USER ADVISORY

These curriculum maps (CMaps) were developed by the Private Education Assistance Committee (PEAC) under the Junior High School In-Service Training (JHS INSET) program of the Government Assistance to Students and Teachers in Private Education (GASTPE), which is co-implemented by the Department of Education (DepEd) and PEAC.

The Grade 7 and Grade 8 CMaps were written by the PEAC JHS Trainers, and some of them were used as exemplars, serving as presentation samples and workshop activities during the 2024 and 2025 In-Service Training for Junior High School Teachers in private schools.

The CMaps are aligned with the Revised K-10 Curriculum of DepEd, which is being implemented in phases nationwide starting SY 2024-2025. Teachers from both private and public schools may use these CMaps to support the implementation of the Revised K-10 Curriculum.

Unit Curriculum Map

Q1 Science 7 Science of Materials

TOPIC/QUARTER	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	ASSESSMENTS	ACTIVITIES	RESOURCES	INSTITUTIONAL CORE VALUES
FIRST 1. Use of models 2. The Particle model and changes of State	Learners learn that: 1. Scientists use models to explain phenomena. 2. The particle model explains the properties of solids, liquids, and gases and the processes involved in changes of state. 3. Diagrams and flowcharts are very useful in demonstrating and explaining the motion and arrangement of particles during changes of state. 4. There are specific	*By the end of the Quarter, learners* recognize that scientists use models to describe the particle model of matter. They use diagrams and illustrations to explain the motion and arrangement of particles during changes of state. They demonstrate an understanding of the role of solute and solvent in solutions and the factors that affect solubility. They demonstrate skills to plan and conduct a scientific investigation making accurate measurements and using standard units.	**A1**: Recognize that scientists use models (*i.e., tangible and conceptual*) to explain phenomena that cannot be easily seen or detected	**A1**. Short Responses	**A1**. Video Viewing	**A1**: Scientific Models by AngelaAlderfer Ahcs https://www.youtube.com/watch?v=nGauq57P5Bg	**A1** Innovative
			B1. Describe the Particle Model of Matter as "All matter is made up of tiny particles with each pure substance having its own kind of particles.";	**B1**. Multiple Choice	**B1**. Reading Text with Chunking Information (Pattern)	**B1**. Reading Material	**B1**. Critical Thinking
			B2. Describe that particles in matter are in constant, random motion exhibiting kinetic energy; have spaces between the particles, attract each other and move faster as the temperature increases (or with the addition of heat)	**B2**. Short Response	**B2.1** Video Viewing about Particle Movement in Varied States and Conditions **B2.2** Simulation of Particle Motion using JavaLab	**B2.1** Arrangement of Particles https://www.youtube.com/watch?v=bwGim-eceS8 **B2.2** Simulation: State of Water https://javalab.org/en/status_of_water_	**B2**. Problem Solving

TOPIC/QUARTER	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	ASSESSMENTS	ACTIVITIES	RESOURCES	INSTITUTIONAL CORE VALUES
	processes for planning, conducting, and recording scientific investigations. 5. The properties of solutions such as solubility and reaction to litmus determine their use.				**B2.3** Modeling/Demonstration	en/ **B2.3** Activity Worksheet	
			B3. Use diagrams and illustrations to describe the arrangement, spacing, and relative motion of the particles in each of the five states (i.e solid, liquid, gas, plasma, Bose - Einstein condensate) of matter;	**B3**. Illustrating/ Diagramming Particles	**B3**. Noting Details with Graphic organizer (Table Completion)	**B3**. Reading Text about States of Matter https://www.sciencelearn.org.nz/resources/1499-states-of-matter#SnippetTab Graphic Organizer	**B3**. Critical Thinking
			B4: Explain the changes of state in terms of particle arrangement and energy changes: a. solid→liquid→ vapor, and b. vapor→liquid→ solid;	**B4**: Short Paragraph	**B4**: Laboratory Experimentation on Phase Change through Gowin's Vee	**B4**: Phase Change Laboratory Activity	**B4**: Collaboration
3. Solutions, solubility, and concentration			**C1**. Identify the role of the solute (*substance that is dissolved in the solvent*) and solvent (*substance in which the solute is dissolved)* in a solution	**C1**. Identification	**C1**. Noting details with Graphic Organizer	**C1**. Activity Worksheet	**C1**. Information Literacy

