LESSON PLAN TEMPLATE

Lesson Title	Captured Moments: The Impact of Physics in Daily Living
Learning Area/s	General Science
Name of Teacher/s	DEPED TAMBAYAN PH
Grade Level and Section	www.depedtambayanph.net
No. of Sessions	4 Sessions (1 Week)
References	Uploaded Files: SHS_GS_Q1_LAS_LE1.pdf, SHS_GS_Q1_LE1.pdf
Declaration of AI use	This lesson plan was co-created using Gemini AI to assist with unpacking competencies into a 4-session learning design, structuring activities, and assessment formulation.

Intentions.
Meaningful learning experiences are anchored in how we frame them. Start by deciding what you want learners to master by the end of the lesson – keep it clear and simple.

Learning Competency and Curriculum Standards:	**Learning Competency:** Physics in Daily Life: • Identify various ways physics enhances our quality of life across different areas, including household activities, health and safety, work productivity, and leisure. **Content Standards:** • Physics principles apply to numerous aspects of everyday living. • Understanding linear and angular quantities to describe motion helps in the design of efficient machines. • The efficiency of simple and compound machines can be improved by applying basic physics principles. • Hydraulic systems exploit the relationship between pressure, force, and area to multiply forces and perform tasks. • Analysis of electricity generation, consumption patterns, and energy-efficiency practices can lead to better energy supply and management. • An understanding of the properties of light and sound leads to their safe and productive application. • Past research in the field of chemistry provides the foundations for the development of helpful products and processes. • Household and personal care products contain chemical substances that determine their properties and guide their proper use and disposal. **Performance Standards:**

	By the end of the term, learners identify general physics principles and their applications in daily life. They use scientific principles to solve problems, make informed decisions, and illustrate the applications of physics for self, society, and the environment. They design simple and compound machines and hydraulic systems to demonstrate applications of force, torque, center of mass, and hydraulic-related principles. They evaluate energy-efficient practices in electricity supply and consumption at home and local businesses and explore the advantages and drawbacks of light and sound in medical imaging, security, communication, and entertainment.			
	Session 1	**Session 2**	**Session 3**	**Session 4**
Learning Objectives:	• Describe how basic physics principles (motion, heat, electricity) are applied in common household tasks and appliances. • Illustrate the importance of physics in maintaining modern household routines.	• Explain how physics concepts (impulse, momentum, force absorption) contribute to safety and injury prevention. • Analyze the effectiveness of safety materials through a simulated impact experiment.	• Identify how physics enhances efficiency in tools and machines at work. • Relate linear and angular quantities to the design of efficient mechanical systems.	• Analyze the role of physics in leisure and technology through personal media. • Summarize the overall impact of physics as a foundational branch of science on the quality of life.
Learner Context:	• Diverse learners with varying levels of prior exposure to scientific terminology. • Includes students requiring visual aids and simplified instructions to bridge the gap between abstract concepts and daily experiences.	• Hands-on learners who benefit from kinesthetic activities. • Accommodations for students with motor difficulties during the experiment phase via peer-assisted groups.	• Includes learners who require multi-modal representation (visual diagrams of machines vs. tactile models). • Emphasis on local workplace contexts (e.g., farming tools or construction equipment) for relevance.	• Support for students without digital access through the provision of magazines/newspapers for the 'Captured Moments' activity. • Inclusive sharing session that values diverse personal interests (gaming, sports, arts).
Learning Experience. Identify activities and interactions to help learners gain knowledge, skills, or understanding in a purposeful way.				
Pre-Lesson:	**Think-Pair-Share:** Learners reflect on the question: 'Where do you see physics in your daily life?' in a 2-minute silent reflection followed by a 3-minute discussion with a seatmate.	**4 Pics, 1 Word (Physics Edition):** A quick game to review Day 1 concepts like force and energy transformation using visual puzzles.	**Physics Charades:** Students act out concepts like 'lever', 'pulley', or 'torque' for the class to guess, activating physical memory of mechanical principles.	**Recall Activity:** Brief recap of the week's themes: Home, Safety, and Work Productivity.
Flow:	**1. Introduction:** Teacher presents key ideas on the board (motion, electricity, heat) based on the pre-lesson sharing. **2. Visual Prompt:** 'If Physics Disappeared'	**1. Demonstration (Active Retrieval):** The 'Egg Drop Simulation'—dropping an egg/ball onto different materials (towel, foam, cardboard) to observe which protects	**1. Interactive Lecture:** Introduction to simple and compound machines and how they multiply force or change direction using the relationship	**1. Main Activity (LAS 1):** 'Captured Moments'—Students browse their own social media or photo galleries to find 5 photos showing physics in daily life (e.g., a photo of a concert for sound waves, a selfie

