

Student Learning Outcomes

Grade 8



Fall Mountain Regional School District - SAU #60

Comprehensive Quality Education System (CQES)

The Fall Mountain Regional School District's mission is to ensure a quality education and equal opportunities for all children by providing effective academic programs, enrichment activities, and athletic and recreational programs in each of our schools.

Our educators strive to continuously improve the programs we offer and to ensure that those programs meet the goals which we and our community partners set for them. As part of our commitment to quality, it is our responsibility to develop students who can:

- ◆ understand themselves;
- ◆ accept global and social responsibility;
- ◆ use processing skills effectively, including communication, decision-making, goal-setting, collaboration, and marketing;
- ◆ master the curriculum;
- ◆ sustain themselves economically; and
- ◆ lead healthy lives



Fall Mountain Curricula

Fall Mountain Regional School District has curriculum specific to each grade level. The individual curriculum (Language Arts, Math, Science, Social Studies, the Arts, etc) is designed to be a progression of skills and content as the student moves from grade K to grade 12. The term "scope and sequence" describes the list of essential topics at each grade level and how these topics are presented chronologically over the years.

Each curriculum is designed based on the New Hampshire State Curriculum Frameworks and Proficiency Standards. It is on these state curriculum frameworks that the state assessment is based.

Curriculum design and adoption are managed by a system of curriculum committees and chairpersons, grades K-8 and by department heads, grades 9-12. This entire process is supervised by the Director of Curriculum and the Superintendent, as well as district policies. Final adoption of new curriculum is the responsibility of the Fall Mountain Regional School Board.

Ensuring Quality Education for All Fall Mountain Children through Partnerships with the Communities of Acworth, Alstead, Charlestown, Langdon and Walpole.

Grade Level Learning Outcomes

Grade 8

Below is a list of targeted student outcomes specific to this grade level. In teaching to these grade level outcomes, Fall Mountain teachers consider the variety of skill levels in their classrooms and the many learning styles of their students. Every effort is made to support each individual student in meeting these outcomes.

In middle school emphasis is placed study skills and increased independence and responsibility of students towards their work.

Language Arts

Note: Language Arts grade level skills are consistent grades 6 through 8.

At the end of Grade 8, the student should be able to:

Reading

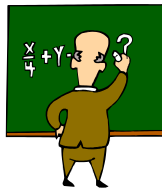
Students will be able to independently use the skills developed during the year. The skills may be applied to short story, novels, and other written forms, as well as television, movies and dramatic productions.

- main idea and supporting ideas
- inferences
- imagery from contextual cues
- relate to prior knowledge
- characterization
- identification with character
- plot
- mood
- judgment and evaluation
- structure
- contract
- irony
- theme
- flashback
- fiction
- poetry and figurative language
- biographies/autobiographies
- nonfiction
- mythology, legends, folk tales
- historical fiction
- science fiction

Students will have the opportunity to read silently and orally to help them develop basic reading competency as well as recognize more subtle intonation of mood, pace and tension. Students should vary rate of reading depending on materials and purpose and read more rapidly silently than orally.

Writing

- spell words correctly.
- identify, define and use given words.
- use end punctuation
- use apostrophes
- use commas
- use semicolons
- use colons, hyphens, dashes
- use quotation marks and underlining
- use capitals



- use sentence and paragraph structure, including topic sentence, supporting details and a conclusion
- write business and friendly letter and envelope
- use the writing process
- write for a variety of purposes, including expository, narrative, persuasive, and descriptive writing

Writing experiences may include the following:

- autobiography
- description
- essays
- dramatics
- note taking
- poetry and figurative language
- formal research paper
- news story
- resume
- bibliography

Listening

- listen to others without interrupting and understand what the speaker is saying
- follow directions
- display listening cues such as: eye contact, leaning forward, nodding, paraphrasing, ignoring distracters, reflect on what is being said whether or not student agrees

