

MATATAG → Science → Grade 8

Topic	FILENAME	File Type	Level of Skill Progression
Q1: LIFE SCIENCE			
Organ Systems Working Together: Organ systems work together for the growth and survival of the organism.	DEV_Video - Introduction to Digestion and Excretion	video	Developing
	PRO_Video - What Is Excretion?	video	Proficient
	PRO_Discussion Presentation - Parts and Functions of the Different Digestive Organs	powerpoint	Proficient
	DEV_Printable Worksheet - Parts and Functions of the Different Digestive Organs	PDF	Developing
	DEV_Discussion Presentation and Printable Worksheet - Keeping the Digestive System Healthy	ppt and pdf	Developing
	PRO_Video - Transport of Water in Plants	video	Proficient
	DEV_Discussion Presentation and Printable Worksheet - The Female Reproductive System	ppt and pdf	Developing
	DEV_Discussion Presentation and Printable Worksheet - The Menstrual Cycle	ppt and pdf	Developing
	DEV_Printable Worksheet - The Musculoskeletal, Integumentary, and Excretory Systems	PDF	Developing
	PRO_Discussion Presentation - The Musculoskeletal, Integumentary, and Excretory Systems	powerpoint	Proficient
	DEV_Printable Worksheet - The Digestive, Circulatory, Respiratory, and Nervous Systems	PDF	Developing
	PRO_Discussion Presentation - The Digestive, Circulatory, Respiratory, and Nervous Systems	powerpoint	Proficient
	DEV_Printable Worksheet - How the Body Systems Work Together and How to Take Care of the Body Systems	PDF	Developing
	PRO_Discussion Presentation - How the Body Systems Work Together and How to Take Care of the Body Systems	powerpoint	Proficient
	PRO_Video - Vascular Plants	video	Proficient
Heredity: Inherited traits passed from parents to offspring are governed by the rules on the patterns of inheritance.	DEV_Video - Great Minds: Gregor Mendel	video	Developing
	PRO_Video - Mendelian Genetics and the Laws of Heredity	video	Proficient
	PRO_Video - Complex Patterns of Inheritance	video	Proficient
	HPR_Video - Punnett Squares	video	Highly Proficient
	PRO_Video - Genotype, Phenotype, and Punnett Squares Made Easy	video	Proficient
	PRO_Discussion Presentation - Cell Cycle and Mitosis	powerpoint	Proficient
	DEV_Printable Worksheet - Cell Cycle and Mitosis	PDF	Developing
	DEV_Printable Worksheet - Meiosis	PDF	Developing
	PRO_Discussion Presentation - Meiosis	powerpoint	Proficient
	PRO_Discussion Presentation - Basic Principles of Mendelian Genetics	powerpoint	Proficient
	DEV_Printable Worksheet - Basic Principles of Mendelian Genetics	PDF	Developing
	BEG_Video - The Father of Genetics	video	Beginning
Taxonomic Classification: Classification of living things shows life's diversity.	PRO_Video - Classification	video	Proficient
	DEV_Video - Classification Hierarchy	video	Developing
	DEV_Video - Biological Classification: The Class Mammalia	video	Developing
	DEV_Printable Worksheet - Classification of Organisms	PDF	Developing
	PRO_Discussion Presentation - Classification of Organisms	powerpoint	Proficient
	PRO_Discussion Presentation - Conservation of Biodiversity	powerpoint	Proficient
	DEV_Printable Worksheet - Conservation of Biodiversity	PDF	Developing
	DEV_Video - Kingdom Plantae: Gymnosperms	video	Developing

Phosynthesis, Respiration, Cycles in Nature: Phosynthesis and respiration are processes that show how living things obtain energy and nutrients from the environment.	PRO_Video - Carbon Cycle	video	Proficient
	PRO_Video - Cellular Respiration	video	Proficient
	DEV_Video - Oxygen and Carbon Cycle	video	Developing
	HPR_Video - Photosynthesis and Respiration 1	video	Highly Proficient
	HPR_Video - Photosynthesis and Respiration 2	video	Highly Proficient
	PRO_Video - Photosynthesis	video	Proficient
	PRO_Discussion Presentation and Printable Worksheet - Cycling of Materials in an Ecosystem	ppt and pdf	Proficient
	DEV_Printable Worksheet - Photosynthesis	PDF	Developing
	PRO_Discussion Presentation - Photosynthesis	powerpoint	Proficient
	DEV_eContent - Photosynthesis and Respiration	html	Developing

