5E Lesson Plan Template

Teacher's Name		Subject/Course Title Grade Level	Date
Snežana Savić		Science, Technology, Art, Recycling and resource recovery Grade 4th	22.4.2025. (Earth Day)
Materials Needed: Plastic bottles Old paper Aluminum cans Wood pieces Flowers Paper, colors, markers Stickers, stencils, old magazines for cutting out pictures		 Lesson Outcomes: (what the student is expected to learn and to do) Understanding the Importance of Recycling and Renewable Energy Knowledge of Different Types of Waste Practical Application of Knowledge Collaboration and Communication Skills Critical Thinking and Problem Solving Creative Expression Self-Reflection and Evaluation 	
Engage 10 min	The teacher begin with a conversation about waste and recycling. The questions may be: • What is recycling? • Why is it important to recycle? • What types of waste do you know? • Do you know how old mobile phones, paper, and plastic can be reused? Students, in groups, are tasked with creating an "Environmental Map" on which they will place different types of waste (paper, plastic, glass, metal) and connect them to recycling or recovery methods. The activity gives teachers the opportunity to assess students' ability to analyze, discuss, and connect information about environmental protection. The activity allows students to practically connect theoretical knowledge with the real world by creating an "Environmental Map," which helps them better understand the processes of recycling and renewable energy sources. ACTIVITIES: Questioning Investigation Reading KWL chart		
Explore 30 min	Activity – Science and Technology Teachers can ask questions that encourage students to think about sustainability, recycling, and the application of technology in everyday life. The activity allows students to collaborate, communicate, and work together to solve problems, thereby developing their social skills and teamwork abilities. Students will explore how different types of waste can be converted into new products or energy. Using simple materials, they will create a demonstration of a small recycling system.		

	 Materials: Plastic bottles Old paper Aluminum cans Wood pieces Flowers (for the discussion on renewable energy sources Paper, colors, markers Stickers, stencils, old magazines for cutting out pictures Task: Each group will choose one material and create a simple "prototype" that shows how that material could be recycled. For example, a group might create a small "wind turbine" using paper and an old CD, or a "mini solar panel" using foil and glass. Students can use numbers to calculate how much plastic or paper they can recycle within a certain time period, helping them understand the amount of waste that can be saved.
	ACTIVITIES: Demonstration Investigation Observation Calculation Reading KWL chart
Explain 10 min	After students complete the activities, the teacher uses this information to provide further explanation about recycling, renewable energy sources, and how technology can help preserve the environment. During this phase, students ask additional questions to clarify uncertainties, while the teacher connects their responses with new technical information (using video materials or software). This phase allows students to focus their understanding and lay the foundation for further learning.
	ACTIVITIES: KWL chart Reading Data Collection and Analysis Sculpture from Recycled Materials Building Prototypes
Elaborate 25 min	Students should create a poster that promotes the importance of recycling and renewable energy sources. Materials: Paper, colors, markers Stickers, stencils, old magazines for cutting out pictures The posters can include drawings, colors, and simple messages. This will allow them to engage in art and learn how to shape messages visually.
	ACTIVITIES: Brainstorming ideas

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	Sketching and planning Collaborative poster design Research Reflection and discussion	
Evaluate	Each group presents their poster and recycling prototype. Students will explain what they have learned about recycling, renewable energy sources, and how	
15 min	technology can help protect the environment.	
	Discussion:	
	• What is the most important way to reduce waste?	
	• How can we use technology to create a better world?	
	ACTIVITIES:	
	Poster and Prototype Presentation	
	Class Discussion	
	Self-Reflection	
	3-2-1 Responses	