Speaking

- use appropriate word for the context
- be aware of different levels of language, such as polite, informal, colloquial, slang and vulgar
- use appropriate language style for the situation
- paraphrase what another person has said
- voice an opinion
- participate in drama, discussion, and role-playing associated with different activities
- give a formal presentation using clear and coherent language using notes
- understand and evaluate AV material
- follow sequence of ideas
- make informed inferences, judgments, and interpretations

Mathematics

Main focus: Proportional Reasoning

Geometry

- recognize and name 2 and 3 dimensional figures
- recognize similar and congruent figures and solve problems concerning similar and congruent figures
- calculate perimeter, area, surface area and volume of 2 and 3 dimensional figures, including circles
- recognize and use properties of lines and angles, including bisectors, parallel, perpendicular, diagonals, interior and exterior angles
- construct lines, angles and geometric shapes
- recognize lines of symmetry
- classify/measure angles
- understand/use properties of circles
- recognize and demonstrate the use of properties of triangles, including right triangles and the Pythagorean theorem

Measurement

- practice measuring/recording linear measurements
- employ conversion of units of measure within a system (not between systems)
- identify/use appropriate measurements for mass, volume and temperature using standard and metric systems

Numeration

- determine place value of both whole and decimal numbers
- compare and order whole numbers, fractional numbers, decimals, integers and rational numbers
- restate or translate fractions to decimals, to percents, and to fractions; make conversions between fractions, decimals and percents
- classify numbers as prime and composite
- interpret fractional remainders
- calculate or identify factors and/or multiples of a given number

Estimation

- estimate measurement units
- estimate sums and differences, products and quotients of whole numbers, decimals and fractional parts
- identify and practice situations when an estimate is appropriate to use
- use estimates to determine reasonable answers
- use estimation to solve problems

Operations/Computations

- recall/solve basic fact
- demonstrate the 4 basic operations on whole numbers, mixed numbers, fractions, decimal numbers and integers
- solve monetary word problems
- apply percents, proportion/ratio to problems
- solve multi-step problems with and without estimation
- convert scientific notation to whole numbers and whole numbers to scientific notation and compute with scientific notation
- convert repeating decimals to fractions
- compute with positive and negative exponents
- solve problems using order of operations to simplify numerical expressions
- identify and demonstrate the use of the associative, commutative, distributive and identity properties

Problem Solving

- solve word problems including the basic operations of addition, subtraction, multiplication, and division with whole numbers, fractions, decimals and integers
- apply knowledge of ratio, proportion and percents
- apply problem solving strategies to life situations including the use of graphs, drawings and geometrical shapes
- solve word problems involving multiple steps

Patterns

- recognize and complete repeating patterns
- practice continuation of a numerical sequence

Technology

- employ the use of calculators, computers, or other technology to solve math problems

Statistics/Probability

- construct/interpret graphs/tables
- solve/find measures of central tendency (mean, median, mode

and range)

- systematically collect, organize and describe data
- find probability of simple events

Algebra/Trigonometry

- solve one and two step linear equations
- graph points in a Cartesian coordinate plane
- evaluate exponential numbers
- simplify and evaluate algebraic expressions
- solve equations and inequalities
- write an expression or equation to fit a given situation
- describe a situation to fit an equation or expression

Social Studies

Major themes: Geography, history and government of the United States from the Age of Exploration (late 1400's) through Civil War (1865)



Students should be able to:

Civics and Government:

- show an understanding of the working of and relationship between state and national government
- understand the importance of civic and social responsibility
- identify the major leaders of our town, state and national governments, as well as some key international leaders

Economics:

- show an understanding of the concept of cultural and ethnic diversity

Geography:

- read, use and create maps, graphs, time lines
- the role of geography in historical events

History:

- show an understanding of the importance of major events and personalities in US and NH history
- show a basic understanding of key concepts of important documents, such as the
 - Declaration of Independence
 - Constitution
 - Bill of Rights
- analyze the relationship between historical events by
 - sequencing events in chronological order
 - demonstrating cause and effect between historical events
 - comparing and contrasting historical events

Science

In the following topics, students will:

Genetics and Heredity

- Show a basic understanding of genetics and heredity.

