

**SCIENCE COMPETENCIES CROSS-WALK BETWEEN
STATE OF NEW HAMPSHIRE & EPPING SCHOOL DISTRICT**

STATE OF NEW HAMPSHIRE

PATTERNS	CAUSE & EFFECT	SCALE, PROPORTION, & QUANTITY	SYSTEMS & SYSTEM MODELS	ENERGY & MATTER IN SYSTEMS	STRUCTURE & FUNCTION	STABILITY & CHANGE OF SYSTEMS	NATURE OF SCIENCE
Students will demonstrate the ability to observe and describe patterns in natural and human designed phenomena and use those patterns to support claims about the observed or predicted relationships among phenomena.	Students will demonstrate the ability to investigate, explain, and evaluate potential causal relationships by using evidence to support claims and predictions about the mechanisms that drive those relationships.	Students will demonstrate the ability to describe and represent the significance of changes in observable and non-observable phenomena in terms of relative scale, proportion, and quantity.	Students will demonstrate the ability to investigate and analyze a natural or human designed system in terms of its boundaries, inputs, outputs, interactions, and behaviors and use this information to develop a system model that can be used to understand and empirically evaluate the accuracy of models in terms of representing the underlying system.	Students will demonstrate the ability to analyze evidence from a variety of sources (investigations, models) to predict, connect and/or evaluate the cycling of matter and flow of energy within and between systems in order to understand, describe, or predict possibilities and limitations of systems.	Students will demonstrate the ability to use evidence to support claims about the relationship among structure and function of natural and human designed objects.	Students will demonstrate the ability to investigate and analyze static and dynamic conditions of natural and human designed systems in order to explain and predict changes over time.	Students will demonstrate the ability to work collaboratively and individually to generate testable questions or define problems, plan and conduct investigations using a variety of research methods in various settings, analyze and interpret data, reason with evidence to construct explanations in light of existing theory and previous research, and effectively communicate the research processes and conclusions.

EPPING SCHOOL DISTRICT

MODELS & EXPLANATIONS	SYSTEMS, ENERGY, & MATTER	STRUCTURE & FUNCTION	STABILITY & CHANGE	NATURE OF SCIENCE
Students will understand that scientists use logic, models, evidence, and current knowledge to explain their world.	Students will understand that there is order and predictability in the universe which can be organized into systems and predicted by laws and theories.	Students will understand that the structure or shape of a living thing, material, or system is related to its function.	Students will understand that living things, materials, and systems remain constant, change at different rates, or exist in equilibrium over time.	Students will develop an appreciation for the role science plays in our culture and everyday lives, and actively engage in scientific investigation.