

5.4.2 Use of plant hormones

AQA GCSE Biology (Higher) Question and answer notes

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How to use these notes

These notes cover everything you need to know for this part of the specification. They have been written in question-answer format to make them easier for you to study from.

In order to study successfully, I recommend you do the following for each question and answer:

- Read it carefully and make sure you **understand** it.
- **Memorise** the answer.
- **Practice** applying your understanding to past exam questions.

A good way to memorise information is to use **retrieval practice**. This is when you practise retrieving information from your memory. You could do this by making a flashcard for each question with the question on one side and the answer on the other. Or you could use a flashcard app. Alternatively, use a sheet of paper to cover up the answer so you can only see the question. Try to answer the question and then check how you did.

You should practise retrieving each answer from your memory until you can do it perfectly. Even once you can retrieve the answer perfectly, your ability to retrieve it will probably fade as time passes without practising. Therefore you will need to keep going back to the questions that you have previously mastered and practising them again. However, each time you re-learn the answer, the memory will be stronger and will last longer than the time before.

What is agriculture?

Agriculture (also known as farming) is the process of growing food on a farm.

What is horticulture?

Horticulture is the process of growing plants in a garden or greenhouse. This can include growing plants for food as well as growing ornamental plants.

What is tissue culture?

Tissue culture is the process of taking a small sample of tissue from an organism and using it to grow new organisms. Tissue culture can be used to grow many new plants from a small sample of tissue from one plant. It is an example of cloning. It can be used in agriculture and horticulture to produce many copies of a plant that has desirable characteristics.

How are auxins used in agriculture and horticulture?

Auxins are used in agriculture and horticulture in the following ways:

- As weed killers
- As rooting powders
- To promote growth in tissue culture

How are gibberellins used in agriculture and horticulture?

Gibberellins are used in agriculture and horticulture in the following ways:

- To end seed dormancy
- To promote flowering
- To increase fruit size

How is ethene used in the food industry?

Ethene is used in the food industry to control the ripening of fruit during storage and transport. Fruit is harvested before it is ripe, then it is transported, and then ethene is used to ripen the fruit. Unripened fruit is not as soft as ripe fruit, so this method reduces the amount of fruit that is damaged in transport.