

Science Homework

Sections 5A, B, C, D, & E

September 4-8, 2023

Day	Homework
Monday	No School (Labor Day) – No Homework **Don't forget to study for Tuesday's Vocabulary Quiz**
Tuesday	Complete "Testable Question and Hypothesis Practice Worksheet"
Wednesday	
Thursday	
Friday	• No Homework! Enjoy your weekend 😊

Reminders

- **HW due Monday, September 11th**
- **Vocabulary Quiz Tuesday, September 5th**
- HW may be completed on iPads & uploaded to Archie OR printed packet may be turned in.

Science Vocabulary

Problem Statement
Research
Hypothesis
Manipulated/Independent/Test Variable
Responding/Dependent Variable
Control Variables
Materials
Procedures
Results
Conclusion
Applications
Abstract

[Topic 1a Working Like a Scientist Vocabulary Quizlet](#)



TESTABLE QUESTION AND HYPOTHESIS PRACTICE

DIRECTIONS: MATCH EACH TESTABLE QUESTION TO EACH HYPOTHESIS.

TESTABLE QUESTION

_____ 1. How does the amount of water a plant receives affect its growth?

_____ 2. Does the size of a magnet affect its strength in picking up paperclips?

_____ 3. How does the temperature of water affect the rate at which sugar dissolves?

_____ 4. Can the color of a solar oven affect its ability to heat up food?

_____ 5. Does playing music affect the growth of bean plants?

_____ 6. How does the shape of an ice cube affect how quickly it melts?

_____ 7. Does the type of soil affect the germination rate of tomato seeds?

_____ 8. How does the amount of light a plant receives affect its height?

_____ 9. Does the temperature of the air affect how much a balloon inflates?

_____ 10. Which brand of paper towel absorbs the most liquid?

HYPOTHESIS

- A. If ice cubes of different shapes (e.g., cube, sphere, pyramid) are placed at room temperature, then the cube-shaped ice will melt the slowest because it has the least surface area.
- B. If a larger magnet is used, then it will pick up more paperclips than a smaller magnet.
- C. If three different brands of paper towels are tested by soaking them with the same amount of liquid, then the [specific brand] paper towel will absorb the most liquid because it is designed to be highly absorbent.
- D. If food is cooked in a black solar oven and a white solar oven, then the black solar oven will heat up faster and cook the food more efficiently because it absorbs more sunlight.
- E. If sugar is added to hot water, then it will dissolve faster than sugar added to cold water.
- F. If tomato seeds are planted in three different types of soil (potting soil, sand, and clay), then the seeds in potting soil will germinate faster and more successfully because it provides the best conditions for seed growth.
- G. If a plant receives more water, then it will grow taller and have more leaves compared to a plant that receives less water.
- H. If a plant is exposed to varying durations of light (e.g., 12 hours, 8 hours, 4 hours), then the plant receiving 12 hours of light will grow the tallest because it has the most access to light for photosynthesis.
- I. If music is played near bean plants, then they will grow at a different rate compared to bean plants in a quiet environment, with some types of music having a more stimulating effect than others.
- J. If a balloon is filled with air from a hot hair dryer and a cold air source, then the balloon filled with hot air will inflate more because hot air takes up more space.