

MATATAG → Science → Grade 10

Topic	FILENAME	File Type	Level of Skill Progression
Q1: EARTH AND SPACE SCIENCE			
Plate Tectonics: Current models explain tectonic plate movement as part of a gravity-driven convection system that pushes young hot plates away from spreading ridges and pulls old cold plates down into subduction zones.	DEV_Video - Tectonic Plates	video	Developing
	DEV_Video - The Scientist Who Mapped the Seafloor: Marie Tharp Great Minds	video	Developing
	DEV_Video - The Development of Plate Tectonics	video	Developing
	DEV_Video - The Plate Tectonics Revolution	video	Developing
	PRO_Video - The Moving Plates	video	Proficient
	PRO_Video - Plate Tectonics: Plates Colliding	video	Proficient
	PRO_Video - Plate Tectonics	video	Proficient
	DEV_Video - Plate Tectonics Explained	video	Developing
	DEV_Video - Earth's Changing Crust	video	Developing
	DEV_Video - Subduction	video	Developing
	PRO_Video - Colliding Plates	video	Proficient
	DEV_Video - Types of Mountains	video	Developing
	PRO_Discussion Presentation and Printable Worksheet - Plate Boundaries	ppt and pdf	Proficient
	PRO_Discussion Presentation - Plate Movement	powerpoint	Proficient
	DEV_Printable Worksheet - Plate Movement	PDF	Developing
	DEV_Printable Worksheet - Evidence Supporting Plate Tectonics	PDF	Developing
	PRO_Discussion Presentation - Evidence Supporting Plate Tectonics	powerpoint	Proficient
	PRO_Discussion Presentation and Printable Worksheet - Earth's Internal Structure and Active Volcanoes	ppt and pdf	Proficient
	PRO_Printable Worksheet - Earthquake Epicenters	PDF	Proficient
	DEV_Discussion Presentation - Earthquake Epicenters	powerpoint	Developing
	PRO_Discussion Presentation - Disaster Risks - Earthquakes, Tsunamis, and Volcanic Eruptions	powerpoint	Proficient
	DEV_Printable Worksheet - Disaster Risks - Earthquakes, Tsunamis, and Volcanic Eruptions	PDF	Developing
	PRO_Discussion Presentation and Printable Worksheet - Disaster Preparedness: Earthquakes, Tsunamis, and Volcanic Eruptions	ppt and pdf	Proficient
Global Climate and Global Interactions	DEV_eContent - Volcanoes and Earthquakes	html	Proficient
	DEV_eContent - Plate Boundaries	html	Developing
	BEG_eContent - Plate Movements	html	Beginning
	HPR_Video - Evaluating the Evidence of Global Warming	video	Highly Proficient
	PRO_Video - Global Warming and Greenhouse Effect	video	Proficient
	HPR_Video - Global Climate Change 1	video	Highly Proficient
	HPR_Video - El Niño	video	Highly Proficient
	PRO_Video - What Is La Niña?	video	Proficient
	PRO_Video - Global Climate Change 2	video	Proficient
	DEV_Video - The Impact of Plants on Global Warming	video	Developing
	DEV_Video - Renewable Energy Resources: Advantages and Disadvantages	video	Developing
	DEV_Video - Understanding Climate Change	video	Developing
	DEV_Video - Global Warming	video	Developing
	DEV_Printable Worksheet - Weather and Climate Patterns	PDF	Developing
Global and Local Sustainability: The rich natural resources of the Philippines require sustainable management.	PRO_Discussion Presentation - Weather and Climate Patterns	powerpoint	Proficient
	PRO_Discussion Presentation and Printable Worksheet - Changes in Climate	ppt and pdf	Proficient
	DEV_Discussion Presentation and Printable Worksheet - Major Mountain Belts	ppt and pdf	Developing

Q2: FORCE, MOTION, AND ENERGY			
Projectile Motion: Newton's laws can be used to explain projectile motion and collisions.	PRO_Discussion Presentation and Printable Worksheet - Projectile Motion	ppt and pdf	Proficient
	HPR_Video - Projectile Motion 2	video	Highly Proficient
	DEV_Video - Introduction to Kinematics	video	Developing
	PRO_Video - Projectile Motion 1	video	Proficient
	DEV_eContent - Projectile Motion	html	Developing
Momentum and Collisions: Momentum in collisions increases as mass or velocity increases.	PRO_Discussion Presentation and Printable Worksheet - Linear Momentum and Its Conservation	ppt and pdf	Proficient
	DEV_Video - Momentum	video	Developing
	DEV_Video - Calculating Momentum	video	Developing
	HPR_Video - About Momentum	video	Highly Proficient
	DEV_Video - Momentum = Mass x Velocity	video	Developing
	PRO_Video - Body Crash	video	Proficient
	PRO_Video - Conservation of Linear Momentum	video	Proficient
Large-Scale Generation and Distribution of Electricity: The electric companies provides high voltage electricity through power generation, transmission, and distribution to many parts of the archipelago.	PRO_Video - Momentum: Conservation of Momentum Principle	video	Proficient
	DEV_Discussion Presentation and Printable Worksheet - Energy Generation, Transmission, and Distribution	ppt and pdf	Developing
	PRO_Discussion Presentation - Direct Current Motor	powerpoint	Proficient
	DEV_Printable Worksheet - Direct Current Motor	PDF	Developing
	PRO_Discussion Presentation - Electric Generator	powerpoint	Proficient
	DEV_Printable Worksheet - Electric Generator	PDF	Developing
	PRO_Video - Energy Transfers in Electricity Production	video	Proficient
	DEV_Video - Exploring the Sources of Electricity	video	Developing
	DEV_Video - The Essential Electric Motor	video	Developing
	PRO_Video - Electric Generator	video	Proficient
	DEV_Video - Benefits of Energy Conservation	video	Developing
	PRO_Video - Energy Reduction	video	Proficient
	DEV_eContent - Electric Motor and Generator	html	Developing
Renewable and Non-Renewable Energy: Responsible planning and innovation lead to efficient generation and distribution of electricity in the Philippines.	PRO_Video - The Wind Power Debate	video	Proficient
	PRO_Video - Renewable Energy Resources	video	Proficient
	PRO_Video - Energy Transfers in Electricity Production	video	Proficient
	HPR_Video - TED Ed: Why Don't We Cover the Desert with Solar Panels?	video	Highly Proficient
	DEV_Video - Britannica Insights: The Transition to Renewable Energy	video	Developing

