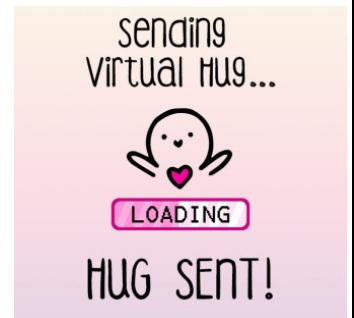


**Week 11:**

**(Natural Science, Personal & Social Wellbeing & Religious Education)**

Dear Grade Fours,



Thank you to all of you who are working so hard to keep up with your schoolwork during these very challenging times. It's not too long now and then we will all be back at school together again. I look forward to that. In the meantime, stay safe and warm. I miss you.

Mrs. Martins.

**Natural Science:**

1. Mark and do corrections for the Natural Science Revision Test you did last week. Please mark and do any corrections in grey pencil.
2. Read the information in your textbook on page 56 as well as the information page on energy for life.
3. Complete Activity One ( Energy For Life)

**Personal & Social Wellbeing (PSW):**

1. Continue doing your project on your chosen religion. Remember it must be in booklet (A4 size) form. Your project will be assessed for marks so make sure it is completed by the time you return to school.

**Religious Education:**

1. Read the account of where Peter walks on water in your Bible in the book of Matthew, Chapter 14; 22 -32.
2. Complete the crossword.



**LORETO CONVENT SCHOOL  
NATURAL SCIENCE & TECHNOLOGY REVISION TEST  
TERM TWO  
GRADE FOUR**

**TOTAL (40)**

1. Are the following statements true or false? (5)

- a) The three forms in which states of matter can exist are solids, liquids and manufactured materials.

**False – matter exists as solids, liquids and gases.**

- b) A liquid has a fixed shape

**False – Liquids take the shape of the container they are in.**

- c) Some materials can be strengthened by changing their shape.

**True**

- d) Gases have no shape but they take up space.

**True**

- e) A raw material is a natural material such as wood and clay that are made into other things.

**True**

1. Jane covered a beaker of water with plastic wrap and left it in a sunny place. When she came back an hour later she noticed droplets of liquid on the inside of the cling wrap. Answer the following questions.

- a) What were the droplets made of? (1)

**Water**

- b) Name the process by which these droplets formed. (1)

**Condensation**

- c) If Jane measured the volume of water in the beaker after one hour would it be greater, the same or less than when she started the investigation?

Explain your answer. (3)

**The water in the saucer would be less because the sun's heat caused some of the water to evaporate making the volume of water in the saucer less.**

2. A group of learners made ice cream. They mixed together milk, sugar and cocoa powder. They poured the mixture into a plastic container and put it into the freezer. The learners took the container out of the freezer the next day.  
Answer the following questions.

a) What state of matter was the milk when the learners began? (1)

**Liquid**

b) What state of matter was the milk when they took the ice cream out of the freezer? (1)

**Solid**

c) Why did the milk change from one state to the other? (1)

**The milk was frozen.**

d) Name the process that took place to make the milk change state. (1)

**Solidification**

e) Why could the learners pour the ice cream mixture into the container before they put it into the freezer? (1)

**The milk was liquid so it took the shape of the container it was poured into.**

3. From this list:

**glass jug, dish cloth, gum boots, toothbrush, clay pot, clay brick, newspaper,  
plastic plate, leather belt, towel**

a) Name two objects that are **flexible**. (2)

**Newspaper**

**Leather belt**

b) Name one object that is **waterproof**. (1)

**Gumboots**

c) Name two objects that are **absorbent**. (2)

**Dish cloth**

**Towel**

d) List one object that is **brittle**. (1)

**Glass Jug / clay pot**

4. State why you would say an object is made of a soft material. (1)

**If you can scratch, cut or dent a material then it is soft.**

5. Which raw material was used to make a glass jug? (1)

**Sand.**

6. Give an example of a manufactured ceramic material. (1)

### **Wash basins/baths/toilets/tiles**

7. Explain how a soft clay brick becomes hard. (1)  
**They are baked / fired in a very hot oven called a kiln which makes them harder and stronger.**
8. Compare the properties of a glass jug with a plastic jug. (2)  
**A glass jug is hard but fragile a plastic jug is hard but strong.**
9. Describe what a fabric is and give an example. (2)  
**Cloth produced by knitting or weaving fibres. Examples: nylon, polyester, cotton, linen, wool**
10. List two ways materials can be strengthened to build stronger structures. (2)  
**By folding or tubing.**
11. Look at the photograph of an animal shelter. Answer the questions.