Evolution

- Demonstrate a knowledge of how living and non-living things change over time.

Geocycles

- Demonstrate a knowledge of both natural and man-induced global environmental change.

Weather

- Demonstrate a knowledge of how the atmosphere works :

what causes weather.

Chemical Interactions

- ❑ Demonstrate a knowledge of how matter changes and the chemical properties of matter.

Heat and Temperature

- ❑ Demonstrate a knowledge of heat energy.

Themes:

- ❑ Understand Models, Scale, Systems, Stability and Change

Students will be able to:

- ❑ increase information gathering capacity using technology and the library
- ❑ design and conduct controlled investigations
- ❑ maintain an organized notebook
- ❑ record observations qualitatively (descriptions) and quantitatively (numbers) and by sketching/drawing and employ charts, graphs and diagrams
- ❑ recognize differences between provable (fact-based) and unprovable (opinion-based) questions
- ❑ use appropriate tools, including a calculator, and standard units of measurement
- ❑ use problem solving process and compile and display data on a computer
- ❑ write and present an organized position paper on a current Science, Technology, Society issue
- ❑ record data using technological methods and computers
- ❑ draw conclusions from observations after organizing, graphing, analyzing and inferring
- ❑ engage in design and construction, compare old and new technologies
- ❑ think critically about products and sources of information
- ❑ use appropriate science vocabulary

Visual Arts

At the end of Grade 8 the student should be able to:

- ❑ consciously incorporate the art elements and design principles in all projects and observe their effectiveness in major works of art
- ❑ use identifiable color schemes to provide mood and feeling to art expression
- ❑ produce advanced digital image using more complex tools of paint software
- ❑ continue habit of regular drawing by means of self-designed and produced book
- ❑ draw, paint and sculpt the human figure
- ❑ use surface design to produce and enhance practical items
- ❑ communicate personal ideas, feelings, stories and information in art work
- ❑ appraise a work of art in terms of elements and principals of art, technical processes, expressive qualities, and historical/cultural context
- ❑ categorize careers in fine arts according to clusters and sub-clusters

Students will show an understanding of:

- ❑ the indispensable contribution of art and design to everyday life throughout the world in the past and present
- ❑ the lives and work of successful artists
- ❑ each person's uniqueness and the freedom tolerated in artistic

expression

- ❑ the need for self-discipline which results in pride of accomplishment
- ❑ the value of an ability to judge aesthetically in the marketplace as well as the museum
- ❑ the conclusion that art can effect political and social changes in societies, cultures, and civilizations
- ❑ the prospect of creating order out of chaos through artistic expression

Music, Grades 6-8

At the end of Grade 8 the student should be able to:

Pitch

- ❑ name the lines and spaces of the bass clef
- ❑ recognize and understand the grand staff

Rhythm

- ❑ read and perform simple syncopation including: quarter-half-quarter, and eighth-quarter-eighth
- ❑ recognize and understand dotted-eighth-sixteenth note pattern

Movement

- ❑ develop more complex dance skills.

Instruments

- ❑ demonstrate the ability to play all available classroom instruments
- ❑ have the opportunity to play in the band

Appreciation

- ❑ recognize instrumental instruments in solo passages (both aural and visually)
- ❑ demonstrate knowledge of music of various cultures through reports and projects

Form

- ❑ analyze and perform simple polyphony (may include canons and fugues)

Singing

- ❑ have the opportunity to sing in the school chorus

Information Technology

At the end of Grade 8, the student should be able to:

