

## Chapter 1

Psychology- scientific study of the mind, brain, and behavior

Levels of analysis- consider the lower rungs most connected to biological influences, higher rungs connected to social influences

Multiply determined- almost all actions are considered this, or being produced by multiple factors

Individual Differences- variations among people in their thinking, emotion, personality, and behavior

Naïve realism- belief that we see the world as it is

Scientific theory- explanation for a large number of findings in natural world

Hypothesis- testable prediction derived from a scientific theory

Confirmation Bias- tendency to seek out evidence that supports our hypotheses and deny, dismiss, or distort evidence that contradicts them

Belief Perseverance- tendency to stick to our initial beliefs even when evidence contradicts them

Metaphysical claim- assertion about the world that is not testable

Nonoverlapping realms- science and religion are considered these because science bounds are tested in the natural world where religion is tested on unprovable moral claims, argued by

**Stephen Jay Gould**

Pseudoscience- set of claims that seems scientific but isn't

Ad hoc immunizing hypothesis- escape hatch or loophole that defenders of a theory use to protect their theory from falsification

Patternicity- the tendency to detect meaningful patterns in random stimuli

Terror Management Theory- our awareness of our own inevitable death leaves many of us with an underlying sense of fear

Correlation-causation fallacy- error of assuming that because one thing is associated with another, it must cause the other

Variable- anything that can vary

## Page 23 Scientific Thinking Principle Diagram

Falsifiable- capable of being disproved

Replicability- when a study's findings are able to be duplicated, ideally by independent investigators

Decline Effect- fact that size of certain psychological findings appears to be shrinking over time

Introspection- method by which trained observers carefully reflect and report on their mental experiences

Willhelm Wundt- 1879 credited with launching psychology as a laboratory science

Table on page 29 about different perspectives by various psychological professionals

Structuralism- school of psychology that aimed to identify the basic elements of psychological experience

Functionalism- school of psychology that aimed to understand the adaptive purposes of psychological characteristics

Natural selection- principle that organisms that possess adaptations survive and reproduce at a higher rate than do other organisms

Behaviorism- school of psychology that focuses on uncovering the general laws of learning by looking at observable behavior

Cognitive psychology- school of psychology that proposes that thinking is central to understanding behavior

Cognitive Neuroscience- relatively new field of psychology that examines the relation between brain function and thinking

Psychoanalysis- school of psychology, founded by Sigmund Freud, that focuses on internal psychological processes of which we're unaware

Evolutionary Psychology- discipline that applies Darwin's theory of natural selection to human and animal behavior

### Six Principles of Scientific Thinking Pg 35

Basic Research- research examining how the mind works

Applied research- research examining how we can use basic research to solve real-world problems