TOPIC/QUARTER	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	ASSESSMENTS	ACTIVITIES	RESOURCES	INSTITUTIONAL CORE VALUES
			C2 Identify solutions, which can be found at home and in school and that react with litmus and natural indicators, pH paper, as acids, bases, and salts	**C2** Identification	**C2** Gamification: Household Scavenger Hunt using GooseChase App	**C2** Activity Worksheet GooseChase https://www.goosechase.com/	**C2** Information Literacy
			C3: Express quantitatively the amount of solute present in a given volume of solvent (percentage concentration i.e. m/m, v/v, m/v)	**C3**: Problem-Solving on Concentration Calculation	**C3**. Concentration Calculation Challenge	**C3** Solution Concentration Concentration - GameUp - BrainPOP.	**C3** Critical Thinking
			C4. Demonstrate how five factors (i.e. temperature, pressure, molecular size, solute properties, and mechanical agitation) affect solubility of a solute in a given solvent.	**C4**. Data Analysis Report - Temperature and Solubility	**C4**. Kitchen Chemistry - investigate the solubility of common cooking ingredients	**C4**. Kitchen Chemistry Rock Candy (Solubility, Supersaturated Solutions, Saturation) | Chemistry | CK-12 Exploration Series	**C4**. Scientific Inquiry

TOPIC/QUARTER	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	ASSESSMENTS	ACTIVITIES	RESOURCES	INSTITUTIONAL CORE VALUES
Planning, following, and recording scientific investigations			**D1**. Follow six appropriate steps of a scientific investigation which includes: a. Aim or problem b. Hypothesis c. Materials and equipment, d. Method or procedures, e. Results including data, and f. Conclusion.	**D1**. Sequencing	**D1**. Video Viewing on the Steps of Scientific Method with Flow Charting	**D1**. Youtube: The Scientific Method The scientific method - YouTube Flow Chart template	**D1**. Critical Thinking
			D2. Generalize that community based problems related to solution concentrations are effectively addressed through scientific investigation.	**D2**. Stick-it-Together	**D2**. CER	**D2**. Article on the application of solutions in community	**D2**. Environmental Care
			D3. Make accurate and precise measurements using standard units for physical quantities and organize the collected data when carrying out a scientific investigation	**D3**. Practical Quiz - Measurement Analysis	**D3**. Measurement Olympics - A Series of Measurement Challenges	**D3**. Worksheet Olympics	**D3**. Scientific Inquiry

TOPIC/QUARTER	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	ASSESSMENTS	ACTIVITIES	RESOURCES	INSTITUTIONAL CORE VALUES
			D4. Demonstrate proper use and handling of science equipment and apparatus.	**D4**. Practical Test and Troubleshooting Scenario	**D4**. Lab Stations Proper Use and Handling of Science Equipment	**D4Teacher**-made Lab Activity Sheet	**D4** Commitment to Precision and Safety
			D5. Design a scientific investigation related to solution concentrations that effectively addressed community-based problems.	**D5** Performance Task: Scientific Investigation	**D5**. Scaffolding Activities		**D5**. Good Stewardship

