| | | | Assessment | | |
|------------|---|--|---|---------------------------|---|
| Time Frame | Standards | Evidence of Understanding | Formative | Summative | Instructional Strategies |
| 2 weeks | Explain that living cells use various different compounds to create and make energy (lipids, carbohydrates, proteins, and nucleic acids) | I know the difference between carbs, proteins, lipids, and nucleic acids. I know the basic buildings blocks of sugars. I know the types of organic compounds that my body uses to create energy. | Questioning during class, homework journals, laboratoy assignments, entrance and exit slips, current events | Chapter tests and quizzes | Identification of biochemicals lab; PowerPoint Notes |
| 2 weeks | Structure, function and interrelatedness of cell organelles; Eukaryotic cells and prokaryotic cells; Characteristics of life regulated by cellular processes; | I can describe the structure of cells. I can determine if an organism is eukaryotic or prokaryotic. I can describe how unicellular organisms gave rise to multicellular organisms. | | | Cell Model Project, Cell City Project; PowerPoint Notes |
| 1 week | | I can describe how substances travel across cell membranes. I can describe how osmosis and diffusion work. | | | Osmosis Egg Lab; PowerPoint Notes |
| 3 weeks | Photosynthesis, chemosynthesis, cellular respiration. | I can describe how plants use photosynthesis to obtain energy. I can describe how all organisms depend upon photosynthesis for energy. | | | Rate of photosynthesis lab; PowerPoint Notes |
| | | I can describe how organisms use cellular respiration to obtain energy. I can describe the dependency of cellular respiration upon photosynthesis. | | | Rate of CO ₂ production lab; PowerPoint Notes |
| 2 weeks | Cell division and differentiation | I can describe the importance of mitosis in relation to growth of an organism. I can describe how mitosis passes on genetically identical copies of themselves to the next generation. | | | Mitosis Flipchart Project; PowerPoint Notes |