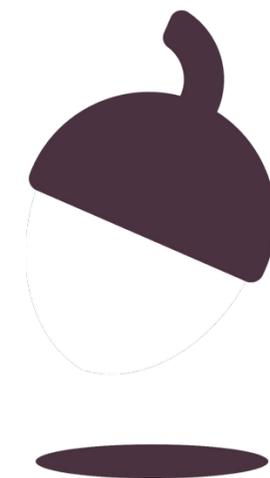


Biology - KS4

Homeostasis and Response

Plant Hormones

Miss Ray



OAK
NATIONAL
ACADEMY

Complete the sentences.

1. _____ tropisms move towards the stimulus.
2. _____ tropisms move away from the stimulus.



Answers

Complete the sentences.

1. **Positive** tropisms move towards the stimulus.
2. **Negative** tropisms move away from the stimulus.



Explain the role of auxins in positive phototropism of a plant stem.

Auxins are highly _____ on the _____ side of the stem. _____ stimulate cell _____ and the shaded side of the shoot will grow _____ than the unshaded side. This causes the shoot to bend _____ the light.



Answers

Explain the role of auxins in positive phototropism of a plant stem.

Auxins are highly concentrated on the shaded side of the stem. Auxins stimulate cell growth and the shaded side of the shoot will grow faster than the unshaded side. This causes the shoot to bend towards the light.



Explain the role of auxins in positive geotropism of a plant root.

Auxins are highly _____ on the _____ side of the root. Auxins _____ cell growth and the upper side of the root will grow _____ than the under side. This causes the root to bend in the direction of _____.



Answers

Explain the role of auxins in positive geotropism of a plant root.

Auxins are highly concentrated on the under side of the root. Auxins slow cell growth and the upper side of the root will grow faster than the under side. This causes the root to bend in the direction of gravity.



Are the following uses of auxins, ethenes or gibberellins?

- 1. Weed killer**
- 2. Ripening fruit**
- 3. Tissue cultures**
- 4. Initiating germination**
- 5. Promoting flower growth**
- 6. Rooting powder**
- 7. Increasing fruit size**



Answers

Are the following uses of auxins, ethenes or gibberellins?

- 1. Weed killer**
- 2. Ripening fruit**
- 3. Tissue cultures**
- 4. Initiating germination**
- 5. Promoting flower growth**
- 6. Rooting powder**
- 7. Increasing fruit size**

- 1. Auxins**
- 2. Ethenes**
- 3. Auxins**
- 4. Gibberellins**
- 5. Gibberellins**
- 6. Auxins**
- 7. Gibberellins**