Q2: SCIENCE OF MATERIALS			
The Atomic Structure	DEV_Video - Atomic Models	video	Developing
	PRO_Video - Atomic Models: Thomson and Rutherford	video	Proficient
	HPR_Video - Niels Bohr and the Rutherford Model	video	Highly Proficient
	PRO_Video - How to Build an Atom	video	Proficient
	PRO_Video - Models	video	Proficient
	PRO_Video - Electron Energy Levels and Valency	video	Proficient
	DEV_Discussion Presentation and Printable Worksheet - The Structure of an Atom	ppt and pdf	Developing
	PRO_Discussion Presentation - Development of Atomic Theory	powerpoint	Proficient
	DEV_Printable Worksheet - Development of Atomic Theory	PDF	Developing
	BEG_eContent - Atomic Structure	html	Beginning
	BEG_Video - Subatomic Particles	video	Beginning
Elements and compounds: Elements and compounds are identified as pure substances.	BEG_Discussion Presentation and Printable Worksheet - Elements: Metals and Nonmetals	ppt and pdf	Beginning
	BEG_Video - Element and Compound	video	Beginning
	DEV_eContent - Elements and Compounds	html	Developing
The Periodic table: The periodic table is a useful tool to determine the chemical properties of elements. Use of Timelines and Charts	DEV_Discussion Presentation and Printable Worksheet - History of the Periodic Table of Elements	ppt and pdf	Developing
	DEV_Discussion Presentation - Arrangement of Elements and Trends in the Periodic Table	powerpoint	Developing
	PRO_Printable Worksheet - Arrangement of Elements and Trends in the Periodic Table	PDF	Proficient
	DEV_Video - Pure Substances Elements	video	Developing
	DEV_Video - The Development of the Periodic Table	video	Developing
	PRO_Video - Modern Periodic Table	video	Proficient
	BEG_Video - How the Elements Got Their Names	video	Beginning
	DEV_Video - How the Elements Are Laid Out in the Periodic Table	video	Developing
	DEV_Video - Why Is the Periodic Table Arranged the Way It Is?	video	Developing
	PRO_Video - Which Is the Most Reactive Element in the Periodic Table?	video	Proficient
	PRO_Video - Atoms and the Periodic Table	video	Proficient
	PRO_Video - The Periodic Table: Atomic Radius, Ionization Energy, and Electronegativity	video	Proficient
	PRO_Video - Energy Levels and Electron Configuration	video	Proficient
	PRO_Video - The Periodic Table: Mass Number and Atomic Mass	video	Proficient
	DEV_Video - Understanding Mass Number and Atomic Mass	video	Developing
	DEV_Video - Elements	video	Developing
	PRO_Video - Valence Electrons	video	Proficient
	HPR_Video - Electron Energy Levels and Valency	video	Highly Proficient

Q3: EARTH AND SPACE SCIENCE			
Earth's Dynamic Surface: Distribution of Continents; Crustal Features and Interactions	PRO_Video - The Hydrosphere	video	Proficient
	HPR_Video - Topography and the Earth: The Land	video	Highly Proficient
	DEV_eContent - Volcanic Eruption	html	Developing
	DEV_Video - Lithosphere	video	Developing
	PRO_Video - Topography and the Earth: Earth Layers Based on Physical Properties	video	Proficient
	PRO_Video - Formation, Types, and Activity	video	Proficient
	PRO_Video - Types of Volcanoes	video	Proficient
	HPR_Video - What Are Volcanoes?	video	Highly Proficient
	PRO_Video - Ring of Fire	video	Proficient
	PRO_Video - Areas of Volcanic Activity	video	Proficient
	PRO_Video - Oceanic Crust	video	Proficient
	DEV_Video - Earth's Changing Crust	video	Developing
	DEV_Discussion Presentation - Types of Volcanoes and Volcanic Eruptions	powerpoint	Developing
	PRO_Printable Worksheet - Types of Volcanoes and Volcanic Eruptions	PDF	Proficient
	DEV_Discussion Presentation - Earthquake Epicenters	powerpoint	Developing
	PRO_Printable Worksheet - Earthquake Epicenters	PDF	Proficient
	DEV_Discussion Presentation and Printable Worksheet - Major Mountain Belts	ppt and pdf	Developing
Typhoons: Bodies of water and landforms affect typhoons.	PRO_Discussion Presentation - Formation of Typhoons	powerpoint	Proficient
	DEV_Printable Worksheet - Formation of Typhoons	PDF	Developing
	PRO_Discussion Presentation - Reducing Risks Associated with Typhoons	powerpoint	Proficient
	DEV_Printable Worksheet - Reducing Risks Associated with Typhoons	PDF	Developing
	PRO_Video - Hurricane	video	Proficient
	HPR_Video - How Hurricanes Form?	video	Highly Proficient
	BEG_Video - Typhoon Hagupit Hits the Philippines	video	Beginning
	DEV_Video - Super Typhoon Hits Philippines Before Heading for Taiwan	video	Developing
	DEV_Video - Weather: How Do Meteorologists Predict It?	video	Developing
	DEV_Video - Philippine Typhoon Survivors Receive Relief Goods	video	Developing
Tides: The interaction between the Sun, Earth, and Moon causes tides.	DEV_Video - The Tides	video	Developing
	PRO_Video - Exploring Earth, Sun, and Moon: Tides	video	Proficient
	PRO_Video - What Is the Most Reliable Form of Renewable Energy?	video	Proficient