- ❑ use the computer as a tool to help achieve their own goals and appropriate terminology, including RAM, storage, operating system, retrieval to explain their application of computer programs
- ❑ examine issues of copyright and the ethical use of computer networks
- ❑ use keyboarding skills to enter information into the computer;
- ❑ use word processing skills to create, modify, spell-check, print and save documents in order to enhance the writing process
- ❑ use appropriate desktop publishing software to publish written work
- ❑ search databases to find specific pieces of information based on given selection criteria, and to organize that information to solve a problem

- ❑ Develop information processing skills by:
 - a) explaining the use of multimedia presentations as a means of providing interactive learning experiences
 - b) analyzing and synthesizing information from multiple sources
 - c) selecting appropriate way to order information
 - d) using online database searching in order to complete a research project
- ❑ use peripherals such as digital camera and/or scanner and import images into a document
- ❑ log onto a network to access files and applications
- ❑ understand the concept of the web and how the browsers work
- ❑ download text and graphics files on the Internet and import into projects/writings, giving appropriate credit
- ❑ use the Internet to do web searches using current search engines

Interested students in Seventh and Eighth Grades will have had opportunities to use the computer to:

- ❑ create simple programs
- ❑ create student publications with **desktop publishing** or multi-use software that combines text and graphics
- ❑ publish on the web using HTML or application that creates web pages

Physical Education

(Grade 6-8)

At the end of grade three, students should be able to:

- ❑ Demonstrate a knowledge of skills, rules, setting and equipment, strategies and history of basic sports activities.
- ❑ Appreciate activities which promote health related fitness and a healthy lifestyle
- ❑ Understand the basic principles of conditioning: warm-up, workout, cool down, overload principle and specificity
- ❑ Develop social skills necessary to participate positively in group activities: sportsmanship, tolerance, leadership and anger management
- ❑ Recognize a need for lifetime sports activities
- ❑ Improve and refine their skills in team and lifetime sports
- ❑ patterns, cutting out and measuring accurately.
- ❑ Identify the parts of the sewing machine: thread guides, spool pin, bobbin winder, thread tension, take-up lever, presser foot, throat plate, bobbin, stitch length control, hand wheel and reverse button

Home Economics

- ❑ Demonstrate basic hand sewing skills by making a pin case to use in sewing labs.
- ❑ Demonstrate using fabric the correct procedure for tracing patterns, cutting out and measuring accurately.
- ❑ Identify the parts of the sewing machine: thread guides, spool pin, bobbin winder, thread tension, take-up lever, presser foot, throat plate, bobbin, stitch length control, hand wheel and reverse button
- ❑ Understand the function and purpose of the parts of a sewing machine.
- ❑ Complete individual sewing project implementing knowledge of hand and machine sewing skills learned.
- ❑ Explore career opportunities and specific job responsibilities in foods, nutrition, textiles, and clothing.
- ❑ Develop a weekly plan of well balanced meals using the food guide pyramid.
- ❑ Demonstrate safety and care of small kitchen appliances and cooking utensils.
- ❑ Identify in a recipe and explain cooking terms: mix, stir, knead, sift, cream, blend, cut-in, fold and combine.
- ❑ Demonstrate cookbook use: reading a recipe correctly and following directions.
- ❑ Complete small group cooking projects implementing skills and knowledge learned.

Technology/Career

Student goals for this six week course of study are:

- ❑ Demonstrate high quality in line drawing and lettering
- ❑ Demonstrate an understanding of the use of scale in drawing and high quality in drafting work.
- ❑ Demonstrate an understanding of how to use research materials, such as texts, lists, diagrams, photographs, and scales, in looking up horticultural information.
- ❑ Learn to estimate the scale sizes of trees and shrubs, to be drawn.
- ❑ Learn to consider size, shape, color, form, and climate in the selection of plantings.
- ❑ Combine all of the above, in planning and drafting a residential plot plan.
- ❑ Students completing the horticultural plot plan, may pursue a woodworking and/or technology project. Learning outcomes for these additional projects are aligned with the learning outcomes set forth in the

Foreign Language

Major themes: Beginning to communicate in the target languages. Understanding how to use and interpret the written and spoken target language. Continuing to gain understanding of other countries and cultures through language learning

