



Student's Name: \_\_\_\_\_ Roll No. \_\_\_\_\_ Grade: 3

Marks: 40

Time Duration: 90 minutes

Invigilator's Sign.

**Q.1 Arun sorts different materials into solid, liquid or gas. Identify the picture and write the state of matter in the space provided. (2)**

a.



Juice

\_\_\_\_\_



Rock

\_\_\_\_\_



Smoke

\_\_\_\_\_



Butter

\_\_\_\_\_

b. Solid butter changes to liquid butter on \_\_\_\_\_ (1)

**(heating, cooling, freezing)**

c. Write any one property of liquid \_\_\_\_\_ (1)

d. Solids have a \_\_\_\_\_ shape (fixed, good) (1)

**Q.2. How do you separate mixtures? Number the pictures. (2)**

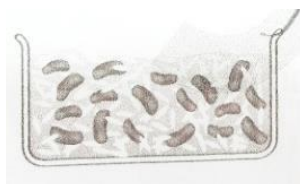
a.



b. Name the separation method. \_\_\_\_\_

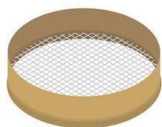
**Q.3. Sofia wants to separate mixture of rice and beans.**

**(2)**



**Rice and beans**

a. Circle the equipment she will choose to separate the mixture.



sieve



magnet



filter paper

b. Explain the reason to choose that equipment.

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**Q.4. Arun measured the size of a shadow as he moved it towards light source. He recorded his results on the table below.**

**(3)**

Distance from light source (cm)	Size of shadow (cm)
25	4
20	9
15	16
10	22
5	29

a. At \_\_\_\_\_ distance from the light source the shadow was smaller.

b. How did he make the shadow smaller?

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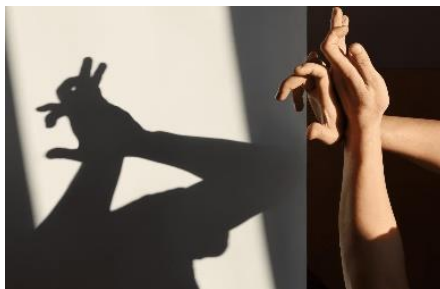
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c. For each test Arun moved the object \_\_\_\_\_ cm closer to the light source.

**Q.5. Hassan makes a shadow puppet with his hands.**

**(4)**



a. Choose the correct word from the list and complete the sentence.

**(Flexible, large, opaque, transparent)**

Hassan makes a shadow puppet because his hands are \_\_\_\_\_.

b. Describe how Hassan can make the shadow puppet in a different size.

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c. A dark area appears on the wall.

What is the name of this dark area? \_\_\_\_\_

**Q.6. This piece of apparatus is being used to measure a force.**

**(2)**



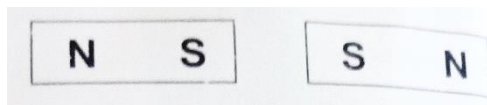
a. What is the name of this piece of equipment? \_\_\_\_\_

b. Force is measured in \_\_\_\_\_ (centimeter, kilograms, newton).

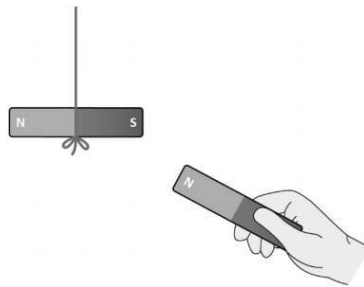
**Q.7. Rajiv puts a smaller magnet near one of the big magnets. The small magnet moves towards the big magnet.**



- What is the pole at x on the small magnet? \_\_\_\_\_ (1)
- Magnets have North and South ends called \_\_\_\_\_. (1)
- He puts the magnets in the different positions. Complete the sentences under each diagram. (2)



- In this position the magnets will \_\_\_\_\_.



- He then moves the north pole of another magnet to the south pole of the hanging magnet what will happen? \_\_\_\_\_

**Q.8. Classify these materials by writing them in the correct place in the table. (3)**

**(Aluminium, rubber, steel, gold, wood, rock)**

Magnetic	Non - magnetic

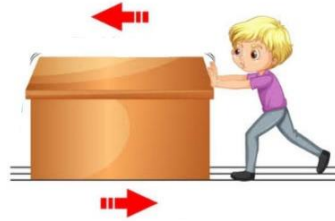
Q.9. label the given forces.

