Subject: Science

Standard: #4 The Living Environment

Key Concept: All living things are composed of cells, from just one to many millions, whose details usually are visible only through a microscope. Different body tissues and organs are made up of different kinds of cells. The cells in similar tissues and organs in other animals are similar to those in human beings, but differ somewhat from those in plants.

Generalization: Cells, the basic units of life, have observable structures and exhibit similar life processes, including the ability to reproduce themselves.

Background:

Students have been studying cell structure and function in both animals and plants. This is the culminating activity for this section of the unit. The students will be working on projects to demonstrate what they have learned about plant and animal cells.

This lesson is tiered in *product* according to *learning style*.

The teacher should determine what is necessary to include in the projects, such as cell structures, comparisons between plant and animal cells, functions of cells, so that students have a clear understanding of the parameters of the project.

Tier I: Visual Learners

Students will demonstrate what they have learned about cells by creating tables, charts, graphs, diagrams, PowerPoint presentations, or other visual means of displaying information.

Tier II: Auditory Learners

Students will demonstrate what they have learned about cells by creating raps, songs, poems, stories, or other auditory forms of disseminating information.

Tier III: *Kinesthetic Learners*

Students will demonstrate what they have learned about cells by creating 3-D pictures, models, mobiles, games and/or other tactile products.

Assessment:

Teacher observation and student interviews during the investigation will serve as formative assessments. My suggestion would be to have a series of rubrics available for each of the possible products. The *Product Guides* from The Curriculum ProjectTM are great. You can create your own rubrics using StandardWriterTM software, also available from The Curriculum ProjectTM. Assessing the product against the rubric would be summative assessment. Students should present their work to each other through some means of sharing in the whole group setting.