# NEW BHARATH MATRICULATION HIGHER SECONDARY SCHOOL, THIRUVARUR

CLASS IV SCIENCE TERM I

### **LESSON 1: MY BODY**

### I. PICK OUT THE ODD ONE:

1. Heart	brain	legs	kidney
2. Eyes	ears	fingers	lungs
3. Fore brain	mid brain	hind brain	nerves

### II.COMPLETE THE FIGURE WITH WORDS GIVEN IN THE BRACKET:

Good Touch	Bad touch
1. Grandparents love	Kissing on the mouth
2. Pat of dad on head	Hitting the buttocks
3. Parent's hugs and kisses	Showing awkward pictures

## III. FIND THE ANSWERS FROM THE FOLLOWING CLUES:

- 1. An internal organ, Heart
- 2. Organ that helps us to breathe, <u>Lungs</u>
- 3. An organs removing wastes from our body, <u>Kidney</u>
- 4. Unfair and unhealthy touch, <u>Bad touch</u>
- 5. Every day we should drink more, Water

### IV. WRITE TRUE OR FALSE:

- 1. Head, hand and legs are internal organs. False
- 2. Heart is made of muscles. True
- 3. Muscles are the soft parts that cover our bones. True
- 4. Brush your teeth once a day. False
- 5. Father patting you on your head is a good touch. True

### V. CHOOSE THE CORRECT ANSWER:

- 1. <u>Brain</u> is the commanding centre of our body.
- 2. Food is converted to energy in the stomach.
- 3. Every day we should brush our teeth two times.
- 4. Good touch is a fair and healthy touch.
- 5. Drink a lot of water every day.

### VI. ANSWERTHE FOLLOWING QUESTIONS IN ONE OR TWO SENTENCES:

1. Name the internal organs.

Lungs, heart, kidney, brain

2. What are the functions of brain?

Brain is the commanding centre of our body.

Brain helps us to think and perform various actions.

Every action like moving, sitting or walking is possible only because of our brain.

3. List out the food items for healthy mouth and teeth.

Take plenty of fruits, vegetables and dairy products.

Drink water or milk instead of sugary juices.

4. How will you take care of your heart and kidney?
HEART:
Avoid oily and junk foods.
Do exercise regularly.
KIDNEY:
Do not eat salty food regularly.
Eat fresh fruits, vegetables and drink clean water.
5. What do you do when someone touches you and you feel uncomfortable?
I will say "don't touch" in a loud voice.
I will leave the spot quickly.
I will tell elders till I got help.
VII. THINK AND ANSWER:
1. When an unknown person disturbs you, how do you behave? Write in your own words.
If unknown person disturbs me, I will say "Don't disturb me" in a loud voice and leave that
place quickly.
I will tell parents or teachers about that person's disturbance.
2. Which organ controls thinking, speaking and learning. Write its 3 important parts.
Brain is an important organ of our body that controls thinking, speaking and learning.
It has three main parts:
1. Fore Brain
2. Mid Brain
3. Hind Brain

### **LESSON 2: MATTER AND MATERIALS**

### I. FIND THE ODD ONE:

1. Brick	coir	silk cloth	pine apple
2. Stone	rubberband	cycle tube	electricwire
3. Sun	candle	torch	pen
4. Umbrella	sponge	rain coat	jerkin
5 Glass bottle	exam pad	paperplate	wooden board

#### II. FILL IN THE BLANKS:

- 1. Materials which can be compressed or cut easily are called <u>soft materials</u>.
- 2. Gold and diamond are the examples of shiny materials.
- 3. Materials which can be bent or stretched easily are called <u>flexible materials</u>.
- 4. <u>Transparent</u> objects allow all the light to pass through them.
- 5. <u>Sun</u> is the natural sources that stimulates lights and makes things visible.

### III. MATCH THE FOLLOWING:

- 1. Light source sun
- 2. Water proof rain coat
- 3. Transparent glass
- 4. Translucent vegetable oil
- 5. Opaque metal

### IV. WRITE TRUE OR FALSE:

- 1. We cannot compress, cut or bend the rough materials easily. True
- 2. Dull materials reflect light. False
- 3. Sand paper is a good example for smooth materials. False

- 4. Opaque objects do not allow light to pass through them. True
- 5. Mirrors change the direction of light that fall on them. True

### V. ANSWERTHE FOLLOWING:

1. When can you say a material is water proof materials?

Materials that do not allow water to pass through them are called waterproof materials.

