

Format: 8 multiple choice questions and 2 open ended questions

Concepts to Review:

- Cells (see Homework 7 and 8)
 - Understand the terms *structure* and *function*, as well as how they relate to each other.
 - Know the function (job) of each of the following cell organelles: *cell membrane*, *nucleus*, *ribosome*, *mitochondria*, *cell wall*, *chloroplast*.
 - Be able to label a diagram of a plant cell and an animal cell.
 - Know the differences between a plant cell and an animal cell.
- Growth (see Homework 10)
 - Be able to define the life function of *growth*.
 - Know why chromosomes are important, what they are made up of, and where they are found in the cell.
 - Be able to summarize the process of mitosis.
 - Be able to explain why the process of mitosis is important in the body of a plant or animal.
 - Be able to compare the number of chromosomes in a parent cell to the number in its daughter cells.
 - Be able to compare the number of chromosomes in a body cell to those in a sperm or egg cell.
 - Be able to explain how cancer occurs.
- Transport of Molecules through a Membrane (see Homework 11 and 12)
 - Understand the terms *diffusion*, *concentration*, *equilibrium*, *osmosis*, and *active transport*.
 - Know which cell organelle is responsible for regulating what comes in and out of cells.
 - Be able to predict the way molecules will move naturally across a selectively permeable membrane or into/out of cells.
 - Be able to explain how diffusion is different from active transport (in terms of the direction in which molecules move and the role of energy).

Practice Quiz Questions:

- Visit the “Practice Exam Questions” page on the course website at www.spraguescience.com.
- Download the “Reproduction, Development, and Growth – Exam” file and try the following practice questions: 8, 14, 15, 16, 17, 19, 21, and 22.
- Download the “Diffusion and Active Transport – Exam” file and try all practice question.
- Check your work to both question sets by downloading the answer keys.