

Standard	Performance Indicator	Question	All WNY (8089)
4.1-Trans. of Energy	4.1b Energy may be converted among mechanical, electromagnetic, nuclear, and thermal forms.	15-MC	65.69%
4.1-Trans. of Energy	4.1c Potential energy is the energy an object possesses by virtue of its position or condition. . .	19-MC	75.67%
4.1-Trans. of Energy	4.1d Kinetic energy is the energy an object possesses by virtue of its motion.	31-MC	70.56%
4.1-Trans. of Energy	4.1f In a nonideal mechanical system, as mechanical energy decreases. . .	42-MC	48.71%
4.1-Trans. of Energy	4.1g When work is done on or by a system, there is a change in the total energy of the system.	13-MC	77.41%
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4.1-Trans. of Energy	4.1i Power is the time-rate at which work is done or energy is expended.	50-MC	66.24%
4.1-Trans. of Energy	4.1j Energy may be stored in electric* or magnetic fields. This energy may be. . .	12-MC	70.71%
4.1-Trans. of Energy	4.1k Moving electric charges produce magnetic fields. The relative motion between. . .	11-MC	69.65%
4.1-Trans. of Energy	4.1k Moving electric charges produce magnetic fields. The relative motion between. . .	22-MC	84.98%
4.1-Trans. of Energy	4.1m The factors affecting resistance in a conductor are length, cross-sectional area, . . .	14-MC	91.62%
4.1-Trans. of Energy	4.1p Electrical power and energy can be determined for electric circuits. . .	39-MC	56.45%
4.1-Trans. of Energy	4.1p Electrical power and energy can be determined for electric circuits. . .	40-MC	67.35%
4.3-Wavelength and Freq.	4.3b Waves carry energy and information without transferring mass. . .	21-MC	93.04%
4.3-Wavelength and Freq.	4.3c The model of a wave incorporates the characteristics of amplitude, wavelength. . .	18-MC	68.57%
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4.3-Wavelength and Freq.	4.3c The model of a wave incorporates the characteristics of amplitude, wavelength. . .	35-MC	65.81%
4.3-Wavelength and Freq.	4.3e Waves are categorized by the direction in which particles in a medium vibrate. . .	17-MC	76.85%
4.3-Wavelength and Freq.	4.3f Resonance occurs when energy is transferred to a system at its natural frequency.	27-MC	91.58%
4.3-Wavelength and Freq.	4.3h When a wave strikes a boundary between two media, reflection, transmission. . .	49-MC	49.68%
4.3-Wavelength and Freq.	4.3j The absolute index of refraction is inversely proportional to the speed of a wave.	41-MC	50.20%
4.3-Wavelength and Freq.	4.3k All frequencies of electromagnetic radiation travel at the same speed in a vacuum.	24-MC	83.47%
4.3-Wavelength and Freq.	4.3m When waves of a similar nature meet, the resulting interference may be explained. . .	25-MC	82.05%
4.3-Wavelength and Freq.	4.3n When a wave source and an observer are in relative motion, the observed frequency. . .	26-MC	63.84%
5.1-Patterns of Motion	5.1a Measured quantities can be classified as either vector or scalar.	01-MC	82.58%
5.1-Patterns of Motion	5.1d An object in linear motion may travel with a constant velocity or with acceleration.	02-MC	80.41%
5.1-Patterns of Motion	5.1d An object in linear motion may travel with a constant velocity or with acceleration.	07-MC	90.65%
5.1-Patterns of Motion	5.1e An object in free fall accelerates due to the force of gravity. . .	04-MC	81.90%
5.1-Patterns of Motion	5.1e An object in free fall accelerates due to the force of gravity. . .	06-MC	65.74%
5.1-Patterns of Motion	5.1f The path of a projectile is the result of the simultaneous effect of the horizontal and . . .	03-MC	82.24%
5.1-Patterns of Motion	5.1g A projectile's time of flight is dependent upon the vertical component of its motion.	05-MC	53.76%
5.1-Patterns of Motion	5.1h The horizontal displacement of a projectile is dependent upon. . .	47-MC	66.23%
5.1-Patterns of Motion	5.1i According to Newton's First Law, the inertia of an object is directly proportional. . .	16-MC	87.65%
5.1-Patterns of Motion	5.1i According to Newton's First Law, the inertia of an object is directly proportional. . .	44-MC	76.47%
5.1-Patterns of Motion	5.1k According to Newton's Second Law, an unbalanced force causes a mass to accelerate.	08-MC	54.46%
5.1-Patterns of Motion	5.1n Centripetal force is the net force which produces centripetal acceleration. . .	38-MC	73.66%
5.1-Patterns of Motion	5.1n Centripetal force is the net force which produces centripetal acceleration. . .	45-MC	85.52%
5.1-Patterns of Motion	5.1p The impulse imparted to an object causes a change in its momentum	09-MC	62.22%
5.1-Patterns of Motion	5.1p The impulse imparted to an object causes a change in its momentum	10-MC	54.36%
5.1-Patterns of Motion	5.1t Gravitational forces are only attractive, whereas electrical and magnetic forces can. . .	32-MC	78.23%
5.1-Patterns of Motion	5.1u The inverse square law applies to electrical and gravitational fields. . .	33-MC	54.33%
5.3-Energy Relationships	5.3b Charge is quantized on two levels. On the atomic level. . .	37-MC	58.61%
5.3-Energy Relationships	5.3c On the atomic level, energy is emitted or absorbed in discrete packets called photons.	43-MC	64.52%
5.3-Energy Relationships	5.3d The energy of a photon is proportional to its frequency.	46-MC	68.69%
5.3-Energy Relationships	5.3g The Standard Model of Particle Physics has evolved. . .	28-MC	75.03%
5.3-Energy Relationships	5.3g The Standard Model of Particle Physics has evolved. . .	29-MC	78.02%
5.3-Energy Relationships	5.3j The fundamental source of all energy in the universe is the conversion of mass into energy.	30-MC	61.08%
Standard 6	I3 The grouping of magnitudes of size, time, frequency, and pressures or other units of measurement	36-MC	56.36%