

## LESSON NOTE

School : Lovu Sangam School

Year : 8

Subject : English Worksheet 4

<b>STRAND</b>	Reading and Viewing
<b>SUB STRAND</b>	Text types media. Everyday communication, literacy text.
<b>CONTENT LEARNING OUTCOM</b>	Discover familiar and unfamiliar texts relevant for a particular purpose.

### COMPREHENSION

There are two passages in this Part. Read each passage carefully and then answer the questions that follow

#### Passage 1

#### The Mermaid of Kona

While many people dream of mermaids few people actually try to become one. How can someone become a mermaid if they don't exist?

5 “As a child, I always felt very connected to the ocean and played mermaids in the water,” says Dana. “My love for the ocean took me to different types of work as a **lifeguard**, swim instructor, underwater photographer, snorkel instructor and safety swimmer, boat captain and surfer. I just decided to take it to the next level and grow a tail.”

10 In 2008 Dana began making mermaid tails from sequins, fringe and shiny fabric that she wears while free diving in the waters around Kona, Hawaii. Free diving means diving without any protective equipment. It requires you to hold your breath while swimming deep underwater. As she dives in, Dana not only looks like a mermaid, she experiences what it is like to swim like one too.

15 “Free diving is all self-discipline and mind-over matter,” she said. Dana also said that breath is a big part of free-diving, relaxing the body and lungs in order for the body to stay oxygenated longer. Dana added that this ultimately takes practice, discipline and patience.

20 The waters around Dana's home in Kona are filled with wildlife, including dolphins and whales. Kona is by a sheltered sea where the waters are calm for swimming. For ten years Dana has been swimming with the creatures of Kona. Some of them have even learned to recognize her.

Source: <http://www.readworks.org/passages/mermaid-kona-hawaii>

### Questions

- What are the two types of work that Dana does as a result of her love for the ocean?  
A. Singer and dancer  
B. Guitarist and pianist  
C. Fisherman and farmer  
D. Boat captain and surfer
- When did she begin making mermaid tails?  
A. 2007      B. 2008      C. 2009      D. 2010
- The word **lifeguard** used in line 5 means  
A. diver.  
B. rescuer.  
C. transporter.  
D. destroyer

4. What does free diving mean?
- A. Diving with equipment.
  - B. Diving with protective equipment.
  - C. Diving without protective equipment.
  - D. Diving with equipment in the deep sea.
5. How long has Dana been swimming with the creatures of Kona?
- A. one year
  - B. two years
  - C. six years
  - D. ten years

**Passage 2**

Pita sat in the gardens one Sunday morning and thought how beautiful life would be for him if he could hold Sera's hand and run down the hill with her hand in his. He would be very happy and there would be nothing he would not be able to do if he could be close to the sweet song of **her** laughter, and there would be nothing he would want if he could hold her hand.

Sera came running up the hill. She held a branch of the flowering hydrangea in her hand, and it was lilac against her white shorts. Her bare brown legs were the colour of spice and she ran strongly up the hill on her toes. He buried his head in the book and pretended that he did not see her. He did not look up until he heard her voice. "Hello," she said. She was smiling and seemed far away from him, remote and out of reach. "Hello," he said, his heart thundering.

Source: *Primary Comprehension Skills - Book 3*

6. Where was Pita sitting on that Sunday morning?
- A. in the sea
  - B. in the house
  - C. in the ground
  - D. in the gardens
7. The word **her** in line 4 is referring to
- A. Sera.
  - B. Dana.
  - C. Pita.
  - D. the narrator.
8. What was in Sera's hand?
- A. a book
  - B. a ball
  - C. a plastic of flower
  - D. a branch of flower
9. How did Sera go up the hill?
- A. went by car
  - B. went by truck
  - C. ran up the hill
  - D. walk up the hill
10. When did Pita look up to Sera?
- A. when he saw her
  - B. when he thought of her
  - C. when she smiled at him
  - D. when he heard her voice



<b>STRAND</b>	Measurement
<b>SUB- STRAND</b>	Time
<b>CONTENT LEARNING OUTCOME</b>	Interpret and use of Digital and Analog Clocks with 12 and 24 Hour schedules

### TIME

**Time** is a measure in which events can be ordered from the past through the present into the future, and also the measure of durations of events and the intervals between them.

