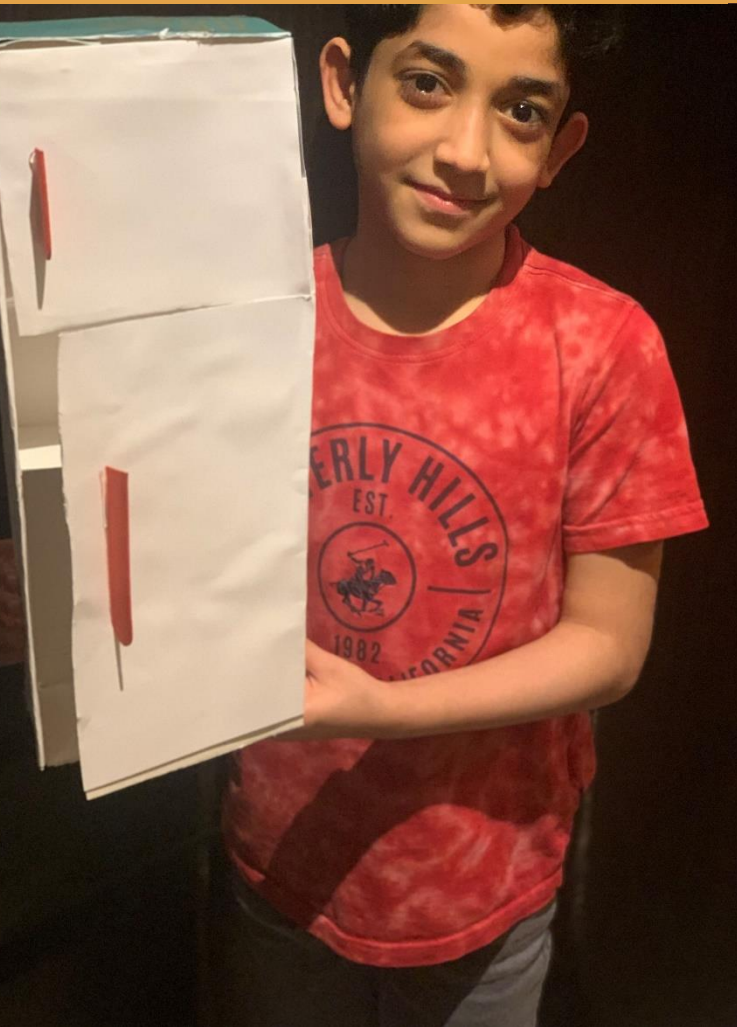


# HOW THE WORLD WORKS

Rand International School



## GRADE 3

NewsLetter

### Lines of inquiry

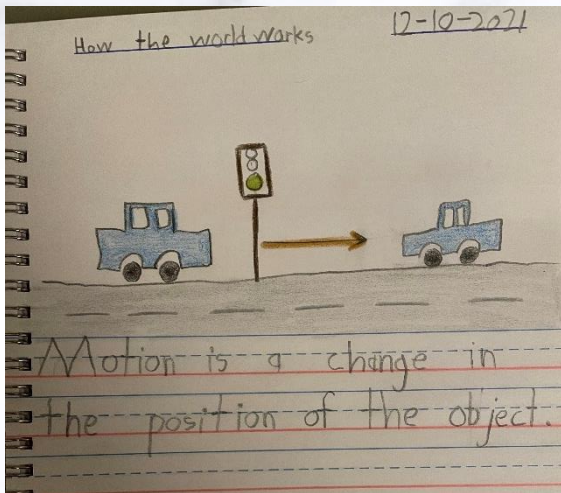
- 1- Effect of force on motion (**Function**)
- 2- Energy has different forms (**Form**)
- 3- Energy can be changed to different forms (**Change**)

