

What Do You Think Science Means?

Summary of Student Ideas, Wed, Jan 4, 2012

Bodies of knowledge

- Science is nature
- Chemistry, physics, biology (interrelated, overlap), union of these
- Small to large scale

Discovery

- Explaining why things are the way they are and the how they work
- Facts and ideas about the world
- Curious nature of humans, solutions to problems
- Breaks down complicated phenomena (e.g., earthquakes) into manageable pieces

Scientific methods

- A process, search for truth, management of “fact bags”
- Hypotheses, experiments, data, other concrete evidence
- Predictions, theories and laws
- Tangible, repeatable, never ending
- Logical, proves conclusions
- Not definitive, correlation versus causation
- Cannot answer all questions (e.g., supernatural forces)

(Useful) impact on humans

- Medicine, anatomy, explains processes in our bodies, metabolism
- Science is everywhere (e.g., art), basis for technology
- Changes society, key to survival, enables communication with the world

Science as a community

- Collaboration of scientists worldwide, sharing
- Opportunity to disagree