BOSTON Public Schools Focus on Children | Office of Instructional Research and Development

Science and Technology/Engineering

CWA High School: Physics

For additional information or questions about these prompts email: bps.science@gmail.com

CWA	Science Idea	Standards (New Mass Framework to select, but also link to Old Mass Framework)	Description Lesson Specific, Unit Assessment, or Open Argument	Writing Prompt	Other Resources (e.g. rubrics, student responses, etc.)
Acceleration of falling objects	Free fall, air resistance	• 1.4 Interpret and apply Newton's three laws of motion.	Open Argument	Which of the two objects do you predict would have the greater acceleration when dropped in air?	• Prompt • Sample student response
Conservation of momentum	Conservation of momentum	• 2.5 Provide and interpret examples showing that linear momentum is the product of mass and velocity, and is always conserved (law of conservation of momentum). • Calculate the momentum of an object.	Lesson Specific	When two objects collide, is their total momentum conserved?	• Prompt • Sample student response • Actual student response
Ohm's law	Ohm's law	• 5.2 Develop qualitative and quantitative understandings of current, voltage, resistance, and the connections among them (Ohm's law).	Lesson Specific	How do voltage and resistance each relate to electric current in a circuit?	• Prompt • Sample student response • Actual student response
Wave properties	Wave property relationships	• 4.1 Describe the measurable properties of waves (velocity, frequency, wavelength, amplitude, period) and explain the relationships among them. Recognize examples of simple harmonic motion.	Unit Assessment	How are the wave properties on a vibrating string related to each other?	• Prompt • Sample student response • Actual student response