Educati n_{with}Fun

Name	e: Date:
<u>Friction</u>	<u>on</u>
Q1. Ans.	Why will a pencil write on a paper, but not on a glass?
Q2.	When we try to push a very heavy box kept on ground, it does not move at all. Which force is preventing this box to move forward? Where does this force act?
Ans.	
Q3. Ans.	Explain why objects moving in fluids must have special shapes.
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Educati n

Friction

Q1. Why will a pencil write on a paper, but not on a glass?

Ans. We are able to write on a paper because there is friction between the tip of the pencil and paper. We are not able to write on a glass because the glass surface is very smooth due to which friction between the tip of the pencil and glass surface is less. This friction is not enough to rub off black graphite particles from the tip of pencil.

- Q2. When we try to push a very heavy box kept on ground, it does not move at all. Which force is preventing this box to move forward? Where does this force act?
- Ans. When we push a very heavy box kept on the ground, it does not move at all because frictional force balances the force that we apply. So, there is no net movement of this box. It acts in a direction opposite to the force we apply.
- Q3. Explain why objects moving in fluids must have special shapes.
- Ans. Fluids exert force of friction on objects in motion through them. The frictional force on an object in a fluid depends on its speed with respect to the fluid. The frictional force also depends on the shape of the object and the nature of the fluid. It is obvious that when objects move through fluids, they have to overcome friction acting on them. In this process they lose energy. Efforts are, therefore, made to minimize friction.