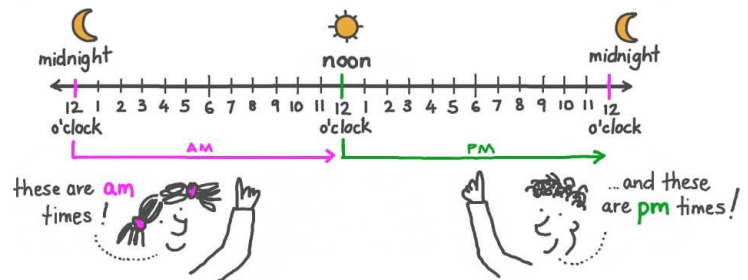
#### SOME SIMPLE TIME CONVERSIONS:

- ✓ 1 Year = 365  $\frac{1}{4}$  Days
- ✓ 1 Year = 12 Months
- ✓ 1 Year = 52 Weeks
- ✓ 1 Month = 4 Weeks
- ✓ 1 Week = 7 Days
- ✓ 1 Day = 24 Hours
- ✓ 1 Hour = 60 minutes
- ✓ 1 minute = 60 seconds

#### AM and PM Times

- **AM** – 12 hours from midnight until noon (morning times)
- **PM** – 12 hours from noon until midnight (afternoon, evening, night time)

#### AM AND PM



Ante Meridiem  
 Latin for "before midday"

Post Meridiem  
 Latin for "after midday"

### Telling the time



- |                                   |                                   |
|-----------------------------------|-----------------------------------|
| 2:00 - It's two o'clock.          | 2:30 - It's half past two.        |
| 2:05 - It's five past two.        | 2:35 - It's twenty-five to three. |
| 2:10 - It's ten past two.         | 2:40 - It's twenty to three.      |
| 2:15 - It's quarter past two.     | 2:45 - It's quarter to three.     |
| 2:20 - It's twenty past two.      | 2:50 - It's ten to three.         |
| 2:25 - It's twenty-five past two. | 2:55 - It's five to three.        |

We use AT + TIME when giving the time of a specific event.

- The class starts at nine o'clock.
- The flight leaves at ten to three.

We use IT IS or IT'S to answer a question that asks for the time right now.

- What time is it? - It is half past four.
- What's the time? - It's twenty to five.

### PARTS OF A CLOCK



60 SECONDS = 1 MINUTE  
 60 MINUTES = 1 HOUR

## ANALOG AND DIGIT CLOCKS

Clocks that use hands to show us the Hours and Minutes are called "**analog**" clocks.  
The **Little Hand** shows the Hours:



2 Hours



5 Hours

The **Big Hand** shows the Minutes:



30 Minutes  
or Half-Past



15 Minutes  
or Quarter-Past

Using both the **Big Hand and Little Hand**, we know exactly what time it is:



2:30 or  
Half-Past Two



5:15 or  
Quarter-Past Five

### Digital Clocks

Digital Clocks show us the time using numbers, like this:  
Examples:



5 Hours and 8 Minutes



9 Hours and 36 Minutes

**Hours : Minutes**

## 24 HOUR CLOCK TIMES

The 24-hour clock is a way of telling the time in which the day runs from midnight to midnight and is divided into 24 hours, numbered from 0 to 24. It does not use a.m. or p.m. This system is also referred to as military time or as continental time. In some parts of the world, it is called railway time.

### **To convert Time to 24 hours:**

- ❖ Written with 4 digits without decimal points
- ❖ No am or pm used but **Hours**
- ✓ All times after 12 mid-day (pm) will change, their pm times will add another 1200 Hours.
- ✓ All for Morning (am) Times, just add 0 in-front of the Time and remove the decimal point and the am. For double digit times, just remove the point and the am and add Hours

e.g 1.30pm = 0130

+1200

1330 Hours

- ❖ 12.00pm(midday) = 1200 Hours
- ❖ 12.00am(midnight) = 0000 Hours
- ❖ 1 am in the morning = 0100 Hours
- ❖ 6.30 am (in the morning) = 0630 Hours
- ❖ 5 am (in the morning) = 0500 Hours
- ❖ 10.30 am = 1030 Hours
- ❖ 3.00pm (in the afternoon) = 1500 Hours
- ❖ 6.30 pm (in the evening) = 1830 Hours
- ❖ 10.30 pm (in the night) = 2230 Hours

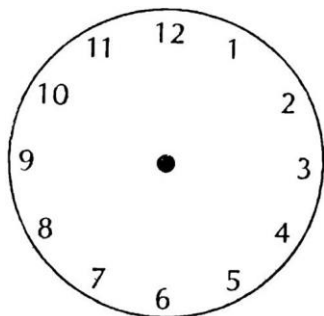
### **Consider this as a 24 Hour Clock Face**



## **STUDENT ACTIVITY**

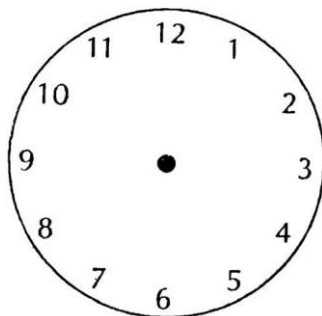
1. Given below are some clock Faces. Draw the time written underneath them.

a)



