

# GRADE 7 - SCIENCE



HOLDEN R-III SCHOOL DISTRICT STANDARDS AND ESSENTIAL LEARNING OUTCOMES

## GRADE 7 - SCIENCE

- ▶ Choose/use/create appropriate materials (tools), methods, and science skills to collect data, and conduct research.
- ▶ Construct steps to use/design a lab experiment or report that includes steps of procedure, variable, materials, and safety precautions for conducting an experiments
- ▶ Compare and contrast plant and animal cell structures
- ▶ Identify the structures with a eukaryotic cell and describe their functions.
- ▶ Observe plant/animal/fungi/Protista cells with compound light microscope; identify/record how cells differ.
- ▶ Compare and Contrast asexual and sexual reproduction
- ▶ Describe the chemical makeup of chromosomes
- ▶ Using genetics, investigate where offspring get their traits
- ▶ Use a model of DNA to investigate mutations
- ▶ Identify the biotic and abiotic factors that make up an ecosystem
- ▶ Diagram and describe the transfer of energy within a variety of food webs
- ▶ Describe how organisms interact with their environments
- ▶ Describe the parts of and processes of an ecosystem as part of a biome
- ▶ Identify the limiting factors and adaptations that affect why organisms live where they do
- ▶ Compare and contrast symbiotic relationships as they occur in nature
- ▶ Understand the effects of organisms on other organisms and their environments
- ▶ Construct an explanation of how matter cycles and energy flows into and out of organisms