

Mansfield Independent School District
Science – Fifth Grade
Assurances

By the end of fifth grade, the student will be able to:

- Plan and implement investigations using scientific methods.
- Collect information by observing and measuring using tools
- Analyze data by constructing charts and graphs to evaluate information.
- Produce models to represent the natural world and show how systems work and identify structures.
- Identify significance of cycles, structures, and processes that interact:
including: seasonal, lunar, water cycle, carbon cycle, nitrogen cycle, life cycles of plants and animals.
- Explore traits inherited from parent of offspring and learned characteristics that result from the influence of the environment
- Determine the role of the sun's energy in cycles including, plants, animals, water, weathering and erosion.
- Identify and describe changes that occur over time, including:
 - weathering on landforms, erosion, sedimentary rock sequences, earth's natural resources, renewable, non-renewable and the formations of fossil fuels.
- Predict adaptive characteristics needed for survival in an ecosystem.
- Compare physical characteristics of the earth and moon.
- Classify matter based on physical properties and identify changes that occur in mixtures and when heat is added or removed.
- Differentiate among forms of energy including:
 - Light, heat, electrical and sound.
- Differentiate between reflection and refraction.
- Determine substances ability to conduct heat, electricity and magnetism.