

# HOW THE WORLD WORKS

OCT 10 - NOV 18 (6 WEEKS)

## GRADE 4 NEWSLETTER



### CENTRAL IDEA

Transformation of electrical energy reduces human efforts and instills the need for conservation

### KEY CONCEPT

form, function, responsibility

### RELATED CONCEPT

conservation-transformation

**Lines of inquiry:** Sources of energy (form) Ways electrical energy is transferred, transformed and controlled (function) How we utilize energy (responsibility)

**Attributes:** Inquirer - balanced **ATLs:** research, thinking and communication

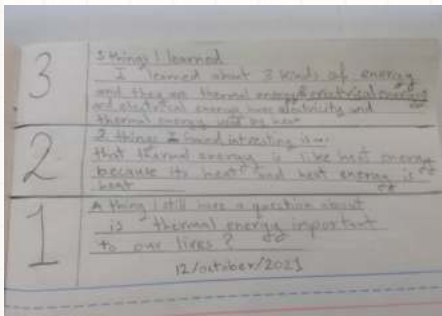
# TUNING IN

Sources of energy



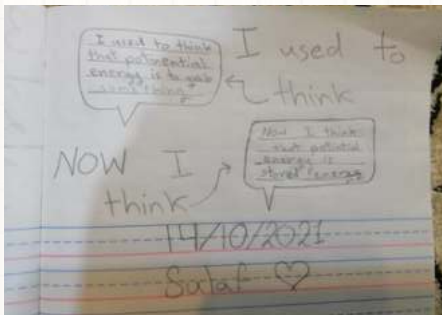
## IDENTIFYING FORMS OF ENERGY

Students used a KWL chart to access their prior knowledge about energy.



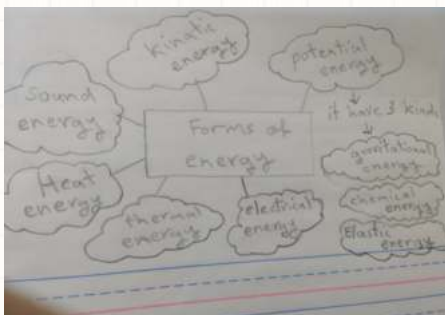
## 321 STRATEGY

Students watched a video about forms of energy. They used 321 strategy to write about ideas and information they came up with about various forms. They also broadened their thinking, challenges and questions they have in their UOI journal.



## I USED TO THINK NOW I THINK

electrical energy at home.

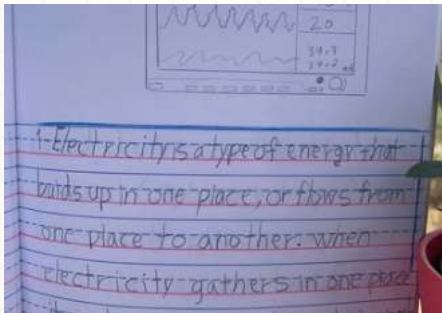


## FORMATIVE ASSESSMENT

Students searched for different forms of energy. They used a concept map.

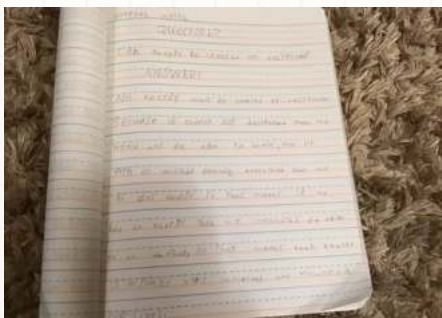
# FINDING OUT

Ways electrical energy transferred, transformed and controlled . Week 2

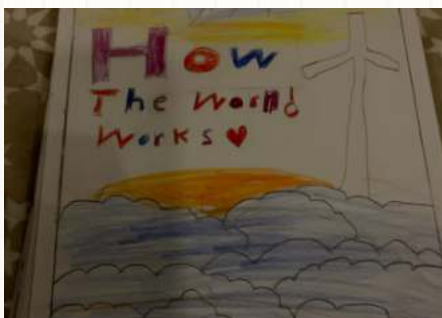


## IMPORTANT FACTS ABOUT ELECTRICITY

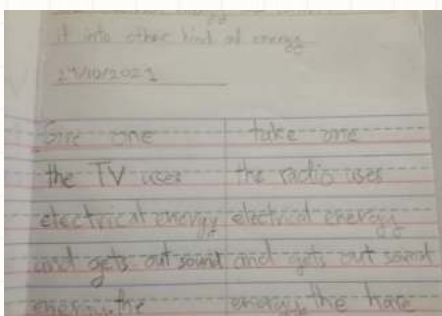
Students used their research skill to inquire and find about most important facts about electricity.



