

Name: _____

Date: _____

Science 6th-8th Grade Studies Weekly

Week 1, Physical Science

Assessment

For the following questions, use this week's Studies Weekly magazine because you must cite one source of your answer. Please list the article title and the page number.

1. How many kinds of variables are there? Name them.

2. What were Martin Fleischmann and Stanley Pons trying to prove?

3. Who was Jan Baptist van Helmont?

4. What was Galileo's "new truth"?

- Ⓐ He discovered that maggots are a form of flies.
- Ⓑ He proved that all objects will fall at the same rate, regardless of weight, if there is no air resistance.
- Ⓒ He discovered that hydrogen peroxide is a powerful fertilizer.
- Ⓓ He proved that the Tower of Pisa in Italy leans far enough to equalize the rate at which different objects fall.

5. Look closely at the data table. What was the average distance that the control soccer ball traveled?

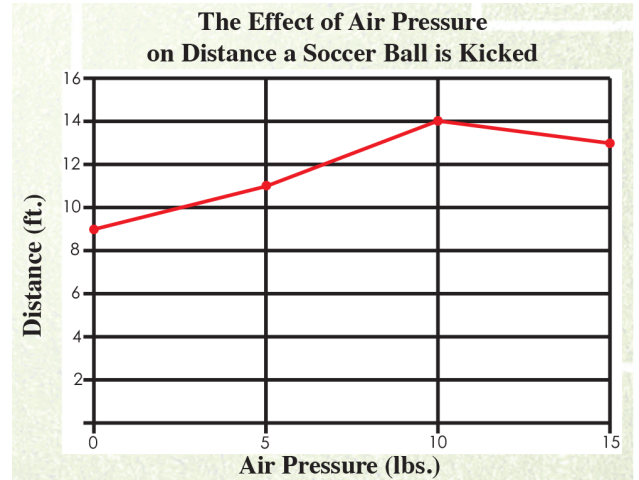
- Ⓐ It traveled an average of 9 meters.
- Ⓑ It traveled an average of 27 meters.
- Ⓒ It traveled an average of 8 meters.
- Ⓓ It traveled an average of 10 meters.

The Effect of Air Pressure on Distance a Soccer Ball Travels

Air Pressure	Trial 1	Trial 2	Trial 3	Average Distance (m)
0 lbs. (control)	8 m	9 m	10 m	9 m
5 lbs.	10 m	12 m	11 m	11 m
10 lbs.	14 m	12 m	16 m	14 m
15 lbs.	12 m	14 m	13 m	13 m

6. The graph shows the effect of air pressure on the distance that a soccer ball travels. Look at it closely. How far will a soccer ball with no air pressure travel?

- Ⓐ It will travel 2 feet.
- Ⓑ It will travel 5.5 feet.
- Ⓒ It will travel 8 feet.
- Ⓓ It will travel 9 feet.



7. What is the control in an investigation?

- Ⓐ A control is the dependent variable.
- Ⓑ A control is the independent variable before it has been changed.
- Ⓒ A control is the variable that answers the question.
- Ⓓ A control is the last variable listed in the directions.

8. Why is it necessary to have a procedure for your experiment?

- Ⓐ A procedure will help other scientists understand how you got your data.
- Ⓑ A procedure will help others analyze your data.
- Ⓒ A procedure will help to make sure that your data can be checked for errors.
- Ⓓ all of the above

9. What did Nobel Prize-winning chemist, Irving Langmuir, call it when scientists come to the wrong conclusion(s) after holding on to a hypothesis too long or too hard?

- Ⓐ He called it pathological science.
- Ⓑ He called it diligent science.
- Ⓒ He called it Nobel Science.
- Ⓓ He called it science with a vision.

10. What is a synonym for germination?

- Ⓐ blooming
- Ⓑ rotting
- Ⓒ sprouting
- Ⓓ culmination