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Hey science teachers! One of the most common questions we get in the science classroom is about the difference between theories and laws. These terms are fundamental to understanding science, yet they're often confused by students (and sometimes adults, too!). Let's break them down and explore how to effectively teach these concepts in the high school classroom. Pssst! There is a free downloadable poster for teaching the difference between theories and laws at the end of this blog post just for you!

**In this hypothesis vs. theory vs. law reading comprehension and worksheets package,** students will learn key characteristics and the differences between theories, laws, and hypotheses. This includes an informative, article, text-dependent questions, and answer key.

**Theory vs Law Reading Comprehension** A scientific theory is a well-substantiated explanation of an aspect of the natural world that is based on a body of evidence and has stood the test of time through multiple lines of inquiry and experimentation.

**Evidence-Based: Theories** are supported by a large body of evidence gathered from multiple experiments and observations.

**Explanatory Power:** They explain how and why certain phenomena occur.

**Predictive Power:** Theories can be used to make predictions about future observations.

**Revisable:** They can be modified or refined as new evidence becomes available.

**Example:** The Theory of Evolution explains the diversity of life on Earth and is supported by evidence from fields such as genetics, paleontology, and comparative anatomy.

**Use Analogies:** Compare a scientific theory to a comprehensive book that explains everything we know about a topic, but with room for new chapters as we learn more.

**Highlight Examples:** Discuss well-known theories like the Theory of Relativity or the Germ Theory of Disease, emphasizing their broad acceptance and predictive power.

**Engage with Evidence:** Have students look at the evidence supporting these theories, perhaps through research projects or interactive timelines showing key discoveries.

A scientific law is a statement that describes a consistently observed phenomenon or a relationship in nature. Laws are typically expressed mathematically and describe what happens under certain conditions.

**Descriptive Nature:** Laws describe what happens but don't explain why it happens.

**Universal Acceptance:** They are universally accepted as true and apply consistently across different situations.

**Predictability:** Laws allow scientists to predict the outcomes of certain conditions reliably.

**Example:** Newton's Law of Universal Gravitation describes the gravitational attraction between two masses but does not explain the mechanism of gravity.

**Mathematical Formulas:** Use equations and formulas to illustrate how laws can predict outcomes (e.g., using Newton's Laws to predict the motion of objects).

**Consistent Patterns:** Show how laws apply universally, using examples from everyday life (e.g., the law of conservation of mass in chemical reactions).

**Hands-On Activities:** Conduct experiments that demonstrate these laws in action, helping students see their consistent and predictable nature.

When you are teaching the difference between theories and laws, consider the following key points:

- Theories explain why phenomena occur; laws describe what happens.
- Theories are broader and provide deeper explanations; laws are specific and often mathematical.
- Theories can evolve with new evidence, while laws tend to remain consistent as long as the conditions are met.

Both laws and theories are based on hypotheses. They can be used to make predictions, and both can be revised if necessary.

Here's a list of my favorite resources for teaching the difference between theories and laws.

In this fun free lesson, students watch a fun TED ED video and answer questions as they learn why science needs both laws and theories to understand the whole picture. Bonus this activity is customizable!

**Theory vs Law Reading Comprehension** This 2-page reading comprehension for teaching the difference between theories and laws! It includes clear explanations and examples of hypotheses, theories, and laws. It also comes with worksheets that include questions and graphic organizers!

In this free PDF from NASA, students learn about the differences theories, laws, facts, hypotheses, and beliefs, and read 35 statements to discern what they are.

In this fun interactive tutorial on the CPALMS website, students will click, learn, and practice information on inferences, hypotheses, variables, and the difference between theories and laws.

This set of free posters make a wonderful reminder to your students about the difference between theories and laws. They include definitions, characteristics, examples, and an analogy of each. Two sizes are included: full poster size and 8.5x11 for notebooks. They will look amazing in your classroom!

In this hypothesis vs. theory vs. law reading comprehension and worksheets package, students will learn about scientific theories, scientific laws, hypotheses, their key characteristics, and the differences between them. This includes an informative, no-prep reading comprehension article, text-dependent questions, and answer key.

WHAT YOU WILL RECEIVE (PDF and Google Slides)

Hypothesis vs. Theory vs. Law Reading Comprehension

This two-page article takes students through the key concepts we're fetching your file...Please wait a moment while we retrieve your file from its home on the internet

**Theory vs law worksheet pdf. Law vs theory worksheet answer key. Law vs. theory worksheet answers. Amoeba sisters theory vs law worksheet. Theory vs law vs hypothesis worksheet.**