Physics Curriculum Map

Time	Unit Title	Objective	CCSS Objective	Literacy Activities	Skills
3 Weeks	Describing Motion	-Measure, calculate, graph, and analyze the motion of an object as a function of time	P2.1A P2.1B P2.1C P2.1D P2.1G P2.2A P2.2B P2.2C P2.3A	-Close reading -Teacher/Student Think Aloud -Contextual Problem Solving -Turn and Talk	-Understand the nature of science and demonstrate an ability to practice scientific reasoning by applying it to the design, execution, and evaluation of scientific investigations of force and motion
3 Weeks	Vector Addition	-Measure, calculate, graph, and analyze the motion of an object in two dimensions	P2.1A P2.1B P2.1C P2.1D P2.1G P2.2A P2.2B P2.2C P2.3A	-Close reading -Teacher/Student Think Aloud -Contextual Problem Solving -Turn and Talk	-Understand the nature of science and demonstrate an ability to practice scientific reasoning by applying it to the design, execution, and evaluation of scientific investigations of force and motion
3 Weeks	A Mathematical Model of Motion	-Measure, calculate, graph, and analyze the motion of an object in two dimensions	P2.1A P2.1B P2.1C P2.1D	-Close reading -Teacher/Student Think Aloud	-Understand the nature of science and demonstrate an ability to practice

			P2.1G P2.2A P2.2B P2.2C P2.3A	-Contextual Problem Solving -Turn and Talk	scientific reasoning by applying it to the design, execution, and evaluation of scientific investigations of force and motion
7 Weeks	Forces and Motion in Two Dimensions	-Apply Newton's Laws to predict and calculate the change in the motion of an object when acted upon by forces	P3.1D P3.2A P3.2C P3.2D P3.3A P3.4A P3.4B P3.4C P3.4E P3.4F	-Close reading -Teacher/Student Think Aloud -Contextual Problem Solving -Turn and Talk	-Understand the nature of science and demonstrate an ability to practice scientific reasoning by applying it to the design, execution, and evaluation of scientific investigations of force and motion
4 Weeks	Universal Gravitation	-Measure, calculate, graph, and analyze uniform circular motion and explain gravitational interactions using the Law of Universal Gravitation.	P3.1A P3.6B P3.6C P3.6D	-Close reading -Teacher/Student Think Aloud -Contextual Problem Solving -Turn and Talk	-Understand the nature of science and demonstrate an ability to practice scientific reasoning by applying it to the design, execution, and evaluation of scientific investigations of force and motion

4 Weeks	Momentum and Its Conservation	-Describe how force, mass, and velocity affect the momentum of an object, calculate impulse, and solve simple collision problems	P3.3B P3.3D P3.4G P3.5A	-Close reading -Teacher/Student Think Aloud -Contextual Problem Solving -Turn and Talk	-Understand the nature of science and demonstrate an ability to practice scientific reasoning by applying it to the design, execution, and evaluation of scientific investigations of force and motion
5 Weeks	Energy, Work, and Simple Machines	-Identify and explain forms of energy in mechanical systems and measure and calculate work and changes in kinetic and potential energy	P3.2B P4.1C P4.3A P4.3B P4.3C P4.3D P4.3E	-Close reading -Teacher/Student Think Aloud -Contextual Problem Solving -Turn and Talk	-Understand the nature of science and demonstrate an ability to practice scientific reasoning by applying it to the design, execution, and evaluation of scientific investigations of force and motion
4 Weeks	Energy	-Identify and explain forms of energy in mechanical systems and measure and calculate work and changes in kinetic and potential energy	P4.1E P4.2A P4.2C P4.2E P4.3B P4.3E	-Close reading -Teacher/Student Think Aloud -Contextual Problem Solving	-Understand the nature of science and demonstrate an ability to practice scientific reasoning by applying it to the design, execution, and evaluation of

				-Turn and Talk	scientific investigations of force and motion