- a) What is the name of the animal shelter in the picture? (1)  
**A chicken coop.**
- a) Is the shelter natural or man-made? (1)  
**It is man-made.**

- b) Name two materials that have been used to make this shelter. (2)

**Wood**

**Wire**

- c) Is the structure an example of a shell or a frame structure? (1)

**It is an example of a frame structure.**

- d) Write a sentence to describe the size and shape of the shelter. (1)

**It is mainly a rectangular shape and of medium size.**

12. Give **ONE** word for each of the following. (3)

- a) The process whereby water vapour turns into liquid.

**Condensation**

- b) Rain, hail, snow, sleet

**Precipitation**

- c) The process whereby liquids change to a gas or vapour.

**Evaporation**

## UNIT I(Energy For Life)

### What is energy?



Energy is the ‘ability to do work’. Energy is how things change and move. It’s everywhere around us and it takes all sorts of forms. It takes energy to cook food to ride a bicycle or to jump in the air.

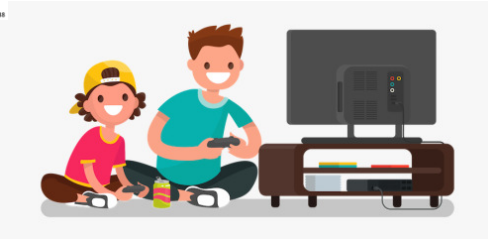
### All about energy

- ❖ All living things need **energy** to live. They use **energy** to grow, to breathe, to move, to feed.
- ❖ **Energy** makes things happen or it makes things move or change.
- ❖ We need **energy** to grow, play, work and sleep.
- ❖ **Energy** is all around us.
- ❖ All living things use **energy** for everything they do.
- ❖ Animals get their **energy** from food.
- ❖ The **energy** in our food is transferred is transferred through food chains starting with the sun.
- ❖ Other kinds of energy include **movement energy**, **heat energy**, **light energy** and **sound energy**.
- ❖ **Energy** is transferred from a **source** (something we get energy from) to where it is needed.
- ❖ In order to do anything – breathe, get out of bed, do your homework or play soccer – you need **energy**.
- ❖ All types of machines that help us such as televisions, the stove, a light bulb need **energy** in order to work. In science we say, that **energy** is needed to do work.
- ❖ The source of all **energy** on earth is the sun. The sun provides us with two types of energy: - heat energy and light energy
- ❖ We get all our energy from the food we eat. Whether we eat plants or animals all the **energy** comes from the sun.
- ❖ Plants make their own food. Plants are able to trap light energy from the sun in their leaves. They use this **energy** to make glucose (sugar found in fruits, plants and honey) from water and carbon dioxide. Grass traps sunlight to make energy so it can grow. A cow eats grass to get energy to make milk. That milk is then used to make cheese and yoghurt. People will then eat the cow’s meat and yoghurt or cheese and this will give us energy. We get all of our energy from the food we eat. This energy travels through living things ( plants and animals) and it is used when the living thing is eaten.
- ❖ The sun also keeps the Earth warm. The average temperature of earth is 15 °C. If we did not have a sun, planet earth would be too cold for us to live on.





## Everything we do uses energy!



### ACTIVITY ONE:

1. What is **energy**?

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2. What is the source of all energy on earth?

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3. Make a list of five things you have done today that needed **energy**.

- a) \_\_\_\_\_
- b) \_\_\_\_\_
- c) \_\_\_\_\_
- d) \_\_\_\_\_
- e) \_\_\_\_\_

4. Look at pictures 1 – 4.

1. 	2. 	3. 	4. 
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5. Match each picture with one of the statements below.

- a) We need energy to play music. Listening to music also uses energy. \_\_\_\_\_
- b) This man is using energy to travel in a canoe. \_\_\_\_\_
- c) Sleeping animals use energy. \_\_\_\_\_
- d) Riding a bicycle uses energy. \_\_\_\_\_

6. Which of the above activities do you think you need the most energy for?

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7. When you are asleep, why do you think does your body still need energy?