Unit Curriculum Map

Q2 Science 7 Life Science

TOPIC/QUARTER	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	ASSESSMENTS	ACTIVITIES	RESOURCES	INSTITUTIONAL CORE VALUES
2 1. Science Equipment: The Compound Microscope	Learners learn that: 1. Familiarity and proper use of a compound microscope are essential to observe cells. 2. The organelles of plant and animal cells can be identified using a compound microscope. 3. Cells are the basic unit of life and mitosis, and meiosis are the basic forms of cell division. 4. Fertilization occurs when a male reproductive cell fuses with a	*By the end of the Quarter, learners demonstrate* understanding of the parts and function of a compound microscope and use this to identify cell structure. They recognize that the cell is the basic unit of life and that some organisms are unicellular and some are multicellular. They explain that there are two types of cell division and that reproduction can occur through sexual or asexual processes. They use diagrams to make connections between organisms and their environment at various levels of organization. They explain the process of energy transfer	**A1**. identify the parts and functions, and demonstrate proper handling and storing of a compound microscope;	**A1**. Identification and Demonstration	**A1.1**. Text Reading with Category Chunking **A1.2** Actual Microscope Manipulation	**A1**. Parts and Functions of a Microscope https://microbenotes.com/parts-of-a-microscope/	Environmental Stewardship
			A2. Use proper techniques in observing and identifying the parts of a cell with a microscope such as the cell membrane, nucleus, cytoplasm, mitochondria,	**A2**. Practical Test	**A2**. Cheek Cell Lab	**A2**. https://www2.mrc-lmb.cam.ac.uk/microscopes4schools/humancheek.php	**A2**. Objectivity

TOPIC/QUARTER	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	ASSESSMENTS	ACTIVITIES	RESOURCES	INSTITUTIONAL CORE VALUES
2. Plant and Animal Cells	female reproductive cell. 5. Sexual reproduction is the basis of heredity. 6. The level of biological organization provides a simple way of connecting the simplest part of the living world to the most complex. 7. Identifying trophic levels helps understand the transfer of energy from one organism to another as shown in a food pyramid.	through trophic levels in food chains. .	chloroplasts, and ribosomes				
			B1. recognize that some organisms consist of a single cell (unicellular) like in bacteria and some consist of many cells (multicellular) like in a human;	**B1**. Short Response	**B1. 1** Picture Analysis **B1.2** Analogy	**B1**. Unicellular & Multicellular Cells https://images.app.goo.gl/4GhuecsajPJSYcTV6	**B1**. Observation & Attention to Detail
			B2. differentiate plant and animal cells based on their organelles;	**B2**. Table Comparison	**B2**. Video Viewing with Venn Diagram	**B2**. Overview of Cell Structure https://www.youtube.com/watch?v=0xe1s65lH0w	
			B3. recognize that cells reproduce through two types of cell division, mitosis and meiosis, and describe mitosis as	**B3**. Multiple Choice	**B3**. Video Viewing with Graphic Organizer	**B3**. **1**Khan Academy: Mitosis and Meiosis https://www.khanacademy.org/science/ap-biology/heredity/meiosis-	**B3**. Comparative Analysis

TOPIC/QUARTER	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	ASSESSMENTS	ACTIVITIES	RESOURCES	INSTITUTIONAL CORE VALUES
			cell division for growth and repair;			and-genetic-diversity/v/comparing-mitosis-and-meiosis **B3. 2** Double Bubble Map Template https://www.edrawmind.com/templates/double-bubble-map-template.html	
			C1. differentiate sexual from asexual reproduction in terms of: a) number of parents involved, and b) similarities of offspring to parents;	**C1**. Short Response	**C1**. Webpage Reading with Table Comparison	**C1**. Sexual vs. Asexual Reproduction https://learn.genetics.utah.edu/content/basics/reproduction	**C1**. Respect for Life
3. Cellular Reproduction			**D1**. Explain why the cell is considered the basic structural and functional unit of all organisms	**D1**. Short Paragraph	**D1.1** Laboratory Experimentation on Plant and Cheek Cells **D1.2**: Virtual Sharing - Padlet.com	**D1.1** Laboratory Activity Sheet for cell observation **D1.2** Introduction to Cells: The Grand Cell Tour https://www.youtube.com	**D1**. Oneness of life

