

CONTROL & COORDINATION

1. How do the shoot and roots of a plant respond to the pull of earth's gravity?

Ans. - Shoot of plant move upwards towards sunlight. This is called as phototropism

- Roots of plant grow downwards into the soil. This is called as geotropism

2. Describe an activity to illustrate the phenomenon of phototropism.

Ans. AIM OF THE ACTIVITY -

- To demonstrate phototropism

MATERIALS REQUIRED -

- Conical flask
- Potted plant
- Cardboard box

Procedure -

- ① Fill a conical flask with water
- ② Cover the neck of the flask with a wire mesh.

- (iii) Keep 2-3 freshly germinated bean seeds on the wire mesh.
- (iv) Take a cardboard box which is open from 1 side
- (v) Keep the flask in the box in such a manner that the open side of the box face light coming from window.
- (vi) After two or three days, the shoots bend towards light & roots away from light.
- (vii) Now turn the flask so that the shoots are away from light and the roots towards the light
- (viii) Leave it undisturbed for a few days.

Observation -

~~Light~~ Potted plant's shoots move towards the direction light comes from.