

Science Homework #5

SECTIONS 3A, B, C, D, & E

SEPTEMBER 16-20, 2024

Homework

- Complete “Making Observations and Inferences” worksheet
- Read “Questions” passage
- Complete “Questions” worksheet.

Contact Me

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Vocabulary

[Topic 1a Vocabulary:](#)
[Think & Work Like a](#)
[Scientist](#)



Reminders

- Homework #4 due Monday, 9/23/24
- **Topic 1a TEST, Wednesday 9/25/24**



name: _____

Directions: Read each statement. Decide whether it is an observation, an inference, or a prediction. Write O, I, or P in the box.

1	Megan will make the cheer team because she has been practicing every day for months.	
2	All of the fourth grade classes are getting on the bus. They must be going on a field trip.	
3	Camden lost a tooth and put it under his pillow tonight. He will find money under his pillow in the morning.	
4	Joseph's mother measured how tall he is and discovered that he had grown 2 inches this year!	
5	Kylie puts half of her allowance in the bank every week. She is probably saving it for something special.	
6	There is a nest made out of grass, twigs, and leaves in the tree outside of my bedroom window.	
7	On cold winter days, all of the kids come to school wearing hats, coats, and mittens.	
8	Dad noticed his truck has a flat tire. He will have to change the tire before he goes to work.	
9	The smell of mom's cooking fills the whole house. We will be eating dinner very soon.	
10	David had a red, itchy rash on his skin after playing in the woods. He must have gotten into poison ivy.	
11	When Aubrey mixed baking soda and vinegar together, the mixture started to bubble and fizz.	
12	There was a puddle on the sidewalk but now it is gone. The water must have evaporated.	

Question

Name: _____

Every investigation begins with a question or a wondering.

How does _____ work?

Why does _____ happen when I _____?

What will happen if I _____?

The questions are endless! Our brains naturally wonder about things. If we observe something we don't understand, we can take steps to try and understand it. Mysteries are great exercises for our brains because they help us to wonder and question, then we can practice finding answers to those questions.

When we are developing an experiment or investigation, our scientific question needs to be testable. For example, if our question was *Which of the planets in our solar system is the largest?* we could simply do research to find the answer and an investigation wouldn't be necessary. If our question was *Which sports drink helps keep athletes hydrated for a longer period of time?* we would be able to design an experiment and discover the answer ourselves. If your question can be answered with "yes" or "no", it is not an investigation. When forming your questions, think of a problem you would like to solve or at least start with something you are interested in.

How does
_____ affect
_____?

Which _____
will work the
best?

Why does
_____ happen
when _____?

Questions have to be testable and must solve a problem. Creating a model of a scientific concept is not testable. Models can help represent an idea or something too big or too small to observe normally, but they do not solve a problem or answer a question.

Question

Name: _____

Determine if the questions below could be used for a scientific investigation. If the question could not be used for an investigation, rewrite it into a testable question.

1. How many dogs visit a dog park each day?

2. Which materials would keep your hands protected when handling items of a high temperature?

3. How do different types of music affect animal behavior?

4. How many hours does a dog sleep during the day?

5. Can a plant survive without water?

6. How many students are tired at school?

7. How will different types of foods affect athletes during games?

8. How far away from the sun is Mars?

9. Is plastic biodegradable?

10. What temperature does water have to be to brew tea?
