

The Biological World Articles



The Biological World

The Physical World

The Social World

The Political World

The Financial World

The Creative and Artistic World

The Constructed World

► Human Physiology and Health

► Botany

► Zoology

► Ecology

The Biological World

The **Biological World** provides opportunities to apply mathematics to human physiology and health, botany, zoology, and ecology.

Solving problems from human physiology and health often requires collecting and analyzing data, using statistical concepts, making measurements, and applying ratio and proportion and percents in the analysis of data.

- What are the nutritional values of school lunches?
- What kinds of growth in heights do students undergo during a school year?

Exploring questions from botany can lead to applying mathematical topics from geometry, probability, measurement, and statistics.

- What are characteristics of leaves that grow on the outer parts of an oak tree versus those that grow on the inner parts of the tree?
- What can genetics reveal about the colors of the kernels of the offspring of Indian corn?

Zoology presents opportunities to make measurements; to use proportional reasoning; to collect, organize, and interpret data; and to develop hypotheses or theories.

- What can be learned about animals from the imprints their feet make on a soft surface?
- What is the nutritional value of a locust?
- What are the differences between Africanized or “killer” bees and European honeybees?

Ecology has become a very important science in environmental studies, and mathematical topics are essential in drawing conclusions from those studies.