**ATLs:** Research and Thinking skills

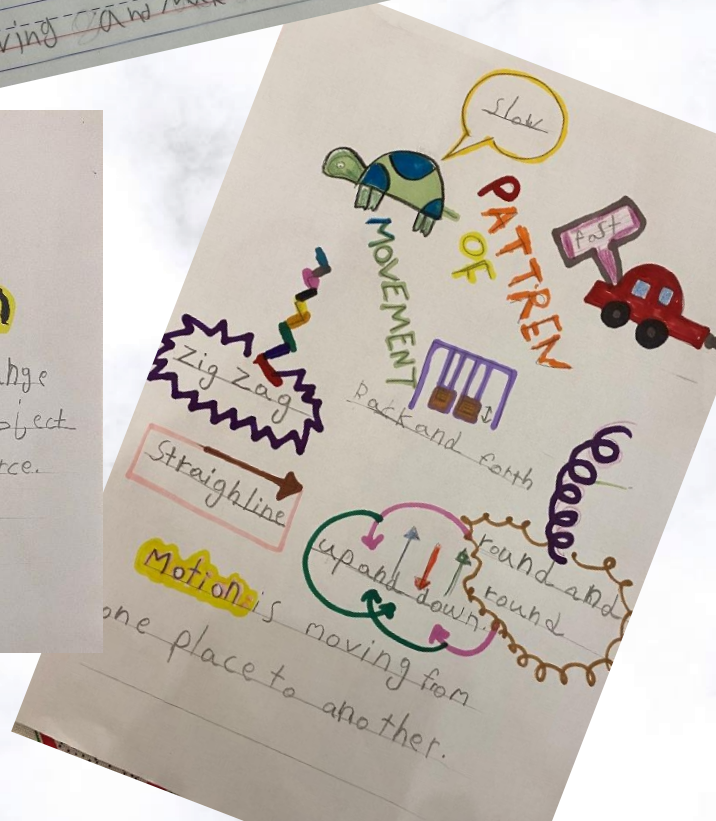
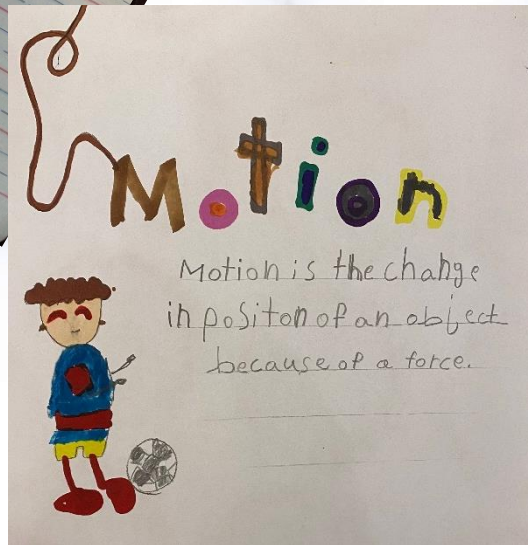
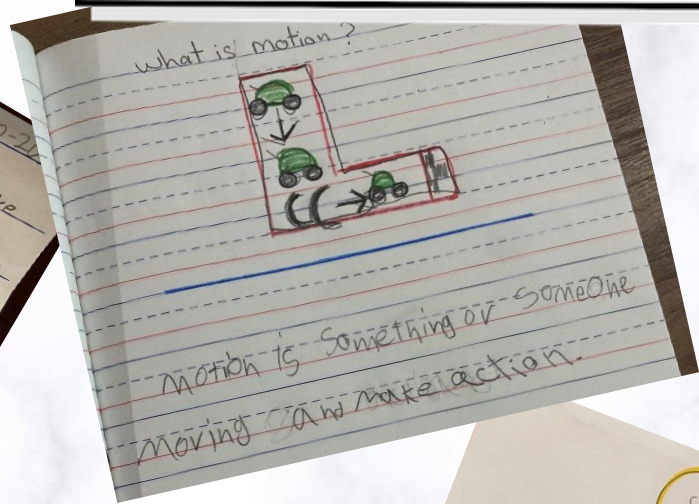
**Learner profile:** Inquirer – Thinker

# TUNNING IN

## Position and Motion



At the beginning students discovered the relationship between position and motion. They showed various patterns of movement and gave examples.