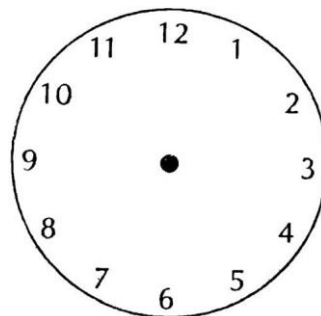
5 O'clock

b)



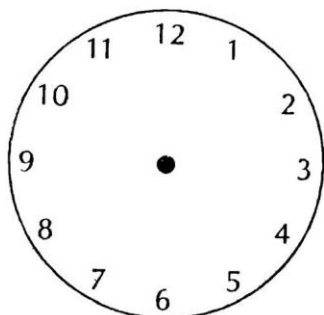
Quarter past 7

c)



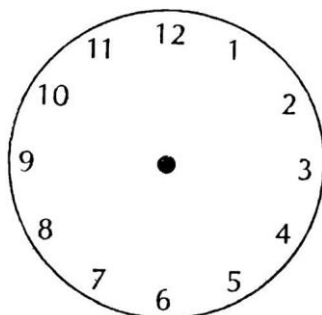
Twenty to 8

d)



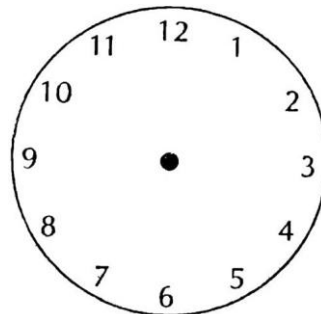
3.30

e)



Quarter to 7

f)



Twenty past 9



2.



## What Time is It?

**Directions:** Look at the clocks below. What time is it? Write the digital times beneath the clocks.

1.  : _____	2.  : _____	3.  : _____
4.  : _____	5.  : _____	6.  : _____
7.  : _____	8.  : _____	9.  : _____
10.  : _____	11.  : _____	12.  : _____

Write down the Correct Times Given below:

:

Two Fifteen

12:15

:

Ten Forty-Five

:

Nine Thirty

:

Three o'clock

8:45

:

Four Thirty

6:30

*Convert these times into 24 hour clock times.*

12 hour	24 hour
4:25am	
9:20am	
2:55am	
11:35am	
1:07am	
12:42am	
6:13am	

12 hour	24 hour
4:25pm	
9:20pm	
2:55pm	
11:35pm	
1:07pm	
12:42pm	
6:13pm	



**1075 LOVU SANGAM SCHOOL**  
**HEALTHY LIVING YEAR 8**  
**LESSON NOTES WEEK 4**

<b>Strand</b>	H3 – Safety
<b>Sub Strand</b>	H8.3.2 Community Safety
<b>Content Learning Outcome</b>	H8.3.2.2 Advocate community service which promotes wellness and make communities a better place without being paid.

**Participating in Community Service**

**What is Community Service?**

Community service is simply working without pay in order to serve a common good. The whole purpose of community service is based on the idea that it is a good thing to give without expecting anything in return, and that if everyone gives a little in their local community, the world can become a better place a little bit at a time.

**Why People do Community Service?**

There are many reasons people do community service and there are many different ways in which to participate:

- ❖ All of them share the common theme of making the world around you a better place without being paid.
- ❖ Some people like to do community service because they simply feel that it's the right thing to do.
- ❖ Some do community service because they want to give back to their community.
- ❖ Whether you come from a life of privileged or if you've had it a little rough, there is always someone who could use your help and your time, and for many, this is reason enough to work at giving back to their community.

**Ways of Participating in Community Service**

Community service is giving back to the community in some way, shape or form. This is an activity such as cleaning out a park, collecting items for charity, volunteering and much more. This is a rewarding job or volunteer opportunity for anyone involved.

**Advantages and Disadvantages of Volunteering**

Volunteering	
Pros	Cons
<ul style="list-style-type: none"><li>▪ Many different areas of volunteering</li><li>▪ You can learn a lot through volunteering</li><li>▪ Volunteering can help you mature in character</li><li>▪ Better impression regarding what you want to do with your life</li><li>▪ You can make many new friends</li><li>▪ You learn how to work in a group</li><li>▪ Volunteering gives you the opportunity to join a strong network</li><li>▪ Can look good at your résumé</li><li>▪ You get a broader perspective on life</li><li>▪ Usually lower stress levels compared to a normal job</li><li>▪ You can volunteer abroad</li><li>▪ High level of inner motivation to help others</li></ul>	<ul style="list-style-type: none"><li>▪ You don't earn money while volunteering</li><li>▪ Volunteering abroad can be expensive</li><li>▪ Many volunteers have too high expectations</li><li>▪ Volunteering abroad means to leave your partner at home</li><li>▪ Some volunteering organizations are quite dodgy</li><li>▪ Volunteering abroad may lead to homesickness</li><li>▪ Confrontation with reality may shock some kids</li><li>▪ You may lose motivation for volunteering</li><li>▪ Volunteering abroad can be dangerous</li><li>▪ Also volunteering can be real work</li><li>▪ You make a certain commitment</li><li>▪ May not be suitable if you already have kids</li><li>▪ You will be older when you finally get a job</li></ul>

