MOUNT VERNON MIDDLE SCHOOL
7th GRADE COURSE DESCRIPTION

COURSE DESCRIPTION

7th grade science consists of the study of the Earth's Populations and Ecosystems, Planetary Science and Electromagnetic Force. These topics will emphasize the Science and Engineering Practices laid out in the Iowa Core Curriculum and Next Generation Science Standards.

In Populations and Ecosystems, students will identify how populations change over time, characteristics of ecosystems, interaction between components of ecosystems, how matter and energy flow through an ecosystem, and how to preserve ecosystem health. During Planetary Science students will be presented with the relationship between the sun, Earth and moon, the causes of day and night and the reason for seasons, phases of the moon, and investigate the scale of the solar system and universe. In Electromagnetic Force, students identify what a force is, define the force of magnetism, the relationship between electricity and magnetism, and the transfer of energy.

STANDARDS AND LEARNING TARGETS

These courses will be assessed through the Iowa Core Science and Engineering Practices as Standards that have three targets. Students will be given feedback on whether they are meeting proficiency in each of the learning targets based on a scaled proficiency.

STANDARDS	**1. Developing and Using Models**	**2. Scientific Investigations**	**3. Scientific Communication**
LEARNING TARGETS	**I can develop and/or use a model effectively with all relevant key features.**	2A: **I can accurately analyze and/or interpret data with all relevant key features.**	**I can engage in effective scientific communication supported by evidence and/or explanation.**
		2B: **I can plan or conduct a valid investigation including all relevant key features.**	

PROFICIENCY SCALE

The codes 1, 2, 3, 4, and M below will be used to communicate student progress in each learning target.

4	3	2	1
Exceeding Proficiency	Meeting Proficiency	Approaching Proficiency	Beginning Proficiency

FORMATIVE, SUMMATIVE, AND PERFORMANCE ASSESSMENTS

Feedback on learning can be given through formative (informal) and summative (formal) assessments as well as performance based tasks. These formative assessments will be used to guide both instruction and student performance expectations. Summative (formal) assessments will occur as mid-course and end of course assessments. Students who find themselves falling behind on any of these assessments will benefit from additional instruction as revisions on those deficient targets.

PERFORMANCE ASSESSMENTS

Students may receive feedback on scaled learning targets through formative (informal) or summative (formal) forms of assessment. These assessments can occur via in class-work, formative assessment probes, topic assessments, mid-unit and end of unit assessments.

SCALED LEARNING TARGETS

Students will be given feedback on their level of proficiency towards mastery in each learning target using the gradations below.

Standard 1: Developing and Using Models

Exceeding Proficiency-4	Meeting Proficiency-3	Approaching Proficiency- 2	Beginning Proficiency- 1
I can develop and/or use a model effectively with all relevant key features in complex ways.	**I can develop and/or use a model effectively with all relevant key features.**	I can develop and/or use a model with some relevant key features.	I can develop and/or use a model with minimal features.

Standard 2: Scientific Investigations

2A. Interpreting and Analyzing Data

Exceeding Proficiency-4	Meeting Proficiency-3	Approaching Proficiency- 2	Beginning Proficiency- 1
I can accurately interpret and/or analyze data with all relevant key features in complex ways.	**I can accurately interpret and/or analyze data with all relevant key features.**	I can interpret or analyze data/text with some relevant key features.	I can interpret or analyze data/text with minimal features.

2B. Planning and Conducting Investigations

Exceeding Proficiency-4	Meeting Proficiency-3	Approaching Proficiency- 2	Beginning Proficiency- 1
I can plan or conduct a valid investigation including all relevant key features in complex ways.	**I can plan or conduct a valid investigation including all relevant key features.**	I can plan or conduct a valid investigation including some relevant key features.	I can plan or conduct an investigation including minimal features.

Standard 3: Scientific Communication

Exceeding Proficiency-4	Meeting Proficiency-3	Approaching Proficiency- 2	Beginning Proficiency- 1
I can engage in effective scientific communication supported by evidence and/or explanation in complex ways.	**I can engage in effective scientific communication supported by evidence and/or explanation.**	I can engage in scientific communication supported by some evidence and/or explanation.	I can engage in scientific communication supported by minimal evidence and/or explanation.

MAKEUP POLICY

Assessments that are missed will be marked “missing” or “not taken” in the gradebook until completed. Students should communicate with the teacher and come up with a plan as to how work will be made up. Incomplete assessments result in a lack of evidence of a student's understanding and may cause a student to fail.

ACTIVITIES NECESSARY FOR COURSE SUCCESS

For students to make adequate progress toward these science standards, students will need to:

- Participate in all activities (contribute to group work, complete in class work, ask questions).
- Complete assigned study tasks to improve learning and understanding.
- Use teacher feedback to identify areas of growth and improvement.
- Complete all assessments, both formal and informal.
- Identify areas of improvement.