## What I LEARNED

# FINDING OUT

**Function: Effect of force on motion.**



Students learned different types of forces that can affect motion...  
Students learned that any action from force can cause the object to accelerate, decelerate, to stop or to change direction.

Balanced force      unbalanced force

300      300      250      300

1. Balanced force cause the to make no change if the forces are equal. IF IS motion less.

2. Unbalanced force cause the object to change or move in the direction of the greater pull.

Contact and noncontact forces 31-10-

Push  
Friction

Contact forces:      Noncontact forces:

Push or pull an object with touching it.

Friction is a contact force that opposes the motion of an object.

Can push or pull an object without touching it.

Magnetism is a noncontact force that pull on or attracts metal objects containing iron.

## Type of Forces

**Contact forces**  
Interactions between objects that touch

- Spring
- Applied
- Frictional
- Normal

**Non-Contact forces**  
attract or repel even from distance

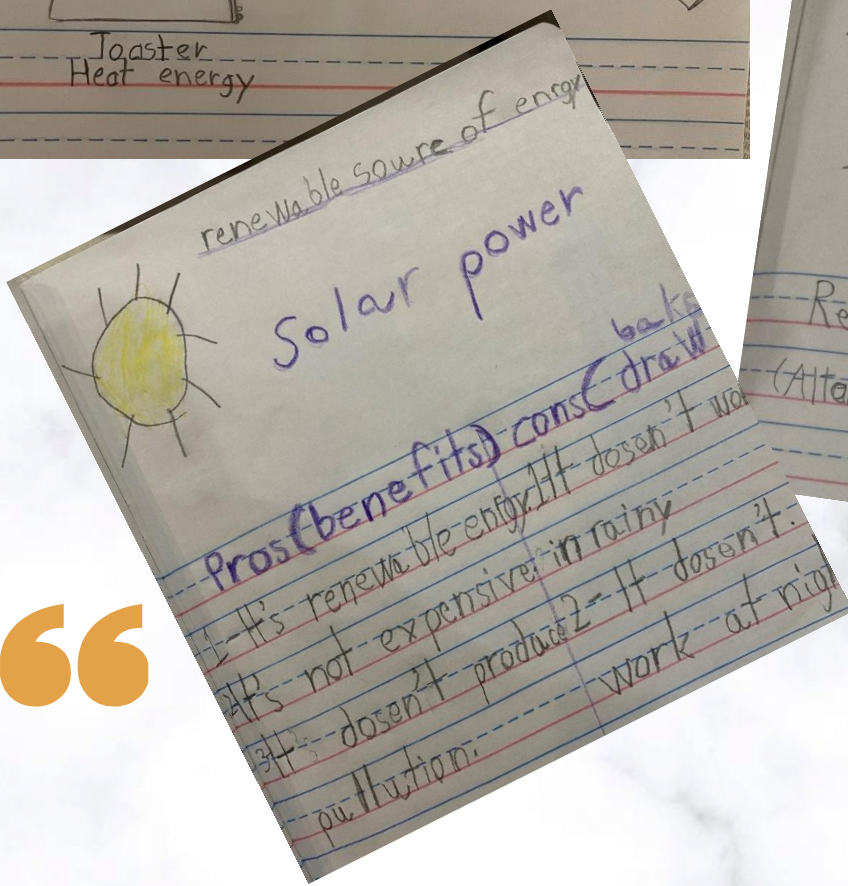
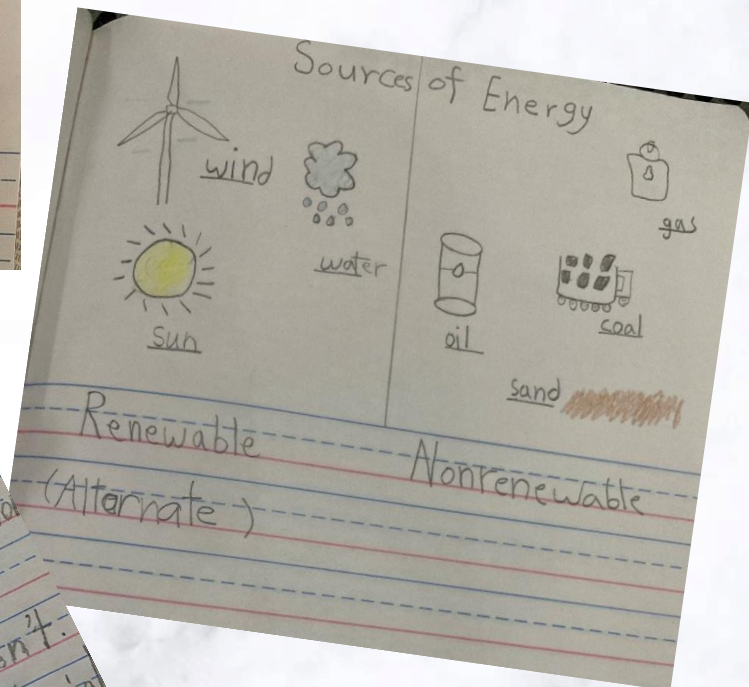
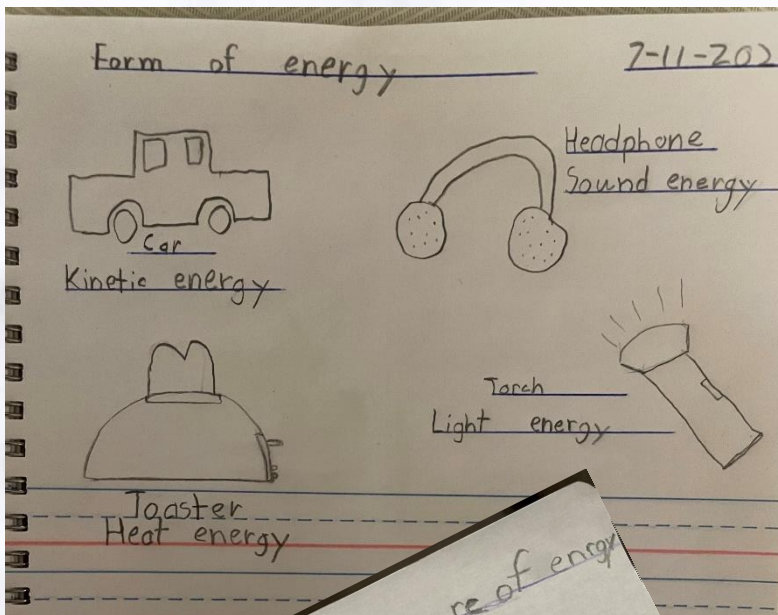
- Magnetic
- Electric
- Gravitational

# SORTING OUT

Form: Energy has different forms.



Students learned different types of energy include thermal energy, sound energy, chemical energy, nuclear energy, electrical energy, motion energy, sound energy, mechanical energy and gravitational energy. They mentioned different sources of energy, moreover, they stated pros and cons of using alternate sources of energy.



# GOING FURTHER

**Change: Energy can be changed to different forms.**



**Students observed every day energy transformation by completing or observing simple activities. They recorded their observations and then used those observations to create the chain of energy transformations that are occurring.**

Energy transformation

chemical potential energy to  
 sound energy  
 one form of energy change to  
 another form.

