BIOLOGY 11

UNIT 1: Cellular Processes

BIG IDEA:

Life is a result of interactions at the molecular and cellular levels



Hemoglobin Protein

Curricular Competencies being developed this unit:

- I can be curious about scientific topics over time
- I can generate questions based upon the observations] make about the world around me
- I can assess risks and ethical/cultural issues associated with a scientific investigation
- I can use metric units and appropriate equipment to accurately collect and record data
- I can be accurate and precise when recording data
- I can plan and perform scientific investigations that collect reliable data, both on my own and in groups.
- I can make, analyze and interpret graphs, models and diagrams.
- I can use my knowledge to draw conclusions that are supported by evidence
- I can describe the advantages and disadvantages of a given model or comparison.
- I can use scientific knowledge to evaluate about claims made by others.
- I can assess the accuracy of information, and the methods used to solve problems.
- I can display care for myself and community, through my individual or collective actions
- I can construct models to describe scientific ideas
- I can use scientific language to communicate ideas for a specific purpose

Curricular Content being learned this unit:

- Levels of organization
- Biomolecules
- Cell structure and function
- Cellular diversity
- Microscopy
- The cell cycle
- Asexual and sexual reproduction: Mitosis & meiosis
- Energy transformations in cells: Photosynthesis & cellular respiration
- Protein synthesis:
 Transcription & translation
- Viruses

