



Module 8

Technology and Energy

Learning Objectives:

By the end of this module, students will be able to:

- Recognize and name various common electronic items.
- Associate and use verbs that indicate common functions of electronic items (e.g., turn on, play, rewind).
- Understand the basic concept of electricity and energy in relation to electronic items.
- Make several models of the solar system or its components.
- Identify the planets by their relative size, basic shape, common color, key features, and position in the solar system.
- Practice and apply key vocabulary words related to technology, energy, and the solar system.
- Use modal verbs (e.g., can, could, should, must) to describe actions and possibilities with technology.

This module is divided into two main units, with a clear connection between technology and the broader concept of energy (including solar energy for the solar system part).

- Unit 1: Everyday Technology: Electronic Items
- Unit 2: Our Solar System: Energy from the Sun

Unit 1: Everyday Technology: Electronic Items

Duration: 2 Weeks

Concepts:

8.1 Technology:

 Electronic items: Common devices used in daily life (e.g., television, radio, computer, smartphone, tablet, fan, air conditioner, microwave, blender, flashlight).

Related verbs:

- Turn on / Turn off (power control)
- Turn up / Turn down (volume, speed, temperature control)
- Play / Pause / Stop (media control)
- Repeat (audio/video function)
- Go forward / Rewind (media navigation)
- Record, Connect, Charge, Plug in, Unplug.

Grammar:

Modal verbs: Can (ability/permission), Could (possibility/past ability),
Should (advice), Must (necessity).

Procedures:

• 8.1 Labeling electric items:

 Show pictures or actual electronic items. Students identify and name them orally and in writing. Categorize items by function (e.g., entertainment, communication, kitchen appliances).

Selecting one of them and explaining its use:

- Students choose an electronic item they know well.
- They explain its primary purpose and how to operate it in simple English sentences.

Writing sentences integrating the verbs list:

- Guided practice: "I can turn on the television." "You should turn down the volume." "He must plug in his phone to charge it."
- Students write their own sentences using different electronic items and the target verbs/modal verbs.

Discriminating electric items through a listening:

- o Teacher describes an electronic item or its sound. Students identify it.
- Teacher gives instructions involving verbs (e.g., "Turn on the fan," "Play the music"). Students listen and identify the action.

Attitudes:

- **8.1 Valuing the utility the electric items have every day:** Discussing how electronic items make our lives easier, more productive, and more enjoyable.
- Developing an awareness of safe use of electronic devices.
- Showing curiosity about how electronic items work.

Progress / Achievement Indicators:

The student:

- **8.1 Completes a puzzle about electric items:** Successfully identifies and names various electronic items from a visual or word puzzle.
- Explains one electric item selected: Clearly describes the function and basic operation of a chosen electronic device in English.
- Creates a poster with the sentences done. Illustrates them: Produces a visually appealing poster featuring correct sentences using target verbs and modal verbs, accompanied by relevant illustrations.

- Completes information in a listening: Accurately answers questions or fills in blanks based on audio descriptions or instructions related to electronic items.
- Uses modal verbs (can, could, should, must) correctly in sentences related to technology.

Suggested Assessment Activities:

- 8.1 Delivering a written test:
 - o Matching exercises: electronic item to its name.
 - Sentence completion: using correct verbs (turn on/off, play, etc.) and modal verbs.
 - Short answer questions: "What is a smartphone used for?"
- **Presenting orally an electric item:** Students present their chosen item to the class, explaining its function and demonstrating verb use (e.g., "This is a remote control. I *can* use it to turn on the TV and *turn up* the volume.").
- **Explaining the poster designed:** Students present their poster, reading their sentences and explaining their illustrations.
- Answering a listening through the teacher's voice or CD: Students listen to commands or descriptions and perform actions (e.g., "Point to the item you use to *play* music") or answer questions (e.g., "What did I *turn off*?").
- "Show and Tell" (modified): Students bring a small, safe electronic item from home and describe it using new vocabulary and verbs.

Unit 2: Our Solar System: Energy from the Sun

Duration: 2 Weeks

Concepts:

- **Solar System:** The Sun, planets (Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune), moon, stars.
- Planet Characteristics:
 - o **Size:** Relative size comparison (e.g., Jupiter is the biggest).
 - o Shape: All planets are spherical.

- o **Color:** Observable colors (e.g., Mars is red, Earth is blue and green).
- Features: Rings (Saturn), Great Red Spot (Jupiter), polar ice caps (Mars/Earth), oceans (Earth).
- o Position: Order from the Sun.
- **Energy:** The Sun as the primary energy source for our solar system.



Grammar:

- Review of Adjectives: (big, small, hot, cold, rocky, gaseous, red, blue, green).
- Comparatives and Superlatives: (bigger, smaller, hottest, coldest, largest, smallest).
- Prepositions of position: (near, far from, between, next to).
- Wh- questions: (What, Which, How big, Where).

Procedures:

- Introducing the Solar System:
 - Watch an engaging video about the solar system.
 - Teacher-led discussion identifying the Sun and the eight planets.
- Identifying the planets by size, shape, color, features, and position in the solar system:

- Use flashcards or digital images of planets. Students identify them and describe their characteristics.
- o Create a classroom "planet line-up" showing their order from the Sun.
- Compare and contrast planets using adjectives, comparatives, and superlatives. (e.g., "Earth is smaller than Jupiter, but bigger than Mars.").

Practice key vocabulary words:

- Vocabulary games (e.g., "Pictionary," "Charades" for solar system terms).
- Labeling diagrams of the solar system.

Make several models of the solar system:

- o **Option 1 (2D):** Create a poster with labeled, illustrated planets in order.
- Option 2 (3D): Use craft materials (styrofoam balls, play-doh, paper mache) to create models of individual planets or a full mobile solar system, painted to show features and colors.
- Option 3 (Collaborative): Each group creates one planet with detailed features and prepares to present it.

Attitudes:

- Valuing the vastness and wonder of space.
- Developing curiosity about scientific concepts.
- Appreciating the Sun as a source of light and heat (energy).
- Showing creativity in designing models.

Progress / Achievement Indicators:

The student:

- Accurately labels planets in a diagram of the solar system.
- Describes each planet using at least three descriptive words (size, color, feature, position).
- Uses comparative and superlative adjectives correctly when comparing planets.

•	Constructs a model of the solar system or individual planets that shows key characteristics.
•	Participates actively in vocabulary practice.