Name	Energy Use	Energy Produced	Picture
Lamp	Electrical	Light	
Iron	Electrical	Heat	
TV	Electrical	Sound	
Swing	potential	Kinetic	



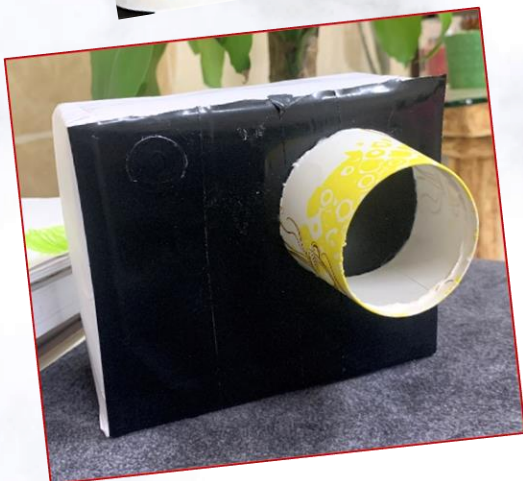
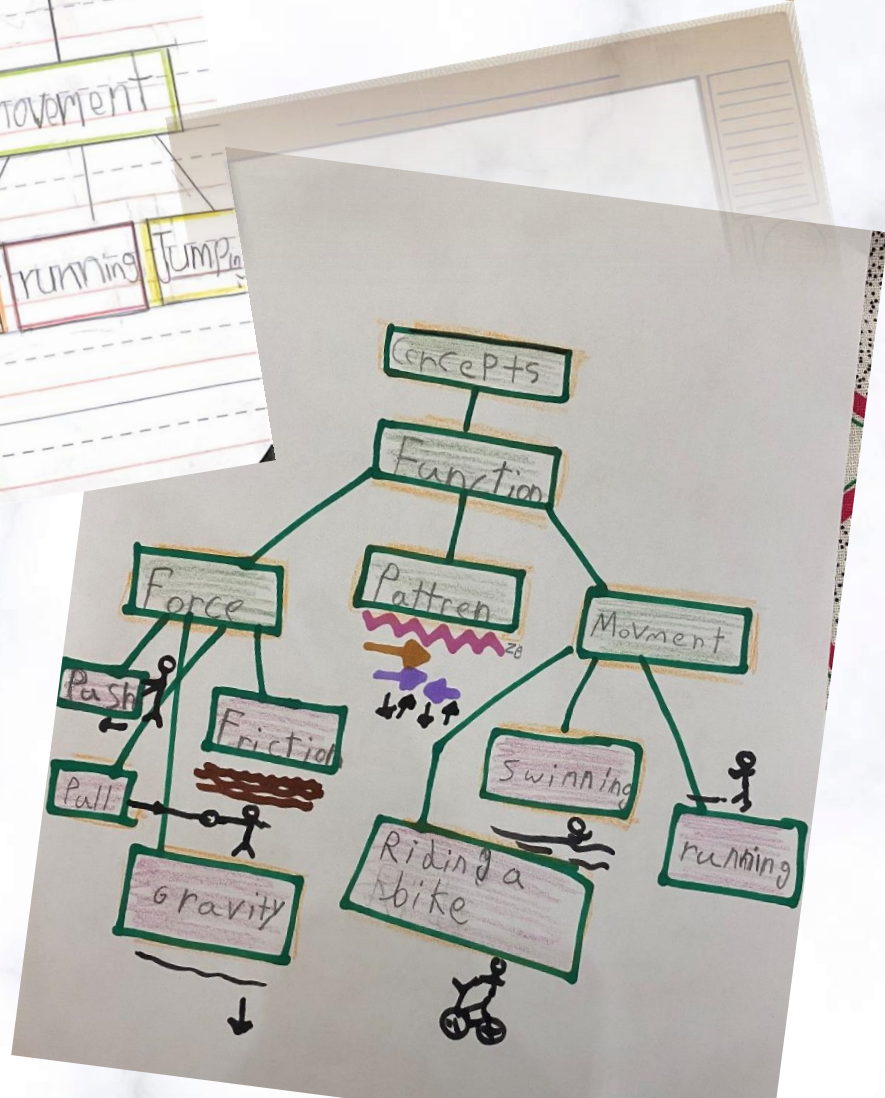
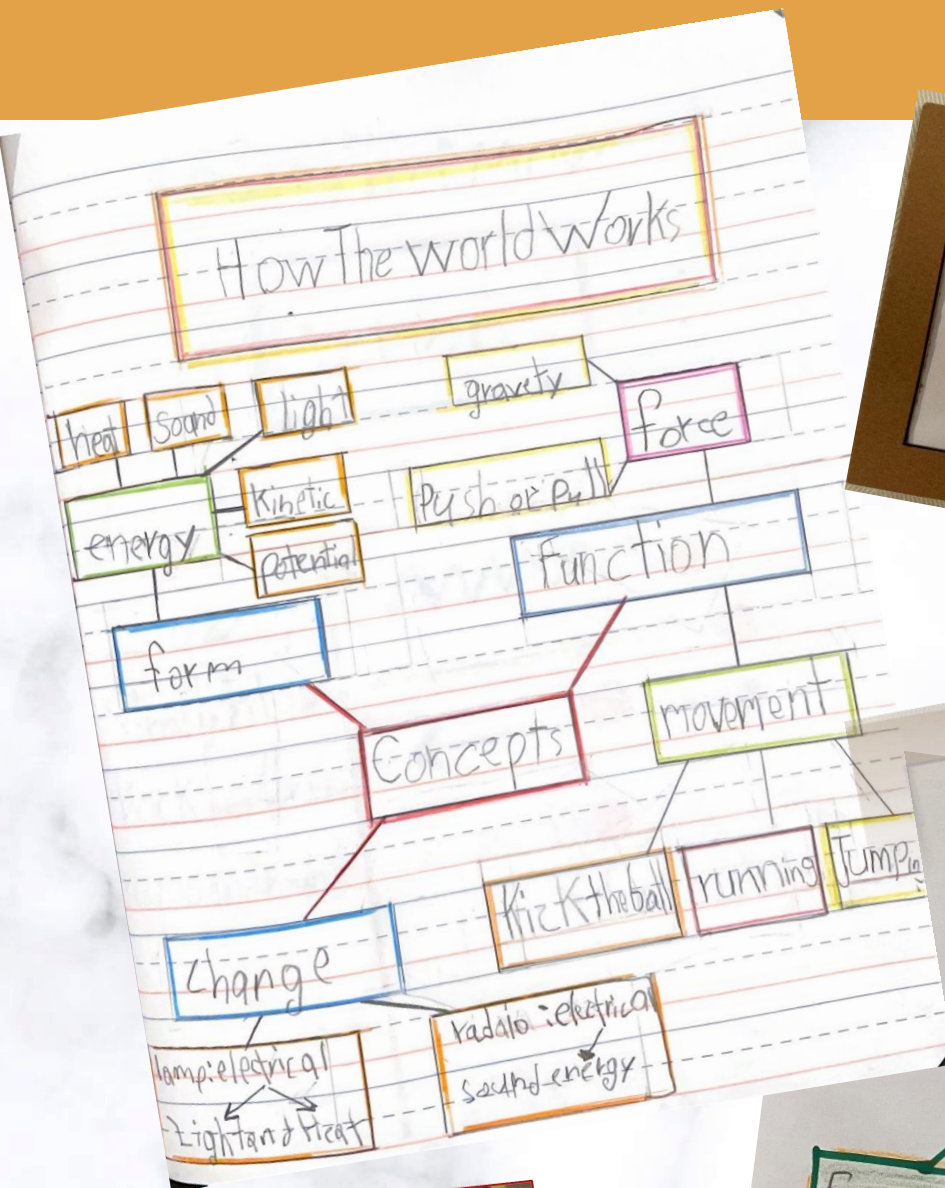
Energy transformation 16-11-2021

Electrical energy to Light energy

Energy transformation is the process of changing one form of energy to another form.

# CONCEPT MAP

Students displayed key concepts and related concepts on a graphic web.



# SUMMATIVE TASK

**Students used recycling materials to create a 3D model then, they explained what type of energy it uses and how energy transforms from one form to another.**

