

# **CLASS VIII G GROUP D**

## **CASE STUDY**

One day Rahul's mother was cooking food in her kitchen, and suddenly the cooking gas got empty. She told Rahul to bring two gas cylinders. Rahul called the gas officials, and they told him that they would be unable to come into their house. The gas office was near his house, so he did not deny. He went to the office and met with his three childhood friends, Ramesh, Ankur, and Rohan. Ramesh had joined it today, Ankur had joined it a week ago, and Rohan had joined it a year ago. Rahul quickly told his friends that he needed two cylinders. Quickly Ramesh went to bring 2 cylinders together but when he applied the force, he could not bring it then Ankur started to drag the 2 cylinders but after some time he got tired at last Rohan tilted the 2 cylinders and started to roll it easily.

Rahul wondered how it happened?

## QUESTIONS

1. What Do you think that had happened with the Gas cylinders when the 3 people brought it to Rahul?
  - a) Muscular Force
  - b) Frictional Force
  - c) Gravitational Force
  - d) Electrostatic Force
2. What do you think who has the more knowledge of Work
  - a) Rahul
  - b) Rohan
  - c) Ankur
  - d) Ramesh
3. Arrange the Names of the workers according to the force they applied to the Gas cylinders.
4. Which type of friction held with Ramesh, Ankur and Rohan simultaneously
  - a) Static, Rolling, Sliding
  - b) Rolling, Sliding, Static

c) Static, Sliding, Rolling

d) Rolling, Sliding, Static

5. Explain Static Friction with a relevant example.

6. Explain why less force is needed to perform rolling friction than Static?