TOPIC/QUARTER	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	ASSESSMENTS	ACTIVITIES	RESOURCES	INSTITUTIONAL CORE VALUES
4. Levels of Biological Organization						/watch?v=8IlzKri08kk	
			D2. Use a labelled diagram to describe the connections between the levels of biological organization to one another from cells to the biosphere	**D2**. Diagram Labeling – Levels of Biological Organization	**D2**. "Ecology Chain" Activity	**D2**. https://www.slideshare.net/slideshow/levels-of-biological-organizationpptx-254528137/254528137	**D2**. Competence
			E1. describe the trophic levels of an organism as levels of energy in a food pyramid;	**E1**. Identification	**E1**. Diagram Analysis	**E1**. Trophic Level Diagram https://images.app.goo.gl/yyR9FModXu1bkc3K7	
			E2. Generalize that the interconnectedness of living things across the trophic levels and their environment affects the process of energy transfer in the ecosystem.	**E2**. Placemat Organizer	**E2**. CER	**E2**. Articles https://pmc.ncbi.nlm.nih.gov/articles/PMC5393222/?utm_source=chatgpt.com	**E2**. Environmental Care and Sustainability
			E3. Use examples of food pyramids (to describe the transfer of energy between organisms from one	**E3**. Scientific Explanation/Short Answer	**E3**. Energy Math Modeling	**E3**. https://education.nationalgeographic.org/resource/energy-transfer-ecosystems/	**E3**. Appreciation for Biodiversity

TOPIC/QUARTER	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	ASSESSMENTS	ACTIVITIES	RESOURCES	INSTITUTIONAL CORE VALUES
			trophic level to another.				
5. Trophic Levels and the Transfer of Energy			**E4**. Propose a multimedia campaign highlighting the interconnectedness of living things across different trophic levels in order to maintain the balance in the ecosystem.	**E4**. Performance Task	**E4**. Scaffold 1: Design a New Zoo Exhibit Scaffold 2: Food Web Link Scaffold 3: The Keystone Species Report	**E4**. https://byjus.com/biology/energy-flow-in-ecosystem/	**E4**. Stewardship/Responsibility

Unit Curriculum Map

Q3 Science 7 Force, Motion and Energy

TOPIC	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	ASSESSMENTS	ACTIVITIES	RESOURCES	INSTITUTIONAL CORE VALUES
Third Quarter A. BALANCED & UNBALANCED FORCES	The learners learn that: 1. Scientists and engineers analyze forces to predict their effects on movement. 2. Vectors differentiate the concepts of speed and velocity. 3. Graphing motion provides more accurate predictions about speed and velocity. 4. The particle model explains natural systems and processes. 5. Scientists and engineers conduct innovative research to find solutions to the current global	The learners shall be able to employ scientific techniques, concepts, and models to investigate forces and motion and represent their understanding using scientific language, force diagrams, and distance-time graphs. They use their curiosity, knowledge and understanding, and skills to propose solutions to problems related to motion and energy. They explore how modern technologies might be used to overcome current global energy concerns.	**A1**. identify that forces act between objects and can be measured.	Short Response	**A1.1** Tug of War Simulation **A1.2** Spring Balance Demo	**A1.1** Tug of War https://phet.colorado.edu/sims/html/forces-and-motion-basics/1.0.0/forces-and-motion-basics_en.html **A1.2** Worksheet	**A1**. Honesty in Observation
			A2. describe everyday situations that demonstrate: a. balanced forces such as a box resting on an inclined plane, a man standing still, or an object moving with constant velocity; b. unbalanced forces, such as freely falling fruit or an accelerating car;	Situational Multiple Choice	Mini-demonstrations	**A2**. https://www.physicsclassroom.com/class/newtlaws/lesson-1/balanced-and-unbalanced-forces	**A2**. Practicality