Q4: FORCE, MOTION, AND ENERGY			
Acceleration: Forces cause objects to accelerate.	PRO_Discussion Presentation and Printable Worksheet - Circular Motion	ppt and pdf	Proficient
	DEV_Video - Introduction to Acceleration	video	Developing
	PRO_Video - Speed, Velocity, and Acceleration	video	Proficient
	DEV_Video - Uniformly Accelerated Motion Examples	video	Developing
	DEV_Video - Measuring Things in Motion	video	Developing
	PRO_Video - Distance-Time and Velocity-Time Graphs	video	Proficient
	HPR_Video - Velocity-Time Graphs	video	Highly Proficient
	PRO_Video - Motion in a Straight Line	video	Proficient
Energy: Mechanical, Kinetic, and Potential	DEV_Discussion Presentation and Printable Worksheet - Different Forms and Uses of Energy	ppt and pdf	Developing
	PRO_Discussion Presentation and Printable Worksheet - Mechanical Energy 1	ppt and pdf	Proficient
	PRO_Discussion Presentation and Printable Worksheet - Mechanical Energy 2	ppt and pdf	Proficient
	PRO_Video - Kinetic Energy	video	Proficient
	PRO_Video - Potential Energy	video	Proficient
	DEV_Video - Kinetic vs. Potential Energy	video	Developing
	DEV_eContent - Potential and Kinetic Energy	html	Developing
Work and Energy: As an object falls from a height its energy is conserved because its potential energy is transformed to kinetic energy.	PRO_Discussion Presentation and Printable Worksheet - Work and Power	ppt and pdf	Proficient
	PRO_Video - Work and Energy	video	Proficient
	PRO_Video - Energy, Work, and Power	video	Proficient
	PRO_Video - Work and Power	video	Proficient
	PRO_Video - Mechanical Energy	video	Proficient
	DEV_Video - Introduction to Mechanical Energy	video	Developing
	PRO_Video - Conservation of Energy	video	Proficient
	BEG_eContent - Energy Transformation	html	Beginning
Renewable Energy: The resources of the Philippines provide many benefits to its people and their activities.	PRO_Video - Understanding Hydropower	video	Proficient
	HPR_Video - Hydroelectricity	video	Highly Proficient
Properties of light	BEG_Discussion Presentation and Printable Worksheet - Describing How Light Travels	ppt and pdf	Beginning
	DEV_Discussion Presentation and Printable Worksheet - Properties and Behavior of Light	ppt and pdf	Developing
	DEV_Discussion Presentation and Printable Worksheet - Introduction to Light	ppt and pdf	Developing
	PRO_Discussion Presentation and Printable Worksheet - Properties and Characteristics of Light	ppt and pdf	Proficient
	PRO_Discussion Presentation and Printable Worksheet - Characteristics of Light	ppt and pdf	Proficient
	PRO_Video - Color and Refraction	video	Proficient
	HPR_Video - Experimenting with Refraction	video	Highly Proficient
	PRO_Video - Reflection and Mirrors	video	Proficient
	DEV_eContent - Relate the ability of the material to block, absorb, or transmit light to its use	html	Developing