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8. Are the following facts about energy true or false?

a) Energy is the ability to do work.

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b) The source of all energy on earth is the moon.

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c) Energy is transferred from a source.

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d) All types of machines need energy to work.

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e) Some living things do not need energy.

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f) Animals get their energy from the food they eat.

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g) Energy makes things move or change.

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h) Living things use energy to breathe and to grow.

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i) The sun provides light and sound energy.

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j) Plants do not trap light energy in their leaves.

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## Unit 2 (Term3)

### Light & Darkness – Fears

Think about a time you were afraid – Things like being alone at home, seeing shadows in your room at night, hearing noises and imagining them to be something far more frightening than they really are, being too scared to answer a question in class in case you give the wrong answer, being too shy and self conscious to make friends with someone are all things that can make us afraid.

Natural phenomena like storms, thunder and lightning can also make us afraid.

Currently we are living in a very scary time indeed with the Covid 19 pandemic!

### What does the Bible tell us about fear?

Think about a dark room. What happens when you light a candle?

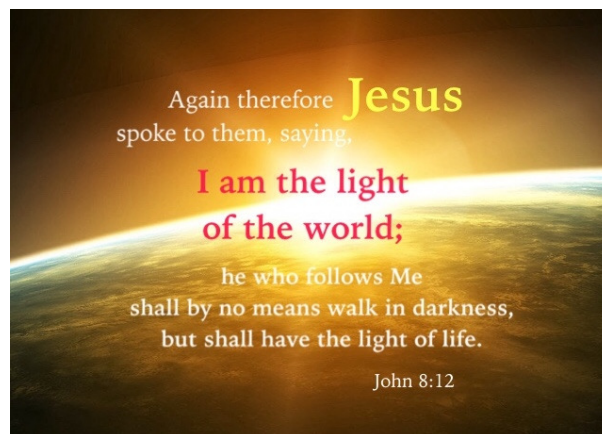
- ❖ People can see and are less afraid.

What would happen if we placed a tin over the light?

- ❖ The light goes out and the room is dark again.

In John 8:12 **Jesus** says ‘I am the **light of the world**. Whoever follows me will never walk in darkness, but will have the **light** of life...’

We need never be afraid because no matter in what circumstances we find ourselves in, Jesus is always with us.



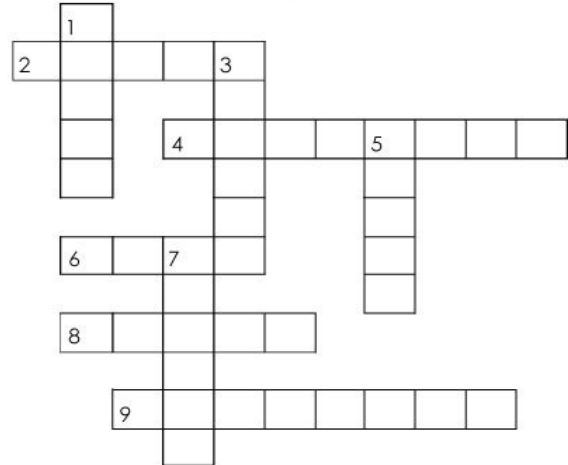
In your Bible, read the biblical account of where Peter walks on water. (Matthew 14: 22 – 32) Jesus calls us to do things for him just as he commanded Peter to get out the boat. Peter proved his obedience. Peter put his faith into action. He got out of the boat and stepped into the dangerous sea. As long as Peter kept his eye on Jesus and his trust in him he was fine. But, as soon as he took his eyes off Jesus and looked around at the waves, he began to lose his faith and sink. Jesus was right there all the time. He never leaves us. He will help us when we call to him.

# Matthew 14: 27

"Do not be afraid."



Fill in the crossword puzzle!



BOAT DISCIPLE PETER NIGHT SPIRIT  
AFRAID HOREB JESUS KINDNESS

## ACROSS

2. Son of God
4. The disciples went in this over the water
6. "Lord, let us see your \_\_\_\_"
8. The mountain of God
9. The ones who followed Jesus

## DOWN

1. One of Jesus's disciples
3. Holy \_\_\_\_
5. The time when the disciples saw Jesus walk on water
7. "Take courage, it is I; Do not be \_\_\_\_"