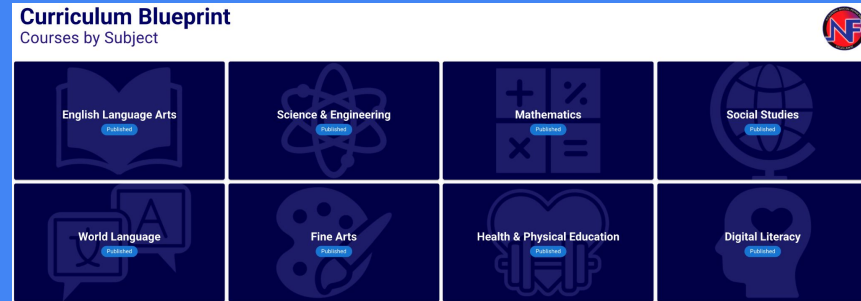




Launching the NFPS Curriculum Blueprint

New Fairfield Public Schools
Board of Education Meeting
December 4, 2025





BUDGET INFORMATION ▾

TEACHING & LEARNING ▾

NOTICES ▾

 BOE Policies

 Calendars

Frozen, presented by the NF JR Rebel Players



Teaching & Learning

NFPS Vision of a Learner



Curriculum



Instruction



Assessment



Supports for Learning



The Mission of the New Fairfield Public Schools is to engage students, staff, and the community in a partnership to provide a collaborative, innovative, encouraging and safe environment where all members take an active role in supporting each other's learning while also helping students pursue their own passions.

Through our Teaching & Learning pages, you can find information about New Fairfield Public School's *Vision of a Learner*, curriculum, instruction, and assessment. You will find an overview of K - 12 curricula and learn about ways we assess students. You can also read about our instructional delivery model, intervention process and special programming to ensure that all students reach their fullest potential.

NFPS Curriculum Blueprint

Vision of a Learner

**Knowledgeable
Scholars**



**Talented
Communicators**



**Critical & Creative
Thinkers**



**Engaged Global
Citizens**



**Self-determined &
Self-reliant
Individuals**





Curriculum Blueprint

Courses by Subject



English Language Arts

Science & Engineering



Select page or grade level

Science and Engineering Overview

K

1

2

3

4

5

6

7

8

9

10

11

12

Mathematics

Social Studies

World Language

Fine Arts

Health & Physical Education

Career & Technical Education



Philosophy

We believe that through the study of science and engineering, students become knowledgeable citizens who understand real-world phenomena and current events and are capable of making informed decisions. A high-quality education in science develops students' understanding of scientific principles and fosters their curiosity and skills through questioning, exploration, experimentation, and analysis.

Science classrooms must be safe and supportive environments that nurture students' ability to take risks and overcome failure, adopting a growth mindset. Instruction must lead students to explore engaging phenomena through inquiry, modeling, experimentation, and collaboration in order for them to gain knowledge of scientific principles and acquire the skills of problem-solving, evaluating claims, and providing relevant, supporting evidence of their thinking.

To meet the needs of every student, we must provide a welcoming environment that reaches students of all abilities through differentiated instruction, assessment and student expression.

Transfer Goals

Students will use their learning to:

- Question and seek answers as they make sense of real-world phenomena.
- Model processes and systems from multiple perspectives for understanding and communication to others.



Science - Grade 8

In **MS Science 8: Exploring Forces, Energy, and Earth's Systems**, students become scientific investigators, exploring fundamental questions about the world through five interconnected units.

Students dive into collision physics and safety engineering, investigate heat transfer and matter behavior, examine chemical reactions and energy use, analyze weather and climate patterns, and explore human impact on climate change.

Through authentic scientific practices, including **experimentation, mathematical modeling, data analysis, and engineering design**, students develop both a deep understanding of science and practical problem-solving skills that bridge classroom learning with real-world phenomena and today's most pressing global challenges.

Units



Unit 1: Forces, Motion, and Energy in Action

In Unit 1: Forces, Motion, and Energy in Action, students investigate "Why do some collisions cause more damage than others?" by exploring Newton's Laws and energy principles through real-world collision analysis, hands-on experiments, and mathematical calculations. Building on their 6th-grade foundation, students use simulations, force diagrams, and laboratory investigations to understand how forces affect motion and how energy transfers during collisions. The unit culminates in an engineering design challenge where students apply their knowledge to create protective devices, connecting scientific principles to real-world safety solutions and preparing them for future units on heat transfer and particle motion.

[VIEW](#)

Unit 2: Heat and Physical Changes

Students delve into the invisible world of particles and energy through hands-on experiments, measuring density, modeling particle behavior in different states of matter, and investigating how heat is transferred through conduction, convection, and radiation. Using hot air balloon demonstrations as their central phenomenon, students conduct laboratory work involving heating and cooling experiments, mathematical calculations of density changes, and create scientific models to build understanding of how particles behave when thermal energy is added or removed and how this affects the properties of matter. This phenomenon-based learning approach helps students understand fundamental concepts, such as particle motion, the distinction between heat and temperature, and energy transfer, which apply to numerous real-world situations, including weather patterns, cooking, engineering, and climate science. As they construct scientific explanations supported by evidence and data, students develop critical thinking skills. The energy transfer concepts learned in this unit provide the foundation for upcoming investigations into chemical reactions and how heat drives changes in matter.



Forces, Motion, and Energy in Action



Unit Description

Unit 1: Forces, Motion, and Energy in Action

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Stage 1: Learning Goals

Established Goals	Transfer	
Standards	Long-Term Transfer Goals	
Next Generation Science Standards Performance Expectations: Middle School Physical Sciences <ul style="list-style-type: none"> Apply Newton's Third Law to design a solution to a problem involving the motion of two colliding objects. (<i>MS-PS2-1</i>) Plan an investigation to provide evidence that the change in an object's motion depends on the sum of the forces on the object and the mass of the object. (<i>MS-PS2-2</i>) Construct and interpret graphical displays of data to describe the relationships of kinetic energy to the mass of an object and to the speed of an object. (<i>MS-PS3-1</i>) Construct, use, and present arguments to support the claim that when the kinetic energy of an object changes, energy is 	What kinds of long-term, independent accomplishments are desired? Students will be able to independently use their learning to... <ul style="list-style-type: none"> Students will use their learning to engage in innovative thinking and design processes that can lead to solutions for complex problems in our world. (<i>T1</i>) 	
	Meaning	
	Understandings	Essential Questions
	What specifically do you want students to understand? What inferences should they make? Students will understand that... <ul style="list-style-type: none"> Forces and motion are interconnected, and changes in motion depend on the magnitude, direction, and interaction of forces, as well as the mass and speed of the 	What thought-provoking questions will foster inquiry, meaning making, and transfer? Students will keep considering... <ul style="list-style-type: none"> How do balanced and unbalanced forces affect the motion of objects, and what patterns can we observe in their interactions? (<i>Q1</i>)



NFHS Program of Studies



The Role of Curriculum

We are committed to providing all students the opportunity to reach their fullest potential. Clearly articulated curriculum is a systematic way to ensure that teachers provide students with equitable access to standards and key content within and across grade levels. District curriculum provides a cohesive instructional framework that supports student growth and development within the discipline and towards our mission and Vision of a Learner.

**The Curriculum Blueprint link
will be “live” the week of
January 5th.**

**NFPS
Curriculum
Blueprint**

