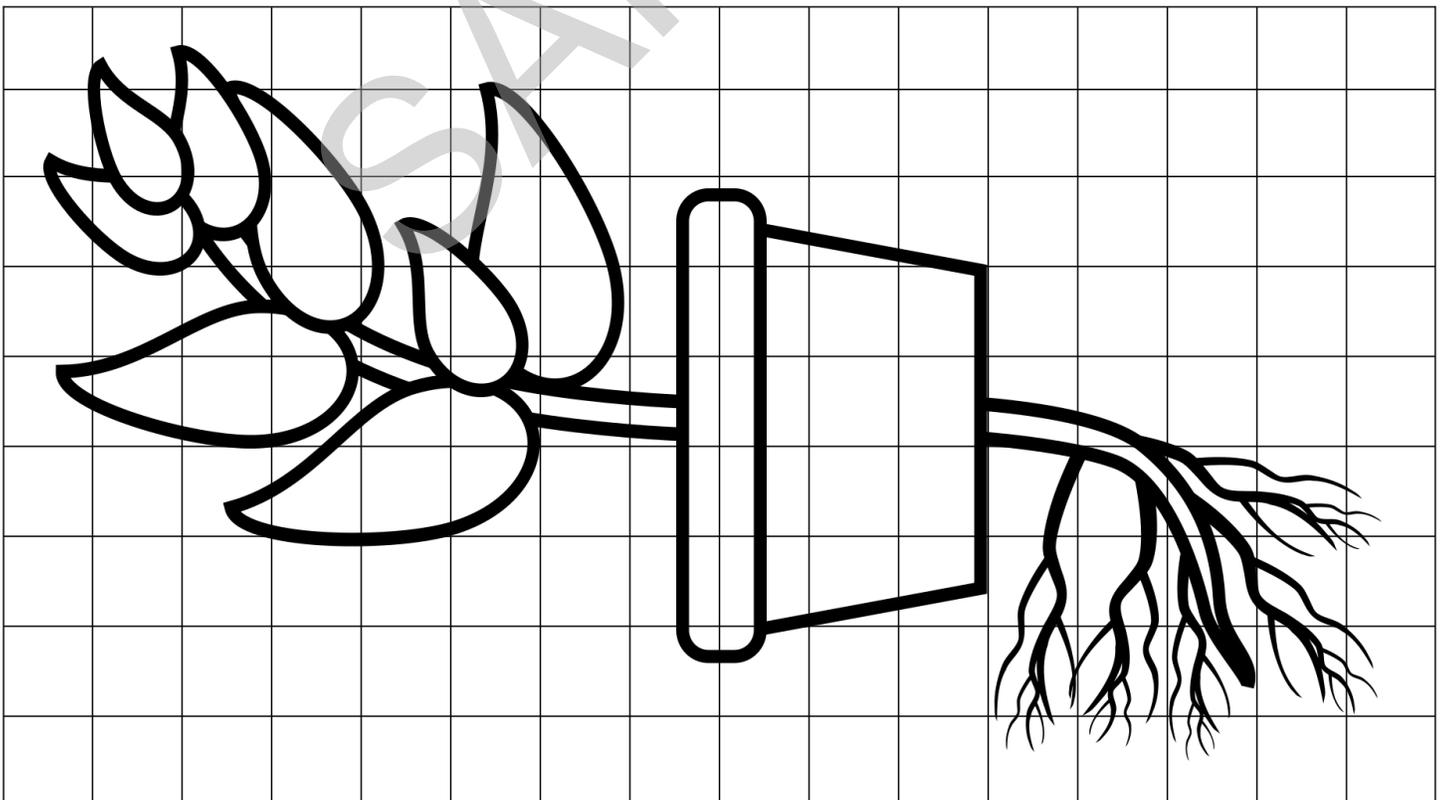


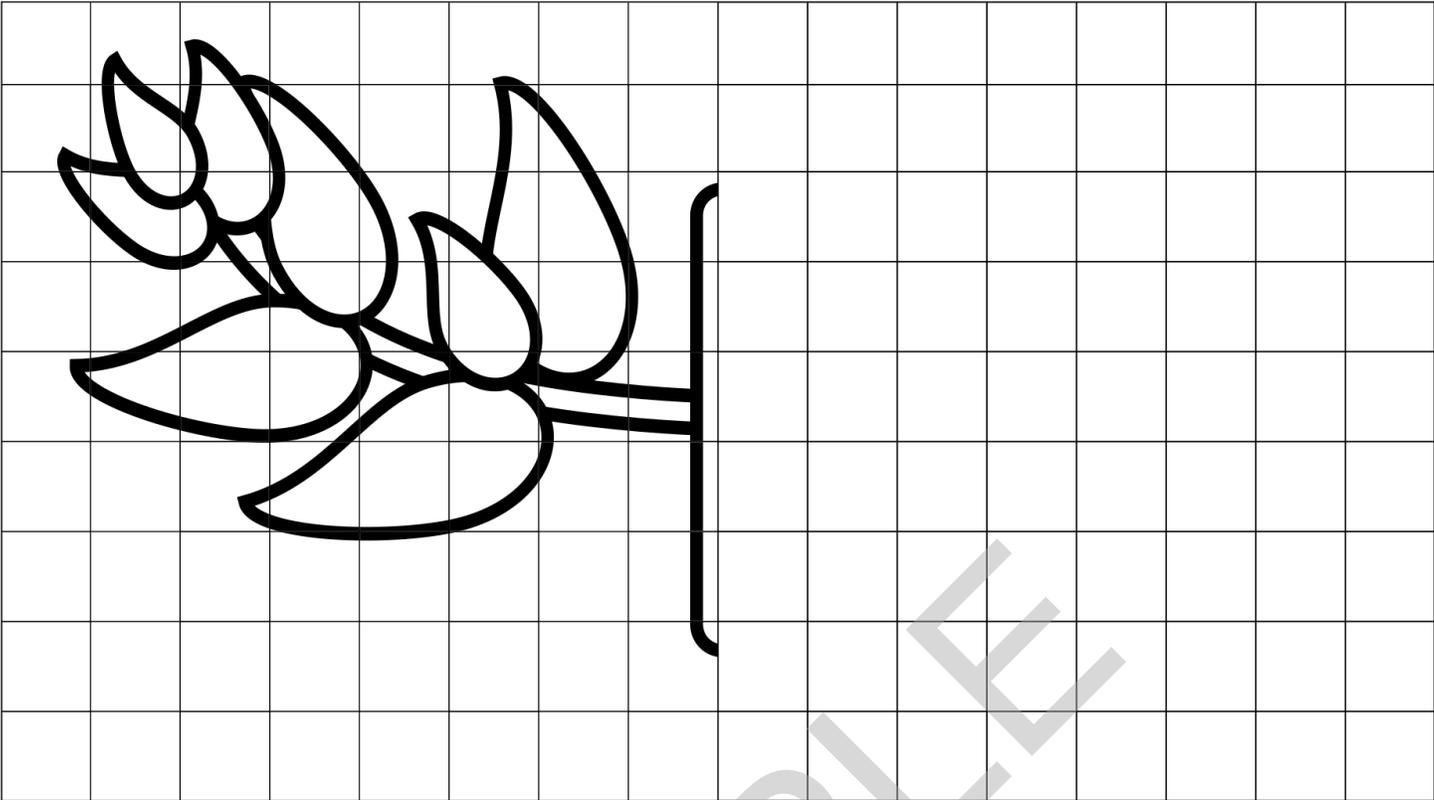
Tropism: Geotropism

Did you know if you plant a seed or bulb upside down, its roots will still grow down? Plant roots have to go deep into the soil if they are going to absorb the water and minerals the plant needs to grow, so roots always grow toward gravity. This kind of growth is called geotropism. It is interesting