

ASSIGNMENT

1-> How do the shoot and roots of a plant respond to pull of Earth's Gravity?

Ans-> The shoot part of the plant shows negative geotropism by growing in the opposite direction of the gravity. The root part of the plant shows positive geotropism by growing in the same direction of the gravity. In this way the shoot and the root parts of a plant respond to Earth's gravity.

2-> Describe an activity to demonstrate ~~photo~~ phototropism.

Ans-> Growth movement of plants (shoot) in response to a light stimulus is called Phototropism. This movement is regulated by the release of Auxin hormone. It is caused due to more growth of cells

towards the shaded side of the shoot as compared to the side towards light.

Aim of Activity: To demonstrate Phototropism.

Materials required: 2 plants.

Procedure: (i) A Plant should be kept in a dark room ~~is~~ along a window. completely exposed to light.

(ii) A plant should be kept besides the window in such a way that ~~the~~ very minimum part of the shoot is exposed to light (sunlight)

Observation: (i) The first plant will grow straight as due to proper exposure to sunlight Auxin hormone synthesized at tip spreads uniformly throughout the plant.

(ii) The second plant will bend towards the light source as auxin diffuses towards the shady part of the plant (shoot) and concentration stimulates the cells to grow longer thus an inclination is observed.