



Practicing the Scientific Method

Can you answer these questions?

(Find the correct answers on the next page.)

1. Ben and Cara want to do an experiment to determine how the temperature of water affects how much salt can be dissolved in it. In what order should they perform the following steps?

A - Record how many half-teaspoons of salt are completely dissolved in each beaker.

B - Bring the water in one of the beakers to the boiling point.

C - Pour equal amounts of water into two identical beakers.

D - Gradually put salt into the water of each beaker, a half-teaspoon at a time.

Answer

C, B, D, A

B, D, C, A

A, C, B, D

2. Sandra wants to learn more about the feeding habits of ants. What is the best way to go about it?

A - Conduct an experiment, form a hypothesis, make a conclusion, record data

B - Record data, form a hypothesis, makes a conclusion, conduct an experiment

C - Form a hypothesis, record data, conduct an experiment, make a conclusion

D - Form a hypothesis, conduct an experiment, record data, make a conclusion

3. Scientists obtain information by using their senses to _____.

A - Record

B - Observe

C - Clarify

D - Understand

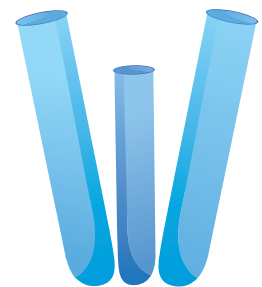
4. The data collected by scientists is also known as _____.

A - Hypothesis

B - Experiment

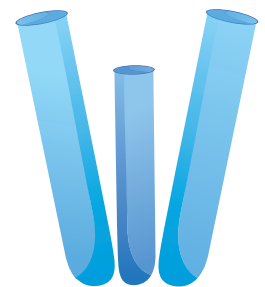
C - Conclusion

D - Evidence





5. A hypothesis is a testable idea that can lead to a scientific investigation.
True
False
6. A valid science experiment must have no more than ____ independent variable(s).
A – Three
B – One
C – Five
D – Two
7. One of the following is a good definition of science
A – A study of living things
B – A study of non-living things
C – Using thought and practical skills to understand the world around us
8. While conducting a scientific investigation, which of these is the first thing a scientist will do?
A – Plan the experiment
B – Research the problem
C – State the hypothesis
9. Which of these is the second step of a scientific investigation?
A – Design the experiment
B – Record and analyze the data
C – State the problem
10. The representation of an object or event is known as _____.
A – Scientific law
B – Variable
C – Model





Answers

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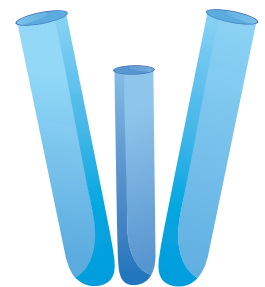
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