

## Bio 12.1

### Goal

- \* Describe DNA organization at several levels
- \* Use terminology to describe cells with different chromosome counts

### Plan

review quiz (35 min)

Terminology (10 minutes)

DNA, genome, chromosomes, human genome project

*Video:* Tales from the Prep Room: Laser Diffraction (5 min)

Higher order terms (10 min)

gene, allele, intron, exon

Diploid, haploid, polyploid

*Video:* Diploid vs haploid cells (10 min)

Chimpanzee and humans chromosomes, the variety of other chromosome arrangements (5 min)

*Video:* Why Ferns Have More Chromosomes Than You (5 min)

Microscope activity: Finding chromosomes

## Bio 12.2: PSAT

*Video:* The Secret of Photo 51

## Bio 12.3

### Goals

- \* Describe major portions of the cell cycle and what is occurring in them
- \* Model mitosis in graphical formats

### Plan

the cell cycle generally (15 min)

*Video:* Mitosis, crash course (10 min)

Summarizing what mitosis and the cell cycle is used for (10 min)

Lab: Mitosis modeling with twizzlers (remainder)