in science lessons.

Write a report which could be used to ensure that the crop you have selected grows well in this area.

Include in your report:

- Preferred growing conditions of the crop you have selected
- An evaluation of the growing conditions at your school/college to include:
 - Soil type/ texture
 - Soil pH
- Recommendations for activities to optimise the soil and growing conditions
- Recommendations to maintain soil fertility.

This activity covers learning aims B and C.

A. B.P3, B.P4, B.M2, BC D2
B. C.P5, C.M3 BC. D2