## **Student Activity Sheet**

### **A: Fill in the blanks**

world	form	pay	community	idea
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1. Community service is based on the \_\_\_\_\_ that it is a good thing to give without expecting anything.
2. Some do community service because they want to give back to their \_\_\_\_\_.
3. Community service is simply working without \_\_\_\_\_ in order to serve a common good.
4. All of them share the common theme of making the \_\_\_\_\_ around you a better place without being paid.
5. Community service is giving back to the community in some way, shape or \_\_\_\_\_.

### **B: Short Answers**

1. What is the main idea behind community service?

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2. Why do people involve themselves in community service?

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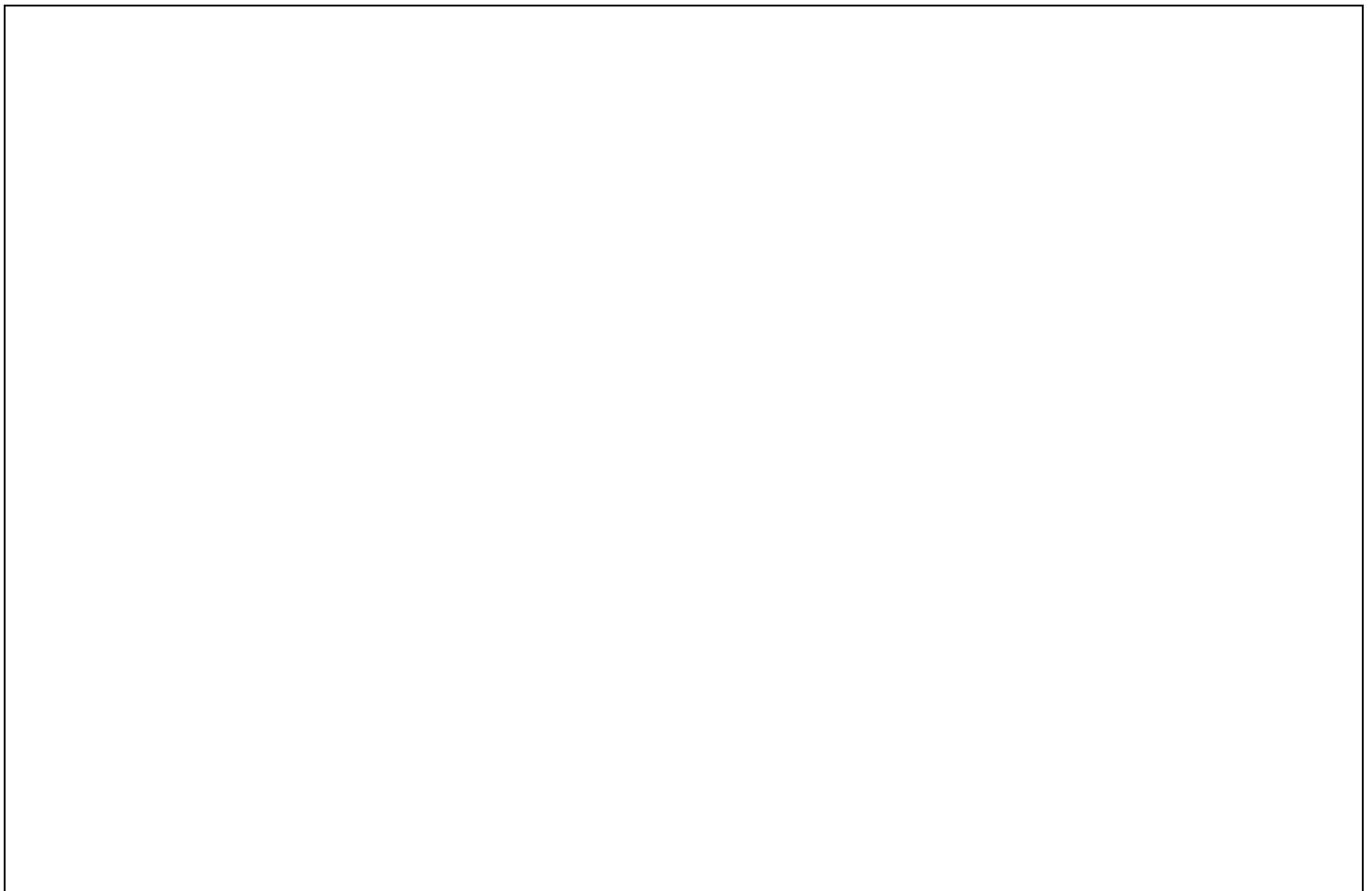
3. Have you ever done any community service in your area? If so, explain.

