Mehlville School District Science

Grade 6, 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, make decisions, and solve problems. An understanding of science and the processes of science contribute in an essential way to these skills.

## **Course Description**

The 6th grade life science course will build upon the student's science understanding from earlier grades in five main topics including structure, function, and information processing; growth, development, and reproduction of organisms; matter and energy in organisms and ecosystems; interdependent relationships in ecosystems; and natural selection and adaptations. The performance expectations in middle school blend core ideas with scientific and engineering practices and crosscutting concepts to support the student in developing usable knowledge across the science disciplines.

## **Course Objectives**

In this course.

The student will develop and use models.

The student will plan and conducting investigations

The student will engage in argumentation with evidence.

The student will become proficient with analyzing and interpreting data.

The student will obtain, evaluate, and communicate information.

The student will construct explanations.

The student will formulate answers to the following questions:

"How do the structures of organisms contribute to life's functions?"

"How do organisms grow, develop, and reproduce?"

"How do organisms obtain and use matter and energy? How do matter and energy move through an ecosystem?"

"How do organisms interact with other organisms in the physical environment to obtain matter and energy?"

"How does variation among organisms in a species affect survival and reproduction? How does the environment influence genetic traits in populations over multiple generations?"

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