TOPIC	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	ASSESSMENTS	ACTIVITIES	RESOURCES	INSTITUTIONAL CORE VALUES
	energy crisis by seeking renewable energy solutions.		**A3**. draw a free-body diagram to represent the relative magnitude and direction of the forces involving balanced and unbalanced forces;	**A3**. Diagramming	**A3**. Scenario-based Free-body Diagramming	**A3.1** https://www.physicsclassroom.com/interactive/newtons-laws/free-body-diagrams/launch **A3.2** Worksheet	**A3**. Respect for Accuracy
			A4. identify that when forces are not balanced, they can cause changes in the object's speed or direction of motion;	**A4**. Short Response	**A4**. Laboratory Experiment	**A4**. Worksheet	**A4**. Respect for Accuracy
B. MOTION: DISPLACEMENT & VELOCITY			**B1**. explain the difference between distance and displacement in everyday situations in relation to a reference point;	**B1**. Short Essay	**B1**. School Map "Walk"	**B1**. https://flexbooks.ck12.org/cbook/ck-12-cbse-physics-class-11/section/2.1/primary/lesson/distance-and-displacement/	**B1**. Respect for Varying Perspectives
			B2. distinguish between speed and velocity using the concept of vectors;	**B2**. Multiple Choice	**B2**. Modified Sack Race	**B2**. Speed vs Velocity Worksheet	**B2**. Respect for Accuracy

TOPIC	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	ASSESSMENTS	ACTIVITIES	RESOURCES	INSTITUTIONAL CORE VALUES
C. DISTANCE - TIME GRAPHS			**C1**. describe uniform velocity and represent it using distance-time graphs;	**C1**. Graphing Uniform Motion	**C1**. Plotting and Analyzing Graphs	**C1.1** https://www.youtube.com/watch?v=lrHAnr9cYdQ **C1.2** https://corbettmaths.com/wp-content/uploads/2013/02/distance-time-graphs-pdf.pdf	**C1**. Respect for Accuracy
D. HEAT TRANSFER			**D1**. identify advantageous and disadvantageous examples of conduction, convection, and radiation;	**D1**. Situation Analysis/Sorting	**D1**. Simple Demonstrations	**D1**. https://bundy.byu.edu/wp-content/uploads/2017/02/Lesson%20Plans/Projects%202011%20Combined.pdf	**D1**. Appreciation
			D2. explain the difference between heat and temperature;	**D2**. Essay	**D2**. Video Watching	**D2**. Heat vs Temperature https://www.youtube.com/watch?v=LL54E5CzQ-A	**D2**. Respect for Accuracy

TOPIC	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	ASSESSMENTS	ACTIVITIES	RESOURCES	INSTITUTIONAL CORE VALUES
			D3. gather information from secondary sources to identify and describe examples of innovative devices that can be used to transform heat energy into electrical energy.	**D3**. Infographic	**D3**. Energy Gallery Walk	**D3**. https://piktochart.com/infographic-maker/	**D3**. Innovativeness
			D4. explain in terms of the particle model the processes underlying convection and conduction of heat energy; and	**D4**. Diagram Analysis	**D4**. Online Simulation	**D4.1** https://www.youtube.com/watch?v=Y1BbDKiVfV0 **D4.2** https://javalab.org/en/conduction_2_en/ **D4.3** https://byjus.com/physics/heat-transfer-conduction-convection-and-radiation/	**D4**. Sustainability, Efficiency
			D5. Generalize that the principles of force, motion, and heat transfer help people design safer, more efficient, and	**D5**. CER	**D5**. Sentence Completion	**D5.1** https://www.escoffieronline.com/pros-and-cons-of-common-cookware-	**D5**. Responsibility, Stewardship

TOPIC	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	ASSESSMENTS	ACTIVITIES	RESOURCES	INSTITUTIONAL CORE VALUES
			sustainable solutions in transportation, housing, and energy use* (added LC)			materials/ **D5.2** https://home.howstuffworks.com/thermos2.htm	
			D6. design practical solutions or prototype that applies the principles of force, motion, and heat transfer for improved efficiency, safety, or comfort* (*added LC*)	**D6**. Performance Task Everyday Engineering: Designing a Prototype or Practical Solution	**D6.1** Scaffold 1: Forces in Action **D6.2** Scaffold 2: Heat on the Move **D6.3** Mini-design Challenge	**D6.** Worksheets	**D6**. Innovativeness