(Ex) Raincoat

## 2. What is a light source?

Light may come either from the sun or from other sources like an electric lamp. The objects that give off light are called light sources.

3. What is the difference between transparent and opaque materials?

Transparent	Opaque
Allow all the light to pass through them	Do not allow light to pass through them.
We can see other objects clearly through it	We cannot see objects through it
(eg) Air, glass	(eg) wood, stone

### 4. Define reflection.

When light falls on a polished surface of an opaque material, It does not pass through it.

It bounces back.

The bouncing of light by any smooth or polished surface is called reflection.

## 5. Classify the objects given below as transparent, translucent or opaque materials.

(air, rock, water, aluminium, foil, mirror, snow, wooden board, polythene bag, CD, oil soaked paper, glass tumbler and coloured glass)

Transparent	Translucent	opaque
Air, glass, tumbler, water	Snow, oil soaked paper, coloured glass	Rock, aluminium foil, wooden board

### **LESSON 3: WORK ANE ENERGY**

### I. USE THE CORRECT WORD:

(Ramp, simple machines, work, energy, pulley)

- 1. Work is said to be done when a force is acting on it.
- 2. The ability to do work is energy.
- 3. Pulley is a machine made up of wheel and rope.
- 4. <u>Simple machines</u> help us to make work easier.
- 5. An example for inclined plane is Ramp

### II. REARRANGE THE LETTERS:

- 1. E D G E W WEDGE
- 2. RLEVE LEVER
- 3. EWREW SCREW

### III. MATCH THE FOLLOWING:

- 1. Class II lever nut cracker
- 2. Pulley drawing water
- 3. Class I lever see saw
- 4. Wheel and axle bicycle
- 5. Renewable resource wind

### **IV.CLASSIFY THE THINGS BELOW:**

- 1. Spade CLASS III
- 2. Seesaw CLASS I
- 3. Wheel barrow CLASS II
- 4. Plier CLASS I
- 5. Nail cutter CLASS I

### V.ANSWERTHE FOLLOWING:

1. What is the unit of energy?  The unit of energy is Joule.
2. Name some simple machines?
Pulley, wedge, inclined, plane, screw, lever, wheel and ax le.
3. What is a first order lever?
When the fulcrum is between the effort and the load, it is known as first order lever
(e.g) Scissors, seesaw
4. Lemon juices belong to which type of lever? Why?
Lemon juicer belongs to class Il lever, because the load is between the effort and the
fulcrum.
5. Define work.
An action is which one exerts a force to move an object is known as work.
6. Write any three types of energy.
Thermal energy
Mechanical energy
<b>.</b> ,
Electrical energy

### **LESSON 4: SCIENCE IN EVERYDAY LIFE**

### I. CHOOSE THE CORRECT ANSWER:

- 1. Primary source of energy for the young ones of some animals is milk
- 2. Vitamin present in milk that helps us to maintain our bones is <u>Vitamin D</u>
- 3. One of the ancient food items made by human is bread.
- 4. <u>Cucumber</u> is a raw food.
- 5. A gadget that plays songs is called <u>music player</u>.

### II. FILL IN THE BLANKS:

- 1. Cheese and paneer are made from milk.
- 2. Nutrients are made ready for digestion by cooking.

### **III. MATCH THE FOLLOWING:**

- 1. Music player plays music
- 2. Small torch provides light
- 3. Smart phone plays games
- 4. Pen drive stores data
- 5. Tablet communicates with the world

### IV. ANSWERTHE FOLLOWING:

1. Name the food products derived from milk.

Curd, butter, ghee, cheese, paneer

2. Write the names of any 3 baked foods.

Bread, biscuit, cake

3. In which ways a smart phone will help you?

A smart phone will help me.

- i. Access the internet
- ii. Store files
- iii. Take photos and track location

#### 4. What is food?

- o Food is one of the basic needs of our life. It provides energy.
- o It contains essential nutrients to keep our body healthy.

#### V. DETAIL:

- 1. Cooking removes harmful microbes write down other benefits of cooking.
  - o It makes nutrients ready for digestion.
  - o It helps to make food in the desired texture, flavour and taste.
- 2. Why should we drink milk?
  - o Milk is a health drink for adults and sick people
  - o It strengthens bones and teeth.
  - o It maintains blood pressure.
  - o It reduces the risk of heart disease.
  - o It is source of energy