

CONPTT

Six characteristics that apply to scientific concepts

Consistent: Several scientists can repeat an experiment and get the same results

Observable: The results can be observed and explained using the five senses.

Tools may be used to extend the senses (ex.: telescopes, computers)

Natural: A **natural** cause must be used to explain why or how the event happens.

Supernatural causes fall outside the realm of science.

Predictability: The natural cause can be used to make specific predictions. Each prediction can be tested to determine if it is true or false

Testability: The natural cause must be testable through the process of science. This uses controlled experimentation.

Tentative: Scientific theories can be changed and corrected. Theories can even be proven wrong. Nothing is ever completely proven in science.

Applying CONPTT

Science meets all six criteria

Emerging science may not meet 1 or 2 criteria; it may lack technology or knowledge.

Pseudo-science lacks more than 2 criteria; is promoted as being science (like astrology)

Non-science does not meet the criteria- it may be an opinion or a belief system

No Summary For This Section ☺

CONPTT:

Six characteristics that apply to _____ concepts

C _____: Several scientists can _____ an experiment and get the _____

O _____: The results can be observed and explained using the _____.
_____ may be used to extend the senses (ex.: _____, computers)

N _____: A _____ cause must be used to _____ why or how the event happens.
_____ causes fall outside the realm of science.

P _____: The natural cause can be used to make specific _____. Each prediction can be _____ to determine if it is true or false.

I _____: The natural cause must be _____ through the _____ of _____.
This uses _____ experimentation.

T _____: Scientific theories can be _____ and _____. Theories can even be _____.
Nothing is ever *completely* _____ in science.

Applying CONPTT:

- " _____ " meets all six criteria
- " _____ science " may not meet 1 or 2 criteria
 - It may lack _____ or _____.
- " _____ -science " lacks more than 2 criteria
 - Is promoted as being science (like _____)
- " _____ -science " does not meet the criteria
 - It may be an _____ or _____ system