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4. Name some volunteer groups in your community or in our country.

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### **C: Creativity Section Draw, colour and label “People helping out in their Communities”**



**1075 LOVU SANGAM SCHOOL**  
**RE- ALIGN CURRICULUM HOMESTUDY PACKAGE WEEK 4**

**SUBJECT: HINDI**

**YEAR: 8**

<b>STRAND</b>	- पढ़ना एवं सर्वेक्षण करना (Reading & Viewing) Strand 2 - लिखना एवं निर्माण करना (Writing & Shaping) Strand 3
<b>SUB STRAND</b>	- सामाजिक एवं सांस्कृतिक संदर्भ और परिस्थितियाँ H 2.3 - भाषा की विशेषताएँ व नियम H 2.2 H3.2 -मूल- पाठ के प्रकार- मीडिया साधारण संप्रेषण साहित्यिक विषय H3.1
<b>CONTENT LEARNING OUTCOME</b>	- विभिन्न सामाजिक परिस्थितियों, उद्देश्यों व दर्शकों से संबद्ध पाठ में आए विचारों, जानकारी व घटनाओं की व्याख्या व चर्चा करना H8.2.3.1 - पाठ के विशेषताओं व नियमों की व्याख्या करना H.8.2.2.1 -विविध वाक्य-संरचनाओं, कड़ियों, तथा उपयुक्त शब्दावली व विरामादि चिह्नों के प्रयोग से विभिन्न विषय-प्रकार का निर्माण करना H8.3.2.1 - काल्पनिक व ज्ञानवर्धक पाठ लिखने हेतु सरल, यौगिक तथा मिश्रित वाक्यों का निर्माण करना H8.3.1.1

**विराम चिह्न (Punctuation)**

हम बोलते समय, भाषण करते या पढ़ते समय जब रुकते हैं, उसे विराम कहते हैं। सही स्थान पर विराम चिह्न का प्रयोग आवश्यक है, नहीं तो गलत अर्थ निकल सकते हैं।

	विराम	चिह्न
अल्प विराम	Comma	,
अर्द्ध विराम	Semi Colon	;
अपूर्ण विराम	Colon	:
पूर्ण विराम	Full Stop	।
प्रश्न बोधक	Question Mark	?
विस्मयादि बोधक	Exclamation Mark	!
उद्धरण चिह्न	Inverted Commas	“ ”
कोष्ठक	Brackets	( )
योजक चिह्न	Hyphen	-
निर्देशन चिह्न	Dash	—

**संज्ञा (Noun)**

किसी वस्तु, समय, प्राणी के नाम या भाव को संज्ञा कहते हैं, जैसे: आदमी, घोड़ा, पुस्तक, स्थान।

**संज्ञा के भेद (Types of Nouns)**

संज्ञा के तीन भेद होते हैं:

- 1 व्यक्तिवाचक संज्ञा (Proper Noun) — जैसे - महात्मा गान्धी, माधवी, फीजी, आदि।
- 2 जातिवाचक संज्ञा (Common Noun) — जैसे - बालक, घर, घड़ी आदि।
- 3 भाववाचक संज्ञा (Abstract Noun) — जैसे - सुन्दरता, बुढ़ापा, लिखावट आदि।

**ACTIVITIES/EXERCISES**

नीचे दिए गए वाक्यों में से संज्ञा शब्दों को चुनकर कर लिखिए।

- |  |                                   |
|--|-----------------------------------|
| 1 वह घर मेरा है। _____                 | 2 सुमन की माँ बीमार है। _____     |
| 3 मोहन तेज़ दौड़ता है। _____           | 4 फीजी की राजधानी, सूवा है। _____ |
| 5 पिताजी खेत में काम कर रहे हैं। _____ | 6 विमला कपड़े धो रही है। _____    |

## सर्वनाम (Pronoun)

जो शब्द संज्ञा के स्थान पर काम में लाए जाते हैं, उन्हें सर्वनाम कहते हैं।

जैसे : यह, वह, तुम, हम, जिस, कौन, कुछ, मेरा, यहाँ, कहाँ आदि।

### अभ्यास :

(क) निम्न वाक्यों में से सर्वनाम शब्दों को रेखांकित करो:

1. कमला कहाँ रहती है?
2. यह किसकी पुस्तक है?
3. सावूसावू शहर किस द्वीप पर है?
4. देखो वह रास्ते पर खेल रहा है।
5. तुम जिस लड़के के साथ खेल रहे थे वह किसका बेटा है?

