

CHRISTWOOD SCHOOL
ACADEMIC YEAR 2019-20

NAME : _____
SUBJECT : **SCIENCE**
DURATION: 40MIN

GRADE : 4
DATE : 30.03.2020
MARKS: 30

I. Read the statement and tick (✓) the correct answer: (2)

Statement	Tick the correct answer
A. A shadow is:	a. black in colour <input type="checkbox"/> b. of the colour of the object <input type="checkbox"/>
B. A Shadow is formed on the:	a. same side of the object facing the light <input type="checkbox"/> b. opposite side of the object facing the light <input type="checkbox"/>
C. A shadow of an object is formed only when it:	a. allows light to pass through it <input type="checkbox"/> b. does not allow light to pass through it <input type="checkbox"/>
D. A shadow is formed only when the object is:	a. between the source of light and screen <input type="checkbox"/> b. behind the source of light or screen <input type="checkbox"/>

II. Answer the questions on types of forces: (4)

A. Match the types of force with their examples.

- | | | |
|-------------------------------|---|----------------------------------|
| a. Frictional force | • | • Closing of refrigerator door |
| b. Muscular force | • | • Falling of a fruit from a tree |
| c. Gravitational force | • | • Lifting a bucket of water |
| d. Magnetic force | • | • Walking on the road |

B. Write whether each of the following is an example of a contact or non contact force.

- | | |
|--|----------------------|
| a. Skating on the road | <input type="text"/> |
| b. Leaves falling from trees | <input type="text"/> |
| c. Pushing a table | <input type="text"/> |
| d. Magnet attracting iron nails | <input type="text"/> |

III. Match the factors with how they help in the formation of soil: (4)

- | | | |
|----------------------------------|---|---|
| A. Changes in temperature | • | • Their roots penetrate and widen the cracks in rocks as they grow, breaking them into smaller pieces. |
| B. Heavy rainfall | • | • It carries small particles that rub against the rocks causing it to weather over a long period of time. |

- C. Strong wind • • A force is applied to the rocks as it hits or flows onto them causing the rocks to break.
- D. Plants • • Repeated expansion and contraction of rocks cause cracks in them.

IV. Draw lines to match each box with the correct circle:

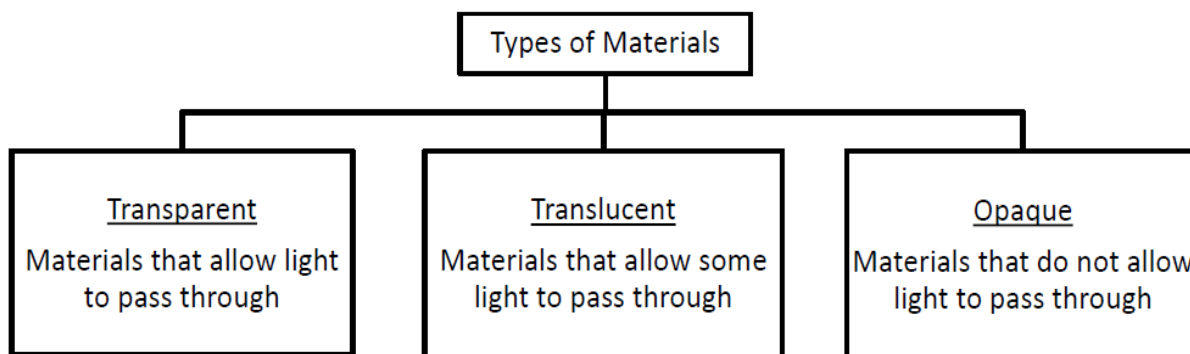
(4)

- A. Weighing balance
- B. seconds, minutes, and hours
- C. millilitres (ml) and litres (l)
- D. Ruler
- E. grams (g) and kilograms (kg)
- F. Measuring flask
- G. Clock
- H. centimetres (cm) and metres (m)

- Measurement of Length
- Measurement of Mass
- Measurement of Capacity
- Measurement of Time

V. Read the chart and fill in the table.

(2)

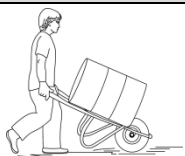
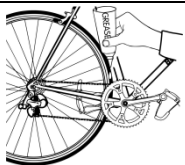


Write if the things turned transparent, translucent or opaque. *One has been done for you.*

Examples of changes in things	Change in material
<i>Plain glass to Sunglass</i>	<i>Transparent to translucent</i>

A. Plain white paper to butter paper	_____ to _____
B. Plain glass to mirror	_____ to _____
C. Clear water to muddy water	_____ to _____
D. Solid butter to melted butter	_____ to _____

VI. Look at the pictures and complete the table about friction: (2)

Methods to reduce friction	How is the friction reduced here?	How is this method helpful for us?
 <p>Picture A</p>		
 <p>Picture B</p>		

VII. Read the text and answer the questions: (4)

Kabir was playing with a torch in his bathroom which had dim light. He pointed the torch towards the mirror from one side and saw light rays from the mirror fall on the wall on the other side.

A. Which phenomenon made Kabir see light rays on the wall?	
B. What happens in this phenomenon?	
C. Draw a diagram to show this phenomenon.	
D. a. In which type of objects can we see this phenomenon most? b. Give 2 examples of such objects.	

VIII. Read the chart and answer the questions: (4)

A. Write down 1 use of the following natural resources:

Plants: _____

Soil: _____

Metal: _____

B. How do natural resources get depleted? Write any 2 ways.

C. Suggest 3 ways in which we can conserve natural resources.

IX. Read the passage and answer the question that follows.

(4)

Friction is a contact force which always acts in the opposite direction to the movement of objects. It depends on many factors and has many advantages and disadvantages.

- A. Sahil pushed his toy car from left to right on the marble floor. What is the direction of force of friction acting on the car?
- B. Sahil saw that his toy car move farther on a smooth marble floor than on a rough carpet. How does friction depend on the type of surface?
- C. Friction produces heat which can be useful. Write an example to show this.
- D. Suggest 1 method to reduce the friction in each situation.

Situation	How can friction be reduced?
a. You have to move heavy boxes from one room to another room of your house.	
b. Your bicycle chain is making sound and it is difficult to pedal.	
c. A carpenter made a rectangular boat which is difficult to move in water.	

*****THE END*****

ACTIVITIES



I. A parent –guided activity

- Take a paper plate. Fix a pencil in the centre of the plate using glue.
- At sunrise, keep the plate in a place where it will get sunlight throughout the day. The plate must remain in the same place throughout the day.
- Mark the shadow of the pencil that is formed soon after sunrise.
- Note which way the shadow moves during the day at regular intervals.
- Mark the shadow just before sunset.

- Remove the pencil and colour the portion between the two marks (SUNRISE – SUNSET) 'yellow'. Label the portion as DAY.
- Colour the remaining portion 'black' and mark it as NIGHT.

Which portion on the plate is longer - the DAY or the NIGHT? What season is it?

II. Do you know that for every notebook you use, some part of the tree is cut down somewhere? Do you follow these practices to save paper? Write 'YES' or 'NO'.

- I use both sides of every sheet of paper
- I buy new notebooks even if there are a few blank pages in them.....
- I use a slate instead of paper to do my rough work and drawing.....
- I use blank unused paper to make origami activities.....
- I use leftover pages from last year's notebooks.....

Make your own rough notebook

Collect all the unused pages from old notebooks. Arrange the pages together neatly. Make small bundles of 25 pages each. Place a card paper or sheet of used gift wrapping paper or any other paper of your choice on the top as a cover. Pin them together. You have now made your own rough notebook.