that many plants are considered to be both positively geotropic and negatively geotropic. In other words, the roots have a positive geotropism in that they grow toward gravity, and the stem has a negative geotropism in that it grows away from gravity.

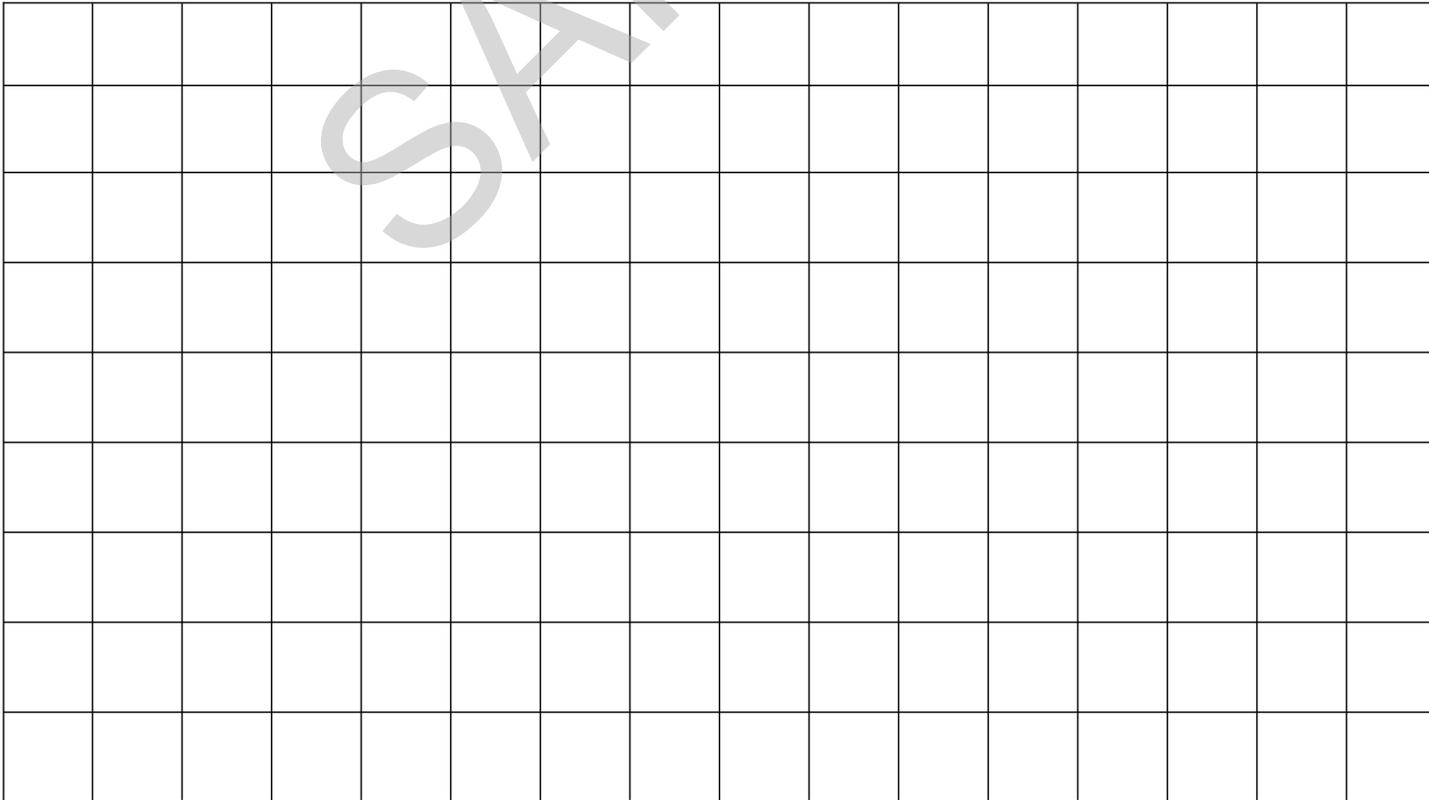
Follow these instructions to draw an example of geotropism on the next page like the one shown below:

- In the first grid, draw the half of the picture that is missing.
- In the second grid, see if you can draw the entire picture.





SAMPLE

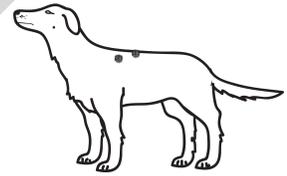
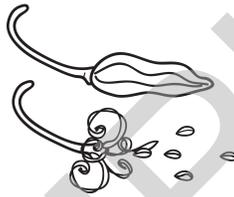


Questions

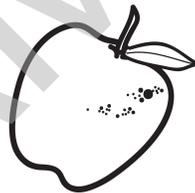
Match the word to the correct definition.

- | | |
|---------------------|--------------------------------|
| ___1. phototropism | a. plant's response to touch |
| ___2. hydrotropism | b. plant's response to light |
| ___3. thigmotropism | c. plant's response to gravity |
| ___4. geotropism | d. plant's response to water |

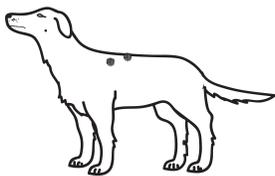
5. Which picture is an example of seed dispersal by animal fur? Circle it.



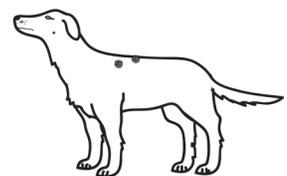
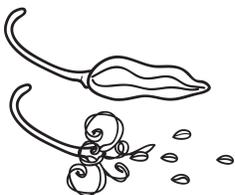
6. Which picture is an example of seed dispersal by gravity? Circle it.



7. Which picture is an example of seed dispersal by water? Circle it.

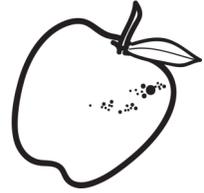


8. Which picture is an example of seed dispersal by explosion? Circle it.



Questions (continued)

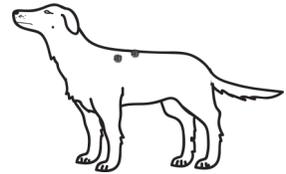
9. Which picture is an example of seed dispersal by wind? Circle it.



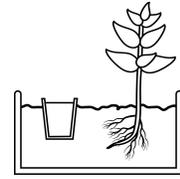
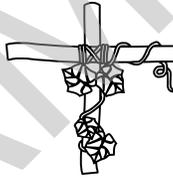
10. Which picture is an example of seed dispersal by animal digestion? Circle it.



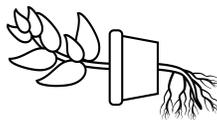
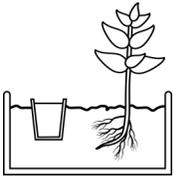
11. Which picture is an example of seed dispersal by fire? Circle it.



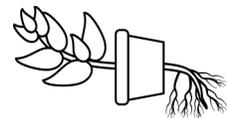
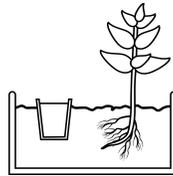
12. Which picture is an example of thigmotropism? Circle it.



13. Which picture is an example of phototropism? Circle it.



14. Which picture is an example of hydrotropism? Circle it.



15. Which picture is an example of geotropism, Circle it.