(ख) उचित सर्वनाम द्वारा नीचे दिए गए वाक्यों को पूरा कीजिए :

1. .... सब बच्चे शोर मचा रहे हैं।
2. विमला .... के साथ शहर जा रही है?
3. .... पिताजी लौतोका से कब लौटेंगे?
4. देखो फाट न के पास ... खड़ा है?
5. अच्छे बच्चे, ... पाठ रोज़ याद करते हैं।

## विशेषण (Adjective)

जो शब्द संज्ञा या सर्वनाम की विशेषता बताते हैं उन्हें विशेषण कहते हैं।

जैसे : मीठा, अच्छा, छोटा, गर्म, अन्धा, सुन्दर, सफेद, काला आदि।

### अभ्यास :

निम्न लिखित वाक्यों में से विशेषण के नीचे रेखा खींचो:

1. अरुन की मोटर लाल है।
2. अन्धा व्यक्ति लाठी के सहारे चलता है।
3. बच्चे को गर्म दूध मत दो।
4. नालिनी हरे रंग की साड़ी पसन्द करती है।
5. मेहनती किसान सफल होते हैं।

### SPELLINGS FOR THE WEEK

कृपया	आकाश	पढ़ना	सुन्दर	शहर
समय	सुनना	सफल	गर्म	मेहनत

**1075 LOVU SANGAM SCHOOL**  
**SOCIAL SCIENCE YEAR 8**  
**LESSON NOTES WEEK 4**

<b>Strand</b>	SS3 – Place and Environment
<b>Sub Strand</b>	8.3.2 – People and care of places
<b>Content Learning Outcome</b>	Gather information on Impacts of Global Warming on Humans and the Environment and express the Socio- Economic and Environmental Impacts of Natural Disasters.

**Impacts of Global Warming**

**Environment**

- Atmosphere's temperature will get warmer.
- Climate will change example the tropics will become deserts, temperate climates will change into tropical climates and the polar climates will have temperate climates.
- Ice bergs in the Polar Regions will melt and cause sea level to rise and low lying islands to sink.
- Tropical cyclones will become frequent and its strength will also increase.
- The aquatic life in freshwater and marine area will be affected they can be destroyed in great numbers.

**Human**

- ❖ People of low lying islands will move their homes to higher grounds or out to another island or country as Environmental Refugees.
- ❖ New diseases will affect their health example skin cancer and cataracts.
- ❖ It will change their lifestyle as they move into new locations their means of livelihood will change example fishermen will now become farmers.
- ❖ People's diet will change because of the new place they moved in will have different food available to them.

**Hazard Disaster, Socio- Economic and Environmental Impact**

<b>Types of Hazard</b>	<b>Cause</b>	<b>Impacts on People</b>	<b>Impacts on Environment</b>
Tropical Cyclones/Hurricane	-Warm oceans in tropical region -Warm moist air moves over the oceans	- Loss of life injuries - Injuries - Loss of income/jobs. - Damage houses and properties.	- Loss of vegetation - Damages to plantation and gardens. - Damages to fresh water source.
Flood	- Heavy rainfall. - Shallow and poor drainage	- House and garden underwater. - Damages to roads and bridges - Increase water-borne diseases. - drowning.	- Low lying areas under water. - Water-logged soil. - Change in landforms.
Earthquake	-Movement of the earth's crust(tectonic plates)	- Loss of life - Body injuries - Belongings destroyed. - Trauma.	- Fractures on the ground. - Soften grounds and cannot hold the weight of buildings and roads.
Landslides	-Poor vegetation -Heavy rainfall -Loss soil	-Loss of life. - Injuries. -Destruction to homes.	- Changes landforms. - Destroys vegetation.



Tsunami	- Movement of the sea floor. -Underwater volcanic eruption	-Loss of life. - Injuries - Loss of income/jobs - Damage houses and properties.	-Low lying areas underwater. -Change in landforms. -Destroys coastal areas.
Drought	-Lack of rainfall. -High sunshine.	-Loss of life. -Dehydration due to lack of water. -Increase water- borne disease. -Famine malnutrition	- bush fire. - destroys farms/crops.
Storm	-Low pressure. -Strong winds. -High waves	- Loss of life example: drowning	-Low lying areas under water.  -Change in landforms. -Destroys coastal areas.

### **Student Activity**

#### **A: Fill in the blanks**

temperate	cancer	melt	low	destroyed
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1. Ice bergs in the Polar Regions will \_\_\_\_\_ and cause sea level to rise and low lying islands to sink.
2. People of \_\_\_\_\_ lying islands will move their homes to higher grounds or out to another island.
3. The aquatic life in freshwater and marine area will be affected they can be \_\_\_\_\_ in great numbers.
4. Climate will change example the tropics will become deserts, \_\_\_\_\_ climates will change into tropical climates and the polar climates will have temperate climates.
5. New diseases will affect their health example skin\_\_\_\_\_ and cataracts.

