

Student _____

Teacher _____

Adams 12 Five Star Schools Eighth Grade Report Card Folder



Introduction to Your Child's Report Card

There are two components to each student report.

Standards Performance Levels:

4 Advanced Understanding of the Standard	3 Meets the Standard	2 Approaches the Standard	1 Does not meet the Standard
<p>The student's work goes substantially above and beyond the assessment or course standards in quality and evidence of understanding.</p> <p>The work includes complexity, sophistication, originality, depth, synthesis and/or application that clearly exceeds what would be expected to meet the standards in this assessment</p>	<p>The student demonstrates a strong fundamental understanding of the standard</p>	<p>The student demonstrates some evidence of learning and understanding that aligns with the standard; however the evidence doesn't demonstrate a thorough grasp of the standard.</p>	<p>The student has demonstrated little evidence of understanding the standard or has not met the majority of performance indicators or criteria for the standard</p>

Scholarly Habits:

Each student is evaluated on the scholarly habits that Adams 12 Five Star Schools has identified as essential for educating the whole child. These scholarly habits are scored using a 1-4 scale with a 1 meaning the habit is almost never observed and a 4 meaning the habit is always observed.

Respect

- Scholars value their work, their interactions with others and who they are as a person

Preparation

- Scholars are prepared and ready with all the necessary tools for learning.

Risk Taking

- Scholars take intellectual risks and think outside the box.

Perseverance

- Scholars don't give up. They keep going, even when the work is hard.

Excellence

- Scholars take pride in their work and seek to achieve excellence.

Please sign and return this folder to your child's teacher.

First Semester

Parent Signature

SELECTED GRADE LEVEL EXPECTATIONS FOR EIGHTH GRADE STUDENTS

Bulleted (•) items are examples of eighth grade expectations, but do not represent the entire curriculum.

LITERACY

Oral Expression and Listening

Eighth Grade students will know and be able to:

- Present claims and findings in a coherent manner, using relevant evidence, valid reasoning, and well-chosen details
- Analyze the purpose of information in diverse media and formats
- Integrate multimedia and visual displays into presentations to clarify and strengthen evidence

Reading for All Purposes

Eighth Grade students will know and be able to:

- Use a range of strategies to analyze and evaluate literary and informational text
- Cite the textual evidence that most strongly supports analysis of text

Writing and Composition

Eighth Grade students will know and be able to:

- Use the writing process to publish narrative, argument, and informational texts for a variety of audiences and purposes
- Demonstrate a command of grammar, usage, and mechanics of writing

Research and Reasoning

Eighth Grade students will know and be able to:

- Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions
- Take a position on an issue and support it using quality reasoning

MATH

Number Sense, Properties and Operations

Eighth Grade students will know and be able to:

- Apply number concepts to both rational and irrational numbers in the real number system.

Patterns, Functions and Algebraic Structures

Eighth Grade students will know and be able to:

- Model and solve real world problems using linear equations and systems of linear equations.
- Distinguish linear from non-linear equations using tables, graphs and equations.

Data Analysis, Statistics and Probability

Eighth Grade students will know and be able to:

- Represent and interpret statistics for two variable data sets.

Shape, Dimension and Geometric Relationships

Eighth Grade students will know and be able to:

- Model and apply the concepts of similarity and congruence through translations, rotations and dilations of plane figures.
- Develop and apply theorems and rules about triangles, lines and angles.

Mathematical Communication

Eighth Grade students will know and be able to:

- Explain mathematical concepts, skills and applications using appropriate mathematical vocabulary.
- Construct logical, complete, and concise mathematical arguments.

Procedural Fluency

Eighth Grade students will know and be able to:

- Organize and carry out procedural, numeric and symbolic work accurately, efficiently and flexibly.
- Select and apply appropriate and efficient strategies to make deductions and solve problems

SOCIAL STUDIES

Social Studies in Grade 8 is a survey of the history of the United States from the American Revolution through Reconstruction. Understanding of United States history is integrated with the use of geographic tools, the roles and responsibilities of citizens and economic principles.

Content

Eighth Grade students will know and be able to:

- Identify key content connected to the history of the United States from the Revolution to Reconstruction
- Identify how personal debt and credit works
- Evaluate the role of law in a democracy

Conceptual Understanding

Eighth Grade students will know and be able to:

- Evaluate continuity and change over the course of United States History
- Evaluate the roles and rights of citizens
- Evaluate the impact of technology on geography

Communication

Eighth Grade students will know and be able to:

- Construct a written historical argument
- Provide an accurate summary of sources

Research and Source Analysis

Eighth Grade students will know and be able to:

- Interpret events from multiple perspectives
- Determine the central ideas or information of primary and secondary sources
- Using technology to research a variety of topics related to the history of the United States

SCIENCE

Science in Grade 8 builds on previous knowledge of chemistry, physical, earth, and life sciences to understand the natural world. Students learn how scientists study the world through a look at forces and interactions, evolution, space, ecosystems and human activity.