## CAN ENERGY BE CREATED OR DESTROYED YES OR NO? WHAT MAKES YOU SAY THAT?

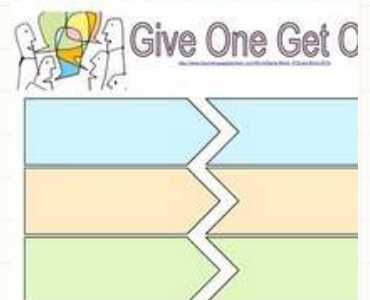


## ART CLASS



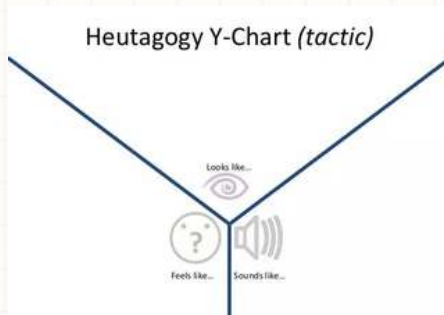
## FORMATIVE ASSESSMENT- GROUP WORK

Students gave examples of objects that can transfer electrical energy to other forms of energy (light and h



# SORTING OUT

(importance of energy in every day life )



## RESPONSIBILITY-FUNCTION

### LIFE WITHOUT ENERGY

Students used Y-Chart to express their feeling on how life would look like without energy!

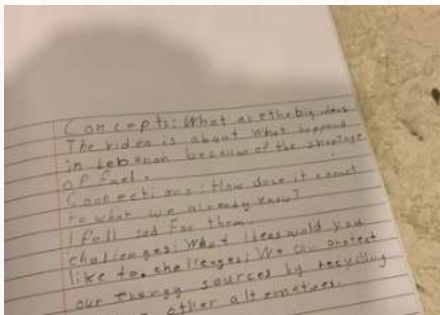
#### 4 C's Thinking Routine

<b>Concepts:</b> What are the big ideas?	<b>Connections:</b> How does it connect to what we already know?
<b>Challenges:</b> What ideas would you like to challenge?	<b>Changes:</b> What changes in attitude, thinking or action are suggested?

## VIDEO ABOUT LEBANON CRISES

connection to real life/Communication skill:I'm able to speak clearly, make informed word choices, and control my tone and pace when I express my ideas, so they make sense to others.

Students Watched a video of Lebanon energy crises ! They wrote their feeling toward the availability of energy in their country.



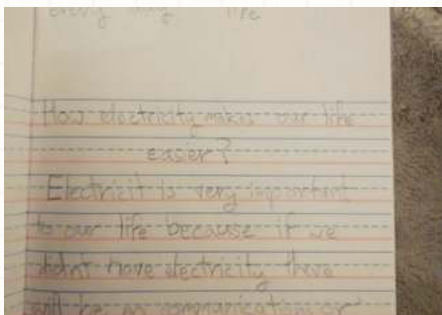
## FORMATIVE ASSESSMENT

asynchronous

Importance of energy in everyday life

Students searched about the relationship between energy and life.

They inquired about the ways in which electrical energy makes their lives easier.



# GOING FURTHER AND MAKING CONCLUSION

. Describe how we utilize energy.



## STUDENT WILL CREATE A POSTER FOR SAVING ENERGY

Students Created a poster on how to conserve energy with Art teacher.

## A DAY WITHOUT ENERGY

Formative for week 5 / thinking skill: I'm practicing using my knowledge and skills in new situations or when solving a problem. Present your prompt to the class/ ICT

A day without power ( compass point strategy)

1. E = Excited  
What excites you about this idea or proposition? What's the upside?
2. W = Worrisome  
What do you find worrisome about this idea or proposition? What's the downside?
3. N = Need to Know  
What else do you need to know or find out about this idea or proposition? What additional information would help you to evaluate things?
4. S = Stance or Suggestion for Moving Forward  
What is your current stance or opinion on the idea or proposition? How might you move forward in your evaluation of this idea or proposition?

## ENERGY PROJECT

by using the design process, students built a project that used one of the renewable resource as a source of energy to run and generate electricity.

The screenshot shows a digital gallery interface for a summative task. At the top, it says 'Zahrah Almatawah · 21h' and 'Summative task'. Below that, the instruction reads: 'Show how to generate electricity using renewable resources, use the generated energy to power your equipments'. The gallery contains several project items:

- Project items**: A section with a 'Fill the design process organizer' card showing a circular flowchart with 'ASK', 'IMAGINE', 'PLAN', 'CREATE', and 'IMPROVE' stages.
- Group 1 (Alnawraa, Layla, Yasmin, Fatimah Ukar, Zahra, Larin D, Fatimah buzaid, Khula)**: A project card showing a small solar panel setup on a table.
- Group 2 (Leena Alqahtani, Batoul, Albatool, Nourya, Wajed, Lina m, Sumo, Sulaf)**: A project card showing a handwritten poster titled 'My Project VIBES' with colorful drawings and text.
- Group 3 (Fatimah Almohsen, Fatimah Alhassar, Leen Alshamasi, Ayah Alzayer, Ayah Alzirigi, Sara Alkhuder, Layan, Hour)**: A project card titled 'Electric Generator House' showing a small wooden house model with a wind turbine on its roof.