Q3: SCIENCE OF MATERIALS				
Chemical Reactions and Their Impact on the Environment	PRO_Video - Clues to Chemical Reactions	video	Proficient	
	DEV_Video - Investigating Chemical Reactions: An Introduction	video	Developing	
	HPR_Video - How Do I Know If a Chemical Reaction Has Occurred?	video	Highly Proficient	
	PRO_eContent - Chemical Reactions	html	Proficient	
	PRO_Video - Types of Chemical Reactions	video	Proficient	
	HPR_Video - Different Types of Chemical Reactions	video	Highly Proficient	
	PRO_Video - Chemical Reactions in Action	video	Proficient	
Acids, Bases, and Salts: Chemical indicators produce color changes with acids, bases, and salts.	DEV_Discussion Presentation - Acids and Bases	powerpoint	Developing	
	BEG_Printable Worksheet - Acids and Bases	PDF	Beginning	
	DEV_Video - What Is the pH Scale?	video	Developing	
	PRO_Video - Acid-Base Reactions in Solution	video	Proficient	
Chemical Equations: Atoms rearrange during chemical reactions but abide by the principle of conservation of mass as illustrated in balanced chemical equations.	PRO_Video - Chemical Reactions	video	Proficient	
	PRO_Video - The Chemical Reactions	video	Proficient	
	PRO_Video - How to Balance Equations - Part 1	video	Proficient	
	PRO_Video - How to Balance Equations - Part 2	video	Proficient	
	PRO_Video - What Is the Law of Conservation of Mass	video	Proficient	
Rates of Reactions: Rates of chemical reactions are critical in production and preservation of many useful materials.	HPR_Video - Factors Affecting Rate of Reaction	video	Highly Proficient	
	PRO_Video - Rates of Reaction	video	Proficient	
	PRO_Video - Endothermic Reaction	video	Proficient	
	PRO_Video - Exothermic and Endothermic Reactions	video	Proficient	

Q4: LIFE SCIENCE			
Homeostasis: Homeostasis is a self-regulating process that allows an organism to maintain stability.	PRO_Video - What Is Homeostasis?	video	Proficient
	HPR_Video - Biology: Homeostasis	video	Highly Proficient
	PRO_Video - Homeostasis and Negative Positive Feedback	video	Proficient
	PRO_Video - Positive and Negative Feedback Loops	video	Proficient
Mechanisms of Evolution: Several theories provide lines of evidence about how organisms evolve.	PRO_Discussion Presentation and Printable Worksheet - The Theory of Natural Selection	ppt and pdf	Proficient
	PRO_Discussion Presentation and Printable Worksheet - Evolution and Speciation	ppt and pdf	Proficient
	HPR_Video - The Theory of Evolution by Natural Selection	video	Highly Proficient
	PRO_Video - Theories of Evolution: Lamarck Vs. Darwin	video	Proficient
	PRO_Video - Biology: Variation and Evolution	video	Proficient
	PRO_Video - Biology: Adaptations	video	Proficient
	PRO_Video - Evidence for Evolution	video	Proficient
Biotechnology: The products and processes of biotechnology can have both beneficial and harmful effects on society and the environment.	PRO_Video - Introduction to Biotechnology	video	Proficient
	PRO_Video - Biotechnology: Crash Course History of Science	video	Proficient
	PRO_Video - Fermentation: The Chemical Process Behind Everyday Foods	video	Proficient
	PRO_Video - Genetic Engineering: Making Transgenic Plants	video	Proficient
	PRO_Video - Attempting De-Extinction	video	Proficient
	PRO_Video - Biotechnology and Ethical Issues	video	Proficient
	PRO_Video - Biotechnology in Medicine	video	Proficient
Ecosystem's carrying capacity and population growth: Population growth influences the carrying capacity of an ecosystem.	PRO_Discussion Presentation - Population Growth and Carrying Capacity	powerpoint	Proficient
	DEV_Printable Worksheet - Population Growth and Carrying Capacity	PDF	Developing
	PRO_Discussion Presentation - The Ecosystem Stability	powerpoint	Proficient
	DEV_Printable Worksheet - The Ecosystem Stability	PDF	Developing
	PRO_Video - Population Ecology: What Causes Populations to Change?	video	Proficient
	PRO_Video - Human Population Growth	video	Proficient