Unit Curriculum Map

Q4 Science 7 Earth and Space Science

TOPIC/ QUARTER	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	ASSESSMENT	ACTIVITIES	RESOURCES	INSTITUTIONAL CORE VALUES
4th A. Faults, Earthquakes, and Tsunami	Learners learn that: 1. Rapid movements along normal, reverse or strike-slip faults cause earthquakes. 2. The damage or effects on communities depend on the magnitude of and distance from an earthquake. 3. Sunlight is the Earth's external source of energy. 4. Solar energy influences the atmosphere and weather patterns. 5. The revolution, rotation, and the tilt of the Earth explain	The learners are able to: *By the end of the Quarter, learners* appreciate the value of using systems to analyze and explain natural phenomena and demonstrate their understanding in explaining the dynamics of faults and earthquakes. They are confident in identifying and assessing the earthquake risk for their local communities using authentic and reliable secondary data. They use the country's disaster awareness and risk reduction management plans to identify and explain to others what to do in the event of an	**A1**. Classify geological faults (i.e. normal, reverse, strike-slip) according to the angle of the fault plane and direction of slip	**A1**. Multiple Choice	**A1**. Sorting Faults (diagram classification)	**A1**. https://www.usgs.gov/faqs/what-relationship-between-faults-and-earthquakes-what-happens-a-fault-when-earthquake-occurs	**A1**. Scientific Literacy
			A2. Describe how the effects of earthquakes on communities (infrastructure and environmental damages; social and economic disruption) depend on their magnitude and intensity.	**A2.** True or False	**A2**. Two- Column Table Case Study: "Comparing Earthquake Impacts"	**A2**. https://www.phivolcs.dost.gov.ph/index.php/earthquake/destructive-earthquake-of-the-philippines/17-earthquake	**A2**. Empathy, Awareness
			A3. Describe procedures (before, during, after) that the authorities have in place to alert communities of pending tsunamis and what procedures can be	**A3**. Checklist/Matching Test	**A3**. Video Viewing: "Tsunami Ready!"	**A3**. https://www.youtube.com/watch?v=oWzdgBNfhQU https://www.redcross.org/get-help/how-to-prepare-for-emergencies/types-	**A3**. Responsibility

TOPIC/ QUARTER	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	ASSESSMENT	ACTIVITIES	RESOURCES	INSTITUTIONAL CORE VALUES
	the patterns of day and night and the seasons.	earthquake. Learners explain the cause and effects of secondary impacts that some coastal communities may experience should a tsunami be produced by either local or distant earthquake activity. Learners use reliable scientific information to identify and explain how solar energy influences the atmosphere and weather systems of the Earth and use such information to appreciate and explain the dominant processes that influence the climate of the Philippines.	implemented should a tsunami impact a community.			of-emergencies/tsunami.html	
			A4. Use models or illustrations (block models, diagrams, and map) to explain how movements along faults generate earthquakes and identify and explain which types of faults are most likely to occur in the Philippines and explain why	**A4**. Diagram Analysis (Identifying Errors)	**A4**. "Faults in Action: Block Model Exploration"	**A4**. https://www.usgs.gov/faqs/what-a-fault-and-what-are-different-types	**A4**. Critical Thinking
			A5. Make a physical or digital model of a fault system (normal, reverse, or strike-slip) and illustrate: a. the location of the epicenter in relation to the focus of an earthquake; b. the difference between the magnitude and the intensity of an earthquake;	**A5**. Constructed Response	**A5**. "Earthquake Model Showcase"	**A5**. https://www.youtube.com/shorts/i2ia25z_oEY	**A5**. Creativity