At the end of grade 8 the student should be able to:

- ❑ Engage in simple conversation in order to offer and receive information
- ❑ Understand vocabulary, which pertains to self such as family, home friends, sports, school, etc.
- ❑ Understand directions, weather and seasons, time, and numbers in each of the target languages.
- ❑ Express likes and dislikes.
- ❑ Use vocabulary to make requests and obtain information.
- ❑ Effectively use learned vocabulary without much hesitation.
- ❑ Speak about other cultures that speak the target languages.
- ❑ Demonstrate the ability to use simple questions and commands.

Health

Standard 1: Students will comprehend concepts related to health promotion and disease prevention.

FM Outcomes: At the end of 8th grade, students will be able to:

1. Explain how health is influenced by the interaction of body systems.
2. Explain the relationship between positive health behaviors and the prevention of injury, illness, disease, and other health problems.
3. Describe the interrelationship between physical intellectual, emotional, and social, and spiritual health during adolescence.
4. Describe how the family and peers influence the health of individuals.
5. Analyze how heredity, environment, and personal health are related.
6. Describe ways to reduce risks related to adolescent health problems.
7. Recognize that most causes of premature death can be prevented by positive practices and appropriate health care.

Standard 2: All students will access valid health information and appropriate health promoting products and services.

FM Outcomes: At the end of 8th grade, students will be able to:

1. Analyze the validity of health information, products, and services
2. Demonstrate the ability to utilize resources from the home, school, and community that provide accurate health information.
3. Analyze how media influences the selection of health information and products.
4. Synthesize accurate information from a variety of sources regarding a community health issue.
5. Compare the costs and validity of health products.
6. Describe situations requiring professional health services.

Standard 3: All students will practice health enhancing behaviors and reduce health risks.

FM Outcomes: At the end of 8th grade, students will be able to:

1. Explain the importance of assuming responsibility for personal health behaviors.
2. Distinguish between safe, risky, and harmful behaviors in relationships.
4. Demonstrate ways to avoid threatening situations and reduce conflict.

Standard 4: Students will analyze the influence of culture, media, technology, and other factors on health.

FM Outcomes: At the end of 8th grade, students will be able to:

1. Describe influences of cultural beliefs on health behaviors and the use of health services.
2. Describe how messages from media and other sources influence health behaviors.
3. Analyze the influence of technology on personal and family health.
4. Analyze how information from peers influence health.

Standard 5: Students will demonstrate the ability to use interpersonal communication skills to enhance health.

FM Outcomes: At the end of 8th grade, students will be able to:

1. Distinguish between verbal and non-verbal communication skills.
2. Describe how the behavior of family and peers affects interpersonal communication.
3. Demonstrate healthy ways to express needs, wants, and feelings.
4. Demonstrate ways to communicate care, consideration, and respect for self and others.

5. Demonstrate communication skills for building and maintaining healthy relationships.
6. Demonstrate attentive listening skills.
7. Demonstrate refusal and negotiation skills to enhance health.

Standard 6: Students will demonstrate the ability to use goal-setting and decision-making skills to enhance health.

FM Outcomes: At the end of 8th grade, students will be able to:

- 2.. Demonstrate strategies to manage conflict in healthy ways.
3. Demonstrate the ability to apply a decision-making process to health issues and problems individually and collectively.
4. Explain how decisions regarding health behaviors have consequences on self and others.
5. Apply strategies and skills needed to attain personal health goals.

7. Analyze the role of individual, family, community, and cultural values when making health-related decisions.
8. Demonstrate the ability to ask when making health-related decisions.

Standard 7: Students will demonstrate the ability to advocate for personal, family, and community health.

FM Outcomes: At the end of 8th grade, students will be able to:

1. Demonstrate the ability to access community agencies that advocate for healthy individuals, families, and communities.
- 4.. Express information and opinions about health issues.