Mehlville School District Science

Grade 5, Duration 1 Year

## Rationale

In a world filled with the products of scientific inquiry, scientific literacy is a necessity for everyone in order to use scientific information to make wise choices. Today, the job market demands advanced skills, requiring people to be able to learn, reason, think creatively, work collaboratively, make decisions, and solve problems. An understanding of science and engineering practices are essential to building these skills.

## **Course Description**

The Fifth Grade student will be studying about Earth's systems, organisms and ecosystems, space systems, and structures and properties of matter. In addition, the students will utilize the science and engineering practices by asking questions and defining problems, planning and carrying out investigations, and constructing explanations and designing solutions. The teacher will use a hands-on, minds-on approach to actively engage the students in constructing and revising their understanding of these concepts.

BOE 6/8/17

## **Course Objectives**

- 1. The student will understand that Earth is a set of connected systems that interact together.
- 2. The student will understand Earth's amounts and properties of saltwater versus freshwater.
- 3. The student will understand the necessity of water as a resource on Earth.
- 4. The student will understand that plants require air and water to live/survive/reproduce.
- 5. The student will understand that matter cycles through living organisms and the environment.
- 6. The student will understand that the flow of energy starts with the Sun.
- 7. The student will understand that gravity is an interaction between two or more objects.
- 8. The student will understand that they can observe patterns that result from interactions in space systems.
- 9. The student will understand that matter can be identified by its properties.
- 10. The student will understand that matter is conserved during chemical and physical changes.
- 11. The student will understand that when a chemical change occurs, matter can have new properties.
- 12. The student will understand human impacts on Earth's systems.