## Science

A wordlist will be provided for each new topic. Use the wordlists to study. After completing of a topic and in preparation for an exam, you should be able to write a one- or two-sentence definition of each term and use each term in a sentence.



Anthropomorphic

Helicobacter pylori

Hypothesis

Koch's postulates

Scientific method

Teleologic

Theory

## Questions

- 1. A researcher has hypothesized that the chemical tributyltin (an additive in boat paint) seeps into the water causing reproductive defects in developing marine snails. In an experiment testing the effects of tributyltin on developing snails, which condition should be used as a control?
- 2. An ad for an herbal product contained the following testimonial as evidence of its effectiveness: "I was very pleased with your product. It certainly works for me. My headaches now disappear within a few hours of taking the pills."
  - Do results support the claim that this herbal product cures headaches.
- 3. Homeopathy is a form of treatment in which a remedy may be repeatedly diluted until only water remains in the container, water that is thought to have acquired a "memory" of the remedy once present. A recent study on the effectiveness of homeopathic therapy involved interviewing 6544 patients to determine if their health improved after homeopathic treatment. The study concluded "70.7% reported positive health changes."
  - Do results support the claim?
- 4. Which of the following is a valid hypothesis?
  - Redwing blackbirds have red epaulettes in order to mate
  - Redwing blackbirds with red epaulettes get to mate



Scientific method	Geocentrism	Heliocentrism
Observation		
Forming an hypothesis		
Testing the hypothesis		
Meeting criteria for becoming a theory		
Would people who accept the idea today revise it if evidence to the contrary arose tomorrow?		
Is the claim falsifiable?		
Does the claim rely on supernatural explanations?		

Scientific method	Theory of Evolution	Other ideas of the origin of life
Observation		
Forming an hypothesis		
Testing the hypothesis		
Meeting criteria for becoming a theory		
Would people who accept the idea today revise it if evidence to the contrary arose tomorrow?		
Is the claim falsifiable?		
Does the claim rely on supernatural explanations?		