# http://www.problem-solving-techniques.com/images/Scientific-Method.jpgLearning Guide

Biology Chapter 1

The Nature of Biology

Essential Questions:

*How do scientists use the scientific method to explain the world around them?*

*What are the characteristics of life?*

*How does technology continually change how scientists work?*

Activities:

* Scientific method activity
* Microscope Lab
* Scientific Process Flow Chart

Mitochondria

Chloroplast



Learning Targets: **I can…**

understand the characteristics of life and diversity in the biosphere.

explain how scientists use scientific method/processes to explain the natural world.

use science skills and technology to conduct ethical scientific investigations.

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| **1.1 Study of Life** |   |
| Biology |  | Organism |
| Biodiversity | Cell |
| Species | Metabolism |
| Biosphere | DNA |
| **1.2 Unifying Themes of Biology**System EcosystemHomeostasis Evolution Adaptation**1.3 Scientific Thinking and Processes** |
| Observation | Independent Variable |
| Data |  | Dependent variable |
| Hypothesis | Constant |
| Experiment | Theory |
| **1.4 Biologist Tools and Technology** |
| Light Microscope/micrograph |
| Transmission Electron Microscope/micrographs |
| Scanning Electron Microscope/micrographs |