# Molecules to Organisms, Part 2 Cell Processes

LS1-1: Conduct an investigation to provide evidence that living things are made of cells; either one cell or many different numbers and types of cells.
LS1-2: Develop and use a model to describe the function of a cell as a whole and ways parts of cells contribute to the function
LS1-3: Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells.
LS 1-4:
Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively.
LS 1-6:
Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms.
PS1-4: ""Photosynthesis, Cellular respiration, Fermentation""
Develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed.
LS1-7:
Develop a model to describe how food is rearranged through chemical reactions forming new molecules that support growth and/or release energy as this matter moves through an organism
ETS1-1:
Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.
ETS1-2:
Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.
ETS1-3:
Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.
ETS1-4:
Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved.