

Plant Response to Light

Summary

Students will develop a hypothesis related to how plants respond to light.

Time Frame

2 class periods of 60 minutes each

Group Size

Individual

Materials

- 2 Plastic cups
- soil
- 5 popcorn seeds per cup
- Sharpie or wax marker
- light sources
- colored plastic wrap
- other items students may request
- [student sheet](#)
(attached)

Instructional Procedures

Ask students to think about how plants respond to light. They probably know plants grow in response to light or grow toward light. Ask them to think about conditions or types of light that might occur like: normal light period in a Utah summer of 16 hours of daylight with 8 hours of darkness-a 24-hour period of light with no darkness-a 24-hour period of darkness-16 hours of daylight and 8 hours of darkness with shaded light. Or do "grow" lights" make a difference, incandescent, fluorescent or colored light?

Read the student sheet with students and ask student groups to develop a hypothesis based on the statement: If we _____ (do something with light) _____ then, _____ (affect on the plant).

As the students to write their hypothesis on the board with no two alike. Discuss the statements and make sure they are correctly written.

Allow time for students to plant their seeds. You may have each group do their own control or you may wish to plant several "class" control plants. The control should be set under a known light source.

Measure the height of the plants and average the results for a couple of weeks or more if needed.

Ask student groups to summarize their results for the class in a conclusion on the board.

Bibliography

Lesson Design by Jordan School District Teachers and Staff.

Authors

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