

DRAFT

Fourth Grade

The Five Unifying Themes of Helena School District #1 Science Students.

The Unifying Themes outline the major skills, concepts, facts, or processes that students need to master or demonstrate proficiency in by the completion of the grade level or course. Unifying Themes do not supplant or replace the curriculum, but list identified skills, concepts, facts, or processes presented in full within the curriculum that are foundational to future learning. They are a quick way to see the enduring and essential understandings presented fully in the curriculum that students need to acquire for life. They represent overarching themes that should be emphasized and reemphasized over and over again through out any given grade level as well as transcend a students' entire science education.

1. Problem Solving

- ❖ Given a testable question students plan, design and safely conduct a scientific investigation with identified variables
- ❖ Environment problems

2. Measurements/Technology

- ❖ Select and accurately use appropriate equipment and technology to measure and gather data for a scientific investigation
- ❖ Identifies interactions among technology, science and society

3. Classification/Grouping

- ❖ Identify that plants and animals have structures and systems which serve different functions
- ❖ Ecosystems/ habitats

4. Models/Systems

- ❖ Solar system
- ❖ Simple machines
- ❖ Body systems
- ❖ Describe and give examples of Earth's changing features

5. Communication/Vocabulary

- ❖ Represent, communicate and provide supporting evidence of scientific investigations
- ❖ List the occupations that historically use science