(2)

a.

Push

friction



b. What does friction do to the moving objects?

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Q.10. Marcus and Sofia are sliding on two different slides with the same height. See who will reach first. (2)



Water slide



without water slide

a. Who will reach the bottom first and why?

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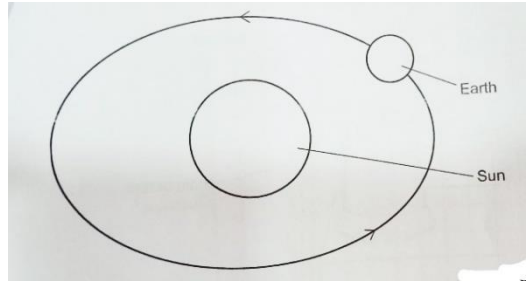
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b. Where does the friction happen?

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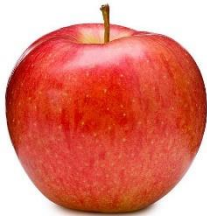
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**Q.11. Aruna draws a diagram to show the relative moment of the Earth around the Sun.**



a. \_\_\_\_\_ is a force that pulls objects towards the centre of the Earth. **(1)**

Aruna models the relative moment of the Earth. The picture shows the objects she uses to represent the Earth and Sun.



Sun



Earth

b. Write down two reasons why the object she uses for the Earth and Sun is not a good choice. **(2)**

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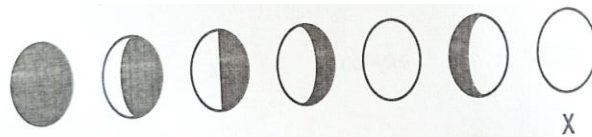


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c. Is this sentence true or false? **(1)**

The Earth and the Moon are both spheres. \_\_\_\_\_

**Q.12. The diagram shows the phases of the Moon as seen in the southern hemisphere.**



a. Complete the diagram by drawing the correct shape for x. **(1)**

b. The Moon travels around the Earth once every 29 days. We call this the Moon's

\_\_\_\_\_. **(1)**

**Q.13. Sarah is using a computer to find out more about the Moon.**

**(1)**



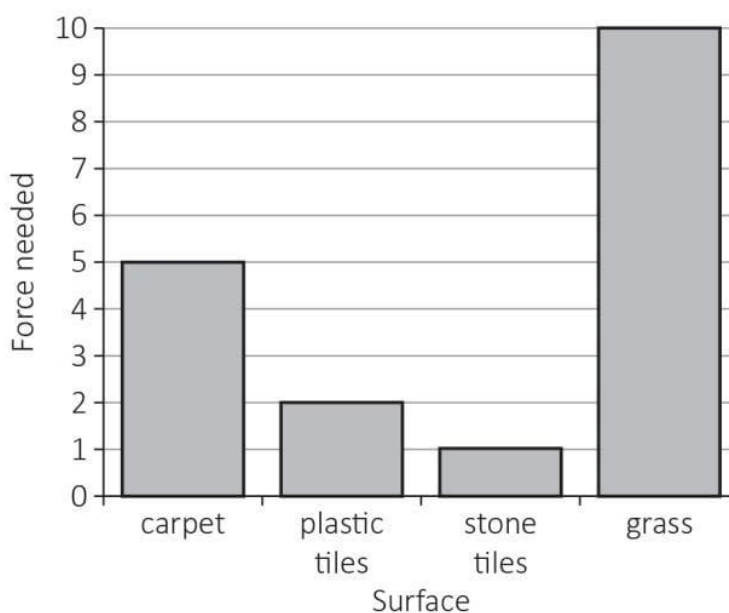
Which type of scientific enquiry is Sarah using. Research, fair testing, observing over time, identifying and classifying or pattern seeking? \_\_\_\_\_

**Q.14. Marcus is testing the effect of pulling a tray over different surfaces.**

**(4)**

- He predicts that the surface that will need the most force will be carpet.
- He tests each surface and records the result in a bar chart.

**Bar chart showing force needed to pull a tray on different surfaces**



a. Was Marcus' prediction right? \_\_\_\_\_

b. Which surface had the least friction? \_\_\_\_\_

c. How much more friction was there on carpet than on the plastic? \_\_\_\_\_

d. Which surface needed the most force to pull the tray? \_\_\_\_\_

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