	activity—students imagine a world without these principles (e.g., no lights, no cooking). **3. Scaffolding:** Watch the video '5 Examples of Physics in Everyday Life' to ground concepts. **4. Check for Understanding:** Students list three household appliances and the specific physics concept (e.g., Microwave - Heat/Electromagnetic Waves) they utilize.	it best. **2. Discussion:** Linking observations to 'time of impact' and 'impulse'. **3. Video Context:** Show crash simulation videos (helmets and airbags). **4. Social Learning:** Group Role-Play representing scenarios (e.g., biker with a helmet, car with airbags) explaining the physics of the safety device.	between pressure, force, and area (Hydraulics). **2. Scaffolding:** Use a diagram of a hydraulic jack to explain force multiplication. **3. Activity:** 'The Productivity Audit'—students list tools used in a specific profession (e.g., mechanic, carpenter) and identify the physics principle used to increase productivity.	for optics/light). **2. Analysis:** Students complete a table analyzing what is happening, the physics involved, and how it is applied. **3. Synthesis:** Class discussion on 'Why understanding physics is important in real-life situations'.
Learning Resources:	• Laptop/Projector • YouTube Video: '5 Examples of Physics in Everyday Life' • Chalkboard	• Eggs/Balls, Foam, Cardboard, Towels • Crash Test Simulation Videos • Role-play Rubric	• PowerPoint Presentation on Machines • Printed Worksheets: 'The Productivity Audit' • Diagrams of Hydraulic Systems	• Personal Mobile Devices/Digital Devices • Magazines/Newspapers (for those without phones) • Learning Activity Sheet (LAS 1)
Opportunities for integration:	Integration with TLE (Home Economics) through the discussion of energy consumption in home appliances.	Integration with Health and MAPEH through the discussion of protective gear in sports and road safety.	Integration with Mathematics through the calculation of mechanical advantage and pressure ratios.	Integration with Media and Information Literacy (MIL) through the ethical use of social media photos for educational analysis.
Assessment. Assessments reveal what learners have gained and what they still need help with.				
Formative Assessment:	**One-Sentence Completion:** Students complete: 'I think learning physics is important because _____.' Responses are posted on a 'Why We Study Physics' board.	**Star-Rating Feedback:** Peer groups rate role-plays based on the accuracy of the physics explanation (1-3 stars) using the provided rubric.	**Exit Ticket:** Students must explain how a specific machine at a local business makes 'work' easier in terms of force or time.	**LAS Synthesis Questions:** Evaluation based on the 20-point rubric (Relevance, Identification, Explanation, Reflection, and Organization).
Ways Forward. Meaningful learning can also happen beyond the classroom. Pause and reflect on what happened today.				
Extended learning opportunities:	Observe one chore at home (e.g., sweeping, washing dishes) and write a short paragraph explaining the forces involved.	Research one safety feature in modern smartphones (e.g., gorilla glass or shock absorption) and the physics behind it.	Interview a family member about a tool they use at work and identify if it is a simple or compound machine.	Write a brief 'Thank You' letter to a physicist (past or present) whose discovery has most improved your daily quality of life.

Reflections:	Reflect on how well students connected abstract principles like 'electromagnetism' to the familiar 'refrigerator'.	How did the concrete 'egg drop' experiment facilitate the understanding of the abstract concept of 'impulse'?	Identify which machines students found hardest to analyze—were compound machines too complex for a single session?	Evaluate the quality of reflections in the LAS—did students move beyond 'it's everywhere' to 'it works because...'?