

09/10

Questions

#3

Agenda

-Science questions
-identifying variables
-Writing a testable ?

Exit Task

Turn in the worksheet

Which of the following is the best question for a controlled investigation?

1. Why does sunlight help plants to grow?
2. How does sunlight increase the height of plant growth?
3. How does the amount of sunlight given to a plant affect the height of the plant after three weeks?
4. Why is three weeks not enough time to measure the affect of sunlight on plant growth?

Explain your answer

Learning target;

I can identify the 3 variables and write a question.

-  Sit up
-  Track the speaker
-  Ask questions
-  Respect your peers
-  Stay focused

Make a list of 2-5 questions you could ask about the room and any of the materials in it.

**Learning target;
I can identify the 3 variables and write a question.**

-  Sit up
-  Track the speaker
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-  Respect your peers
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Information questions V testable research question

Next to your questions write whether they are;

I information questions

T testable questions

I



T



- ★ Sit up
- ★ Track the speaker
- ★ Ask questions
- ★ Respect your peers
- ★ Stay focused

Learning target;

I can identify the 3 variables and write a question.

Information questions V testable research question

Put this vocabulary in your glossary



I information question

Designed to gather information on a topic



T testable question

These questions require a specific comparison that can be tested.

-  Sit up
-  Track the speaker
-  Ask questions
-  Respect your peers
-  Stay focused

Learning target;

I can identify the 3 variables and write a question.

Testable research questions have a clear format:

How does _____ (MV) affect _____ (RV) _____ ?



Think of a variable that would affect the number of fans at a football field

The ONE
variable that is
changed in an
experiment

Manipulated

NV

The variable
that we are
measuring

Responding

RV

Things that are
kept the same in
an experiment

Controlled

CV

- ★ Sit up
- ★ Track the speaker
- ★ Ask questions
- ★ Respect your peers
- ★ Stay focused

Write a Question for any **one** of the following manipulated and responding variables.

1. Manipulated Variable – length of paper helicopter blades
Responding Variable – rotational speed
2. Manipulated Variable – length of string telephone
Responding Variable – Clarity of sound
3. Manipulated Variable – time spent at baseball batting practice
Responding Variable – batting average
4. Manipulated Variable – temperature of water
Responding Variable – dissolving time of a sugar cube
5. Manipulated Variable – number of displayed recycling posters
Responding Variable – the number of milk cartons found in the trash
6. Manipulated Variable – amount of time spent studying for a test
Responding Variable – the score on the test



Work quietly on the pink sheet

-  Sit up
-  Track the speaker
-  Ask questions
-  Respect your peers
-  Stay focused