AOK REVIEW:

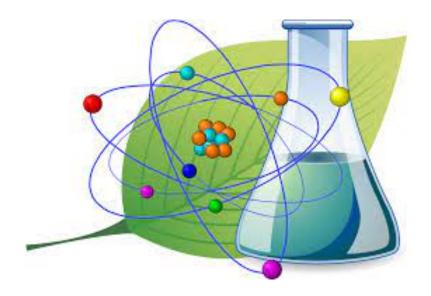
NATURAL SCIENCE

Theory of Knowledge - Year 2





- Given the problems with the inductive process (particular to general), how can science be reliable?
- How does one know in advance what factors (to measure, etc.) will be relevant to the final explanation?
- How can we build understanding of the world independent of the human act of measuring it? (The Observer Effect, etc.)
- How can it be that scientific knowledge changes over time?
- How do paradigms impact scientific knowledge?
- Where are ethical boundaries drawn in science? Who should draw them?



NATURAL SCIENCE: TERMS



- Pseudoscience: a system of beliefs and practices that claim to be scientific but are incompatible with the scientific method
- Empirical: based on and verified by observation and experience
- Inductivism: the use of inductive methods of reasoning to develop natural laws
- Scientism: an exaggerated trust in the methods of science applied to any and all areas of investigation
- Positivism: belief that the only authentic knowledge is that which can be scientifically verified
- Informed consent: permission given in full knowledge of known possible consequences
- Principle of simplicity: preferring the simpler of two competing theories that make exactly the same predictions
- Corroborate: to confirm or support a scientific theory through repeated experimentation