TOPIC/ QUARTER	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	ASSESSMENT	ACTIVITIES	RESOURCES	INSTITUTIONAL CORE VALUES
			c. how underwater earthquakes may or may not generate tsunamis.				
			A6. Explain how earthquakes (tectonic/volcanic under the sea earthquakes) result in tsunamis that devastate shoreline communities.	**A6**. CER	**A6**. Video analysis	**A6**. https://youtu.be/Wx9vPv-T51I?si=VDCjTZCCsw4ZdyNl https://www.youtube.com/watch?v=_oPb_9gOdn4	**A6**. Scientific Literacy
B. The Sun, Atmosphere, and Earth's tilt			**B1**. Identify the Sun as the primary source of energy driving weather patterns and climate on Earth.	**B1**. Multiple Choice	**B1**. Sun Energy Exploration: Lab Simulation Part 1	**B1**. https://www.youtube.com/watch?v=kyE3Yd1_zDc	**B1**. Scientific Literacy
			B2. Describe the Earth's basic motions (rotation and revolution) and the tilt of its axis in relation to the Sun.	**B2**. Multiple Choice	**B2**. Earth's Motion Model: Lab Simulation Part 2	**B2**. https://www.youtube.com/watch?v=kyE3Yd1_zDc	**B2**. Scientific Literacy
			B3. Explain how energy from the Sun interacts with the atmosphere.	**B3**. CER	**B3**. Closed Reading	**B3**. The Sun's Energy: An Essential Part of the Earth System |	**B3.** Resilience and Preparedness

TOPIC/ QUARTER	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	ASSESSMENT	ACTIVITIES	RESOURCES	INSTITUTIONAL CORE VALUES
						Center for Science Education Solar Energy https://climate.nasa.gov/news/3084/how-the-sun-powers-earths-weather/	
			B4. Make a physical model or drawings to demonstrate understanding of how the tilt of the Earth relative to its orbit around the Sun affects the varying intensity of sunlight received at the poles, tropics, and equator throughout the year.	**B4**. Error Analysis using Models	**B4**. Laboratory Activity	**B4**. https://spaceplace.nasa.gov/seasons/en/ https://education.nationalgeographic.org/resource/seasons/	**B4**. Creativity
			B5. Explain, using models, how the tilt of the Earth in relation to its orbit around the Sun, causes changes in the length of daytime and nighttime at different times of the year (e.g., longer days in summer, shorter days in winter, and equal	**B5**. CER	**B5**. Video Analysis	**B5**. Earth's Tilt 1: The Reason for the Seasons 404 | NASA Climate Kids	**B5**. Critical Thinking

TOPIC/ QUARTER	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	ASSESSMENT	ACTIVITIES	RESOURCES	INSTITUTIONAL CORE VALUES
			day-night length during equinoxes).				
			B6. Explain how the unequal heating of the Earth's surface by solar energy causes differences in air pressure that lead to the formation of local winds (land and sea breezes), seasonal wind patterns (monsoons), and global wind convergence at the Intertropical Convergence Zone (ITCZ).	**B6**. Constructed Response	**B6**. Learning Station and Stick It Together	**B6**. https://education.nationalgeographic.org/resource/wind/?utm https://earthobservatory.nasa.gov/images/703/the-intertropical-convergence-zone?utm	**B6**. Critical Thinking
			A1- B6. Assess the risks of earthquake- and weather-related hazards (such as typhoons, monsoons, and flooding) in their local community using scientific tools and reliable information, and demonstrate appropriate preparedness actions by applying local disaster readiness	**A1- B6.** Performance Task: Community Hazard Preparedness Portfolio	**A1- B6.** Scaffold Activity 1: Exploring Local Hazards (Research + Mapping) Scaffold Activity 2: Case Study Analysis: Past Disasters in the Philippines	**A1- B6.** https://www2.phivolcs.dost.gov.ph/faultfinder/ https://www.sciencedirect.com/science/article/pii/S2590061721000442 -Interview/ Observation Guide and Template	**A1- B6**. Community

TOPIC/ QUARTER	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	ASSESSMENT	ACTIVITIES	RESOURCES	INSTITUTIONAL CORE VALUES
			plans at home, in school, and in the community.		Scaffold Activity 3: Preparedness Drill & Reflection	-Risk Assessment Guide and Template	