Disciplinary Core Ideas (content)

Eighth grade students will know and be able to:

- Investigate forces and motion (i.e. Newton's Laws; types of interactions within forces).
- Develop models to explain how the Earth-sun-moon system interacts (i.e. eclipses, seasons, moon phases).
- Present an argument related to human impacts on Earth systems.
- Construct explanations regarding interactions of organisms within ecosystems.
- Analyze and interpret data related to natural selection, adaptations, and diversity of organisms.

Science Practices

Eighth grade students will know and be able to:

- Apply key practices that scientists use as they investigate our world.
- Demonstrate science practices through asking questions, developing and using models, planning and carrying out investigations, using mathematics, analyzing and interpreting data, constructing explanations and arguments by making a claim and supporting their ideas using evidence, and by obtaining, evaluating and communicating information.

Crosscutting Concepts

Eighth grade students will know and be able to:

- Apply key concepts in order to develop a scientific view of the world. These concepts are embedded in the Disciplinary Core Ideas and Science Practices for each unit.
- Observe, describe, and apply concepts related to patterns, cause and effect, scale, proportion, and quantity, energy and matter, structure and function, stability and change, and the interactions of systems in the natural world.

Communication

Eighth grade students will know and be able to

- Explain their understanding of science content in a way that is clear and appropriate for the task, purpose and audience.
- Present arguments related to scientific ideas that are logical and supported with evidence (communication of content can be expressed in a variety of ways including but not limited to: writing in science journals, oral presentations, demonstrating a scientific model, etc.).

ENGINEERING

Engineering in Grade 8 introduces criteria and constraints to successful solutions taking into account the larger context of the problem and the limits to possible solutions. Students learn to identify elements of existing solutions and combine them to create new solutions. Students are expected to determine an optimal design through using systematic methods comparing different solutions and how each combination of elements best meets criteria and constraints. Student learns to test and revise solutions multiple times.

Disciplinary Core Ideas

Grade 8 students will know and be able to:

- Define and delimit engineering problems by precisely defining criteria and constraints. Specification of constraints includes consideration of scientific principles and other relevant knowledge that are likely to limit possible solutions.
 - Define problems and/or propose solutions related to the interdependent relationships in ecosystems, cycling of matter and energy transfer in ecosystems, dynamic nature and resilience of ecosystem and how changes in biodiversity may influence humans.
 - Systems engineering.
 - Define problems and/or propose solutions related to patterns of motion and positions of universal bodies (the sun, the moon, earth, planets, stars, etc.) and gravitational pull upon them.
 - Define problems and/or propose solutions related to Newton's laws of motion and the types of forces and their interactions.
- Develop, test and systematically modify solutions to a problem multiple times in order to improve on the design.
- Optimize the design solution by identifying the characteristics of the design that performed best, combining characteristics and engaging in the iterative process of testing promising solutions and modifying to greater refinement.

Science and Engineering Practices

Grade 8 students will know and be able to:

- Define a problem that can be solved through the development of an object, tool, process or system including criteria and constraints.
 - Define a problem that can be investigated within the scope of the classroom, outdoor environment, and museums and other public facilities with available resources and, when appropriate, frame a solution based on observations and scientific principles.
- Develop a model to generate data to test ideas about designed systems, including those representing inputs and outputs.
 - Construct a model that includes qualitative or quantitative relationships between variables that predict phenomena.
 - Analyze displays of data to identify linear and nonlinear relationships.
 - Analyze and interpret data to determine similarities and differences in findings.
- Analyze and interpret data including quantitative analysis. Distinguish between correlation and causation. Utilize basic statistical techniques to analyze data and error potential.
 - Analyze displays of data to identify linear and nonlinear relationships.
 - Analyze and interpret data to determine similarities and differences in findings.

Crosscutting Concepts

Grade 8 students will know and be able to:

- Apply key concepts of science, engineering and technology in predicting short and long-term consequences of designs (positive and negative) on society and the natural world.
 - Patterns
 - Cause and effect
 - Energy and Matter
 - Stability and change
 - Scale, proportion, and quantity
 - Systems and system models
- Apply knowledge of individual or societal needs, desires, and values on the uses and limitations of use of technologies in relation to scientific findings and factors of climate, natural resources and economic conditions.

Communication

Grade 8 students will know and be able to:

- Engage in argument from evidence gathered in the iterative process of solution design.
 - Construct an oral and written argument supported by empirical evidence and scientific reasoning to support or refute an explanation or a model for a phenomenon or a solution to a problem.
 - Evaluate competing design solutions based on jointly developed and agreed-upon design criteria.
- Communicate information about the problem, criteria, constraints, design process and solution.
- Communicate about possible positive and negative consequences of a solution.

For more information about what your child needs to learn at this grade level, visit our website at <http://www.adams12.org> and click on Parents link and then Student Learning.