

HOME ASSIGNMENT I

1. How do the shoot and roots of a plant respond to the pull of earth's gravity?
The shoot part of the plant ~~grows~~ shows negative geotropism as it grows against the gravity. The root part of the plant shows positive geotropism as it grows in the same direction of the gravity. In this way the shoot and roots of a plant respond to the pull of earth's gravity.

2. Describe an activity to illustrate the phenomenon of phototropism and explain why does this occur.

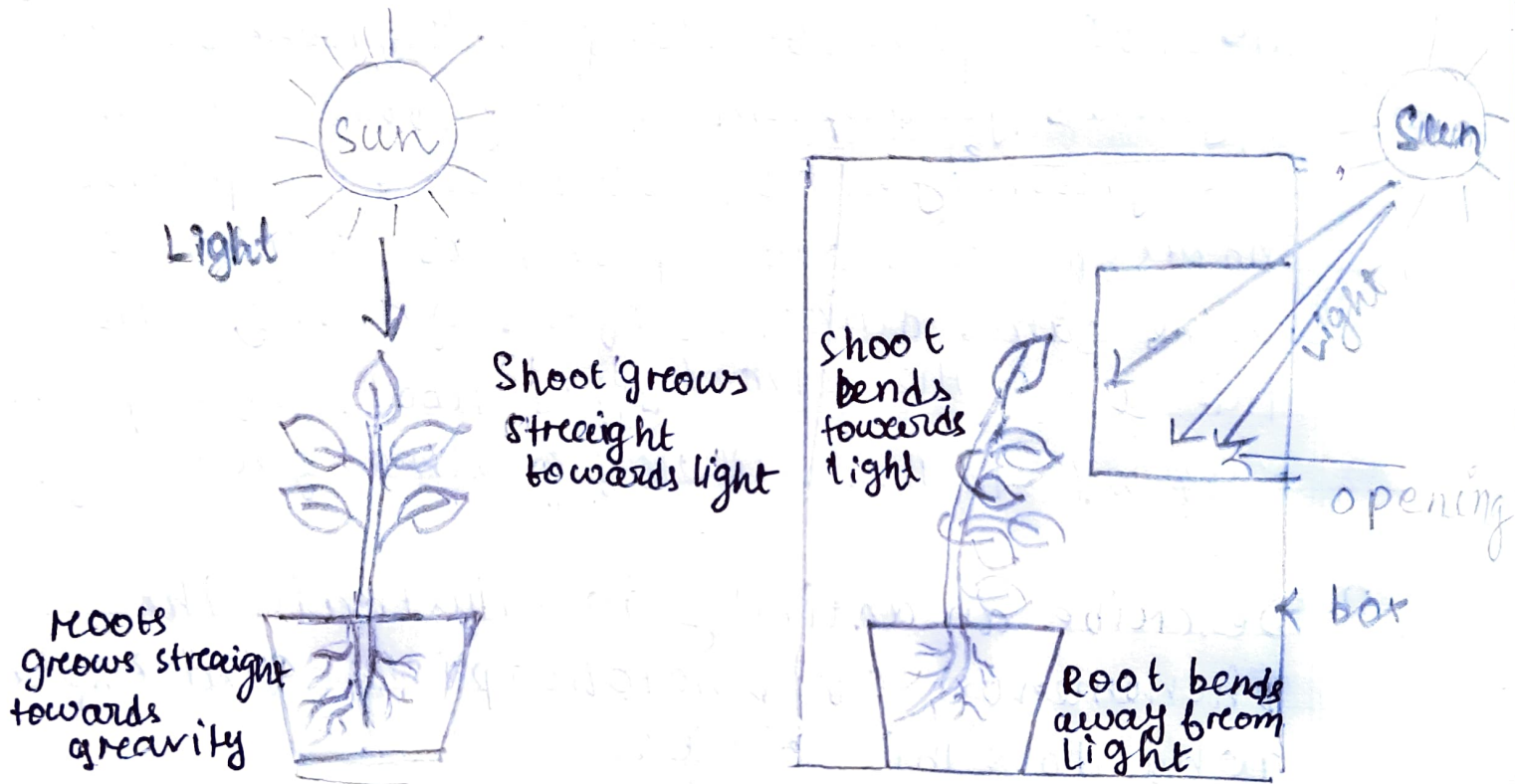
Aim of the activity :- To show ^{movement of} ~~response~~ of ~~to light~~ plant part in response to light

Materials required - 2 Potted plant, Box with small opening on one side

Procedure - • Take ~~a~~ potted plant and place it under the sun

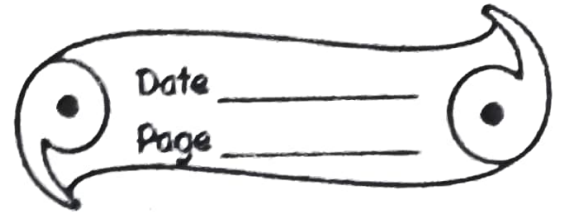
• Take another potted plant and placed it ~~and~~ inside a box which

- has a small opening on its one side and the small opening should face the sun.
- ~~the~~ Observe both the plants for some days.



Observation - • We observe that the plant kept in direct sunlight grows straight. The shoot grows straight upwards and root grows straight downwards.

- The plant kept in the box with small opening grows towards light. The shoot bends towards light but the root bends away from light.



Conclusion - The shoot of a plant is positively phototropic but the root is negatively phototropic.