BRAIN INTERNATIONAL SCHOOL

Science Assignment **Class: VIII** **July'2024**

Chapter -11 Force and pressure

1. **Choose the correct option:**

(i) Force acting on per unit area is called
(a) Non-contact forces (b) Contact forces (c) Force (d) Pressure

(ii) When two forces act in opposite directions, then net force acting is the
(a) Sum of two forces (b) Difference between two forces
(c) Both of these (d) None of these

2. In each of the following questions, two statements are given- one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the codes (a), (b), (c) and (d) as given below:

a) Both A and R are true, and R is correct explanation of the assertion.

b) Both A and R are true, but R is not the correct explanation of the assertion.

c) A is true, but R is false.

d) Both assertion and reason are false.

(i) Assertion (A): A potter makes pots of different sizes and shapes from kneaded clay.
Reason (R): Force may bring about change in the size or shape of an object.

(ii) Assertion (A): When same force is applied for same time, to both car and truck. The car picks up a greater speed than truck in that time.
Reason (R): The magnitude of force needed depends on the mass of object and value of change of speed.

3. <u>Answer the following questions</u>:

1. Why is sharp knife more effective in cutting a fruit than a blunt knife?
2. Define pressure? What is the SI unit of pressure?
3. Can a rubber sucker be stuck on a rough surface? Give reason.
4. Explain briefly why a ball rolling along the ground gradually slows down and comes to rest.
5. What are the effects of the application of force on the object? Explain it in brief.
6. Define force? Differentiate between contact and non-contact forces with suitable examples.

Chapter-3: Coal and petroleum

1. **Choose the correct option:**

1. The most commonly used liquid fuel in our home is
   (a) Kerosene (b) Petrol (c) Diesel (d) Fuel oil
2. The main element present in petroleum are
   (a) Carbon and Oxygen (b) Carbon and nitrogen
   (c) Carbon and hydrogen (d) Hydrogen and Oxygen

2. In each of the following questions, two statements are given- one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the codes (a), (b), (c) and (d) as given below:

a) Both A and R are true, and R is correct explanation of the assertion.

b) Both A and R are true, but R is not the correct explanation of the assertion.

c) A is true, but R is false.

d) Both assertion and reason are false.

(i) Assertion (A): Sunlight and air are inexhaustible resources.
Reason (R): These resources are present in unlimited quantities in nature and are likely to be exhausted by human activities.

(ii) Assertion (A): Petroleum is referred to as 'black gold.
Reason (R): Petroleum resembles molten gold in appearance

3. <u>Answer the following questions</u> :

1. Name three constituents of petroleum
2. Define exhaustible and inexhaustible natural resources and give two examples of each.
3. Where do we get coal and how is it formed?
4. What is CNG? What are its uses?
5. How is the energy useful to us? Explain.
6. How is petroleum formed inside the Earth?

Chapter-9: Friction

1. **Choose the correct option:**

1. To sharpen the blade of a knife by rubbing it against a surface, which of the following will be most suitable?
   (a) stone (b) plastic block (c) wooden block (d) glass block
2. Smooth surface has
   (a) less friction (b) more friction
   (c)sometime less sometime more (d) all of these

2. In each of the following questions, two statements are given- one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the codes (a), (b), (c) and (d) as given below:

a) Both A and R are true, and R is correct explanation of the assertion.

b) Both A and R are true, but R is not the correct explanation of the assertion.

c) A is true, but R is false.

d) Both assertion and reason are false.

(i) Assertion (A): We do not slip when we walk on wet floor.
Reason (R): The water forms thin layer between the feet and the floor and decreases the friction.

(ii) Assertion (A): Rocket has a special streamlined body.
Reason (R): It increases the friction.

3. <u>Answer the following questions</u>:

1. What is the cause of friction?
2. What is the direction of force of friction acting on a moving object?
3. Why are the worn-out tyres discarded?
4. Explain different type of friction with suitable examples.
5. Explain increasing and decreasing friction with suitable examples.
6. What do you mean by fluid friction? How can fluid friction be reduced?