

## Scientific Investigation-5.1

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To look closely at data, noting patterns and
interpreting what it means
Arrange (a group of people or things) in classes or categories according to shared qualities or characteristics.
A summary statement based on the results of an investigation or experiment Includes how your results support or contradict your original hypothesis.
something that stays the same
Variables that stay the same throughout the experiment
In an experiment, a group that is kept under normal or ideal conditions while others are changed for comparison.
measurements or observations; analyzed to come up with a conclusion
The variable in the experiment that responds to the changed variable. The variable the scientist MEASURES.
Collected body of data from observations and experiments
a prediction or educated guess based on background knowledge that states what the scientist thinks will happen in an experiment; stated as an "IfThen" statement where the If is the cause and the then is the effect
The experimental factor that the scientist changes; the variable whose effect is being tested.  The CAUSE in a hypothesis (the IF).
A tentative explanation based on prior knowledge and experiences (schema), and observations and/or data.
A representation or simulation of a real object, system, or event Includes only the most important parts of the system. Helps to clarify explanations and demonstrate relationships.
Information obtained through the senses.
Data or observations in the form of words The QUALITies of something
Numerical data or observations the QUANTITies of something
A series of steps followed to solve scientific problems including collecting data, formulating a hypothesis, testing the hypothesis, and stating conclusions.

18. Scientific predictio	
19. Testable question	Can be answered by designing and conducting an experiment and collecting and analyzing evidence that is measurable. Relates to scientific ideas rather than personal preferences.  About changing one thing to see the effect it has on another thing.
20. Variable	A factor that can change in an experiment