

Development of Theories

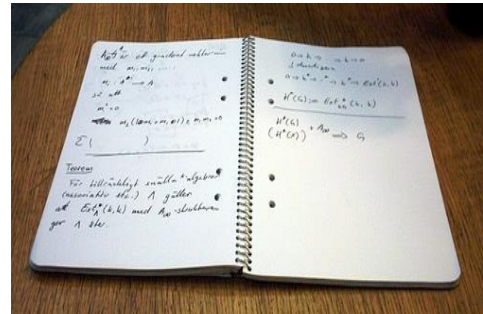
Theories and Laws

- A scientific **theory** is a strongly supported hypothesis with no significant evidence to disprove it.
 - If conflicting data is discovered, theories can be revised or discarded.
- A **law** is something that always applies the same way, regardless of the conditions.
 - Laws explain simpler things than theories: laws state that things happen, but theories explain why they occur.

Theories are very comprehensive, and thus scientists spend a lot of time trying to reinforce and develop their theories.

Study Tip

Although a theory is often trusted and reputable, theories must be constantly tested and revised. Gravity is a law because it applies in every situation in the same way (but perhaps in different quantities).



Concept Check

- Can a law become a theory? Can a theory become a law?
- Which one is the most important: hypothesis, theory, or law?