Phantom Energy Detective Hunt Activity

Objective

Students will identify and list school or classroom devices that use phantom energy, also known as "vampire energy" — energy consumed by electronics when they are turned off but still plugged in.

Materials

- List of common devices (provided below)
- Chart to track usage (template included)
- Clipboards and pens (for on-site tracking)
- Discussion space (classroom or virtual platform)
- Power Strip given in kit

Activity Description

Step 1: Introduction to Phantom Energy

- **Duration:** 10 minutes
- **Method:** Discuss the concept of phantom energy and its impact on energy consumption and environmental health.
- **Topics to Cover:**
- What is phantom energy?
- Examples of devices that use phantom energy.
- Why is it important to reduce phantom energy use?
- How does the power strip help with phantom energy?

Step 2: Device Identification and Listing

- **Duration:** 20 minutes
- **Method:** Provide students with a list of common devices that are often sources of phantom energy.
- **Examples of Devices:**
    - TV
    - Computer
    - Microwave
    - Printers

    - Chargers (phone, laptop, etc.)
    - Coffee maker
- Students will use this list during their hunt to identify and record devices.

Step 3: Phantom Energy Detective Hunt

- **Duration:** 30 minutes
- **Method:** Students will walk around the school to spot the listed devices.
- They should check if these devices are plugged in but not in use.
- Students will mark these observations on their charts.

Step 4: Data Recording

- **Duration:** 10 minutes
- **Method:** Students will use the provided chart to document the devices they found consuming phantom energy.
- **Chart Columns:**
    - Device Name
    - Location Found
    - Plugged In (Yes/No)
    - In Use (Yes/No)

Step 5: Class Discussion

- **Duration:** 20 minutes
- **Method:** Discuss the findings as a class.
- Which devices were most commonly found to be using phantom energy?
- What strategies can be implemented to reduce phantom energy use?
- How can these practices be integrated into daily routines at school?

Step 6: Conclusion and Reflection

- **Duration:** 10 minutes
- **Method:** Reflect on the activity and discuss the potential energy savings and environmental benefits of reducing phantom energy use.

Chart Templates for Tracking Usage

Device Name	Location	Plugged In? (Yes or No)	In Use? (Yes or No)

Location	Current Energy Usage	Observations on Energy Wastage	Suggestions for Conservation
Classroom	Lights always on, computers left running	Lights on even when room is empty	Use natural light, turn off lights when not in use
Cafeteria	Refrigerators running constantly	Fridges sometimes left open	Ensure doors are closed, use energy-efficient models
Home - Kitchen	Oven and stove used frequently	Oven preheated for long periods	Plan cooking to minimize preheating time
Home - Living Room	TV left on, multiple devices plugged in	Devices on standby mode overnight	Unplug devices when not in use, use power strips

Additional Ideas:

- Encourage students to complete this activity at home and then use the power strip from the kit to help reduce phantom energy.
- Encourage students to think critically about energy use and to propose solutions for reducing phantom energy at school and at home.
- Use this activity as a springboard for a broader project on energy conservation and environmental stewardship.
- Share the findings with the school community to raise awareness and promote energy-saving practices.

This activity not only educates students about an often-overlooked aspect of daily energy consumption but also engages them in practical, investigative learning that can lead to real-world environmental impact.