#### **B: Short Answers**

1. Name **3** natural disasters which impact our environment?

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2. List **2** impacts of Global Warming on our environment?

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3. List **2** impacts of Global Warming on humans?

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4. Draw and colour how our environment will look like after a cyclone/hurricane.

# 1075 LOVU SANGAM SCHOOL

## YEAR 8

### VOSA VAKA VITI

### WORKSHEET #4

**Matana:** Volavola kei na Bulibuli

**Matana Lailai:** Lawa ni Vosa.

**CLO:** Bulia e dua na iokaoka ni tukutuku veikauyaki kei na kena e volai me vakadewataki ka vakamacalataki kina na nanuma ena i rairai duidui eso

### NA VOSA E CAVUTI

- Ni da vola na vosa e cavuti, e dua na ka bibi na kena vakadigotaki vakadodonu na veika e cavuti. Oqo e vakayagataki kina na cegu leka, cegu levu, cegu taro kei na koma lili. (, . “ ”)
- Vakadewataka mada na i tukutuku ka soli koto.
  - E taroga ko Sitiveni se sa yaco mai vei na waqa.  
**“Sa yaco mai vei na waqa?” a taroga ko Sitiveni.**
- A kaya ko Salesi ni na qai lako e na siga ka tarava.  
**“Au na qai lako ni mataka,” a kaya ko Salesi.**

### NAUNI

- Na nauni e okati kina na yaca ni tamata, vanua se dua na ka me vaka na Suva, Sekove, koli, teveli, dabedabe, Savusavu.

### VU

- Na Vu e okati kina na vosa cakacaka. Oqo na vosa e vakayagataki ni dua e cakava tiko e dua na ka me vaka na cici, kaba, lako, vodo, qalo, taubale, talitali.

### CAKACAKA LAVAKI

Wirina na matanivola e dodonu. Na taro e ke e vauci vata kina na cakacaka sa oti.

1. Sa daro na qito. Na vosa cava e na i yatu vosa e **nauni**?  
  
A. Sa                                      B. na                                      C. qito                                      D. daro
2. “Dou dau veilomani,” a tataunaka na turaga.  
Na i yatu vosa cava e vakasavuya vakadodonu na i yatu vosa e cake.  
A. A tataunaka na turaga meda dau veilomani.  
B. A tataunaka na turaga me ratou dau veilomani.  
C. A tataunaka na turaga me datou dau veilomani.

D. “A tataunaka na turaga me ratou dau veilomani.”

3. E kurusetā na loma ni vale na domo ni tagi nei Bulou. Na vosa e balebale vata kei na vosa ka toqai na rukuna na

A. voqa.                      B. robota.                      C. rogoci.                      D. yanaka.

4. A tarogi Seru o Epeli se o cei e qaqa ena qito. Na taro cava nei Epeli e vakadigotaki donu?

- A. O cei e qaqa ena qito? a taro ko Epeli.
- B. “O cei e qaqa ena qito?” a taro ko Epeli.
- C. Seru! o cei e qaqa ena qito? a taro ko Epeli.
- D. “Seru, o cei e qaqa ena qito?” a taro ko Epeli.

5. Au na muri rau na noqu i caba i koronivuli.

Na i yatu vosa cava e vukica na i wiliwili ena i yatu vosa e cake, ki na **lewe tolu**?

- A. Keirau na muri ira na neirau i caba i koronivuli.
- B. Keitou na muri ira na neitou i caba i koronivuli.
- C. Keitou na muri iratou na neitou i caba i koronivuli.
- D. Keimami na muri ira na neimami i caba i koronivuli.

6. A cici muria na kalavo e dua na vusi loaloa.

Na vosa cava e na yatuvosa oqo e **vu**.

A. cici      B. kalavo      C. vusi      D. A



## LESSON NOTE

**SCHOOL:** Lovu Sangam School  
**SUBJECT:** Basic Science Worksheet week 4

**YEAR:** 8

<b>STRAND</b>	Energy
<b>SUB STRAND</b>	Energy Source and Transfer
<b>CONTENT LEARNING OUTCOME</b>	Investigate the transfer of some forms of energy and describe the effect of energy transfer on certain materials.

