Class: 6

Subject: Physics

Chapter: Force

(Children please listen to the given audio clip carefully, discussed in the audio clip are some key points that would summarize the entire chapter for you, however please do read the chapter thoroughly before attempting the work sheet given below)

In our daily life, we pick up things, open things, shut things, kick things, lift things and host of other activities like these. Can we replace these terms, which cause a change in the motion of an object, by a single term. Yes, we'll find that all the above mentioned actions can be classified as pushes or pulls. In science, a push or a pull on an object is called force.

A. <u>Fill in the blanks</u>
1. Force is a and
2. Force has as well as
3. Force changes the state of of a body or its or both.
4. Force does not have an effect on the of a body.
5. Force can or the speed of a body.
6 always opposes motion.
7. Friction between two surfaces depends upon their and
8 is a necessary evil, i.e. , it is as well as
B. <u>Define the following terms</u>
1. Force
2. Vector force
3. Friction
4. Static friction

- 5. Kinetic or dynamic friction
- 6. Rolling friction
- C. Mark the statement as True or False
- 1. Motion is not possible without the application of force.
- 2. Force always changes the position of an object.
- 3. Motion of an object depends only on the magnitude of force.
- 4. When forces are applied in the same direction it increases the sped of an object.
- 5. Net force acting on the body is the vector sum of forces.
- 6. Force cannot change the shape of an object.
- 7. Friction is a conservative force.
- 8. Force can change the mass of an object.
- D. Name the following
- 1. Quantity which changes the direction of motion of an object.
- 2. Quantity which does not change with the application of force.
- 3. Opposing arises due to rolling of two surfaces.
- 4. The force which opposes the motion of the body.
- 5. Net forces acting on a body.
- E. Answer the following question
- 1. Why is force required to move an object?
- 2. How does the speed of a body change with respect to the application of force?
- 3. How is the direction of force important for the motion of a body?
- 4. Why is force also called a vector quantity?

5. Why is friction know as a necessary evil?
6. Why does friction decrease the efficiency of machines?
(Note: please complete Ex B, C, D, and H form page 37 to 39 of your text book in your exercise copy)