

Q1) How do the shoot and root of a plant respond to the pull of earth's gravity.

Roots grow downwards towards gravity while shoot usually grows upward away from the earth. In this way the shoot and the root of a plant respond to the pull of the earth's gravity.

Q2) Describe an activity to illustrate the phenomenon of phototropism and explain why does this occur?

Aim of the activity.

To explain the phenomenon of phototropism and the reason for its occurrence.

Materials required.

- ① Two seedlings of mustard plant.
- ② A bottle containing water
- ③ a split cork
- ④ wooden box.
- ⑤ a source of light

## Procedure:

Two seedlings of mustard plant were taken and kept in a small ~~bottle~~ bottle containing water. Then the bottle was closed using a split cork, and then kept in a wooden box with a small opening on one side. Then the box was kept near a light source, in such a way that opening in the box faced the light source. Then observation was recorded after 2-3 days.

## Observation:

After 2-3 days, it was observed that the shoot bend towards the light, but the roots bent away from the light.

## ~~Conclusion~~

From the above activity, we concluded that such a growth movement in response to light stimulus is termed as 'phototropism'.