### FORMS OF ENERGY

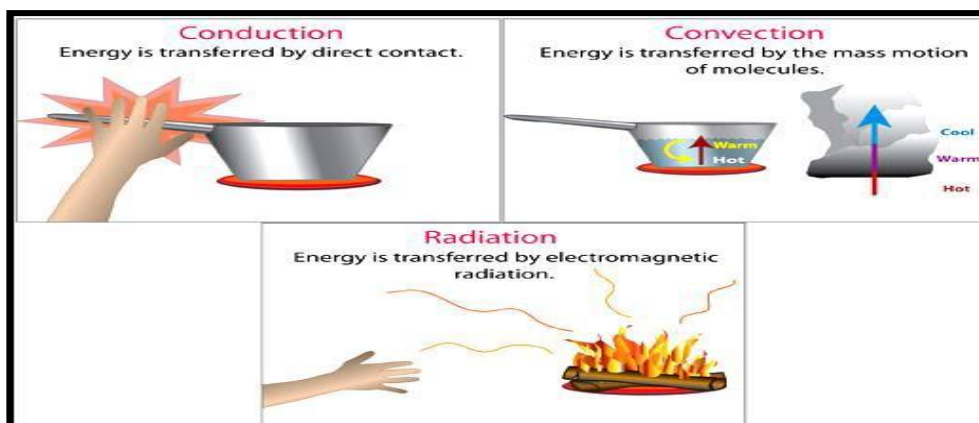
Energy can be found in different forms. Some forms of energy are as follows:

1. Heat
2. Electrical
3. Sound
4. Solar

**1. Heat Energy** – is a form of energy that is transferred from a region of higher temperature to one of lower temperature. A cold object placed in a warm place will absorb heat from its surroundings, causing its temperature to rise. On the other hand, a warm object will lose heat to its surroundings causing its temperature to fall.

There are three different types of heat transfer:

- i. **Conduction**
- ii. **Convection**
- iii. **Radiation**



#### **i. Conduction**

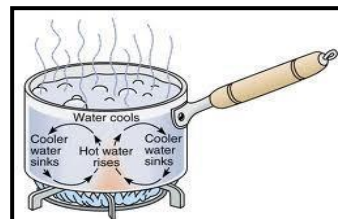
Conduction transfers heat within a body or between two bodies that are touching. It is a point by point process of heat transfer. Conduction occurs in solids, liquids or gases that are at rest. Energy flows, but the substance through which the heat is being transferred does not itself flow. Example, A metal spoon taken out of a cup of hot drink has a hot handle.

A material that allows heat to travel through it is called a **conductor**. Some materials are better conductors than others. Metals like iron, steel and copper are good conductors.

Other materials like rubber, wood and some plastics are bad conductors. A material that does not conduct heat or electricity easily is called an **insulator**. Fire fighters wear insulated clothing to protect them from the heat of the fire.

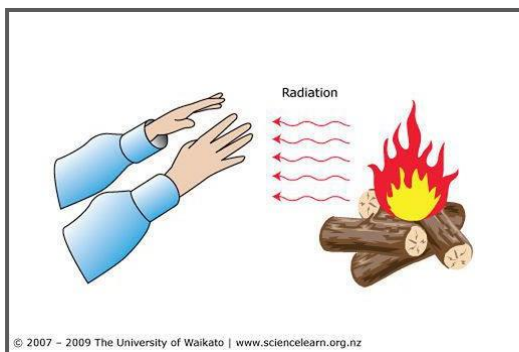
**ii. Convection** is the transfer of heat from one fluid to another by the movement of the fluid itself. A fluid is a substance which can flow. Liquids and gases are fluids. It is usually a fairly rapid process. It depends upon the movement of the material that is heated. The motion is a result of changes in density (mass per unit volume) that accompany the heating process. Water in a tea kettle is heated by convection. A hot stove also heats the air in a room by convection. When a fluid is heated, its density decreases. The particles of the fluid speed up and spread out. The fluid expands, becoming more buoyant. A warmer

volume of fluid will rise, while a colder and thus more compacted volume of fluid will descend.



### iii. Radiation

All objects radiate energy and heat, even your own body. However, the radiation coming from hotter objects is more intense than that coming from cooler objects. Radiation leaves an object in the form of waves. The hotter an object is, the shorter the wavelength of the radiation.



As you stand in front of a camp fire holding your cold fingertips out in front of you, what do you feel? Slowly your fingers begin to warm up as they absorb the radiation coming from the fire. The infrared waves, or heat rays, leave the hot fire, and radiate out towards your hands.

An object that is especially good at radiating heat is referred to as a blackbody. Both the Sun and the Earth are excellent radiators, and as a result, both are considered blackbodies.

### Exercise

- Write down three types of heat transfer.

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- List down two good conductors and two insulators of heat in the table below.

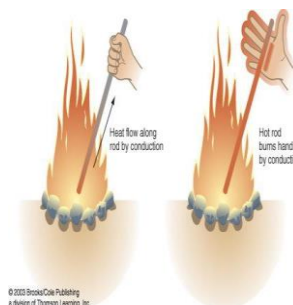
Conductors	Insulators
1.	
2.	

- For each of the diagrams given below, state the type of heat transfer used.




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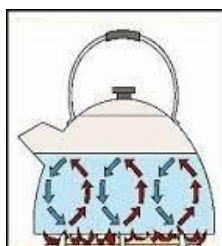
b)



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c)




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