Exercises on Concept 1

(Answer Guide P. 8)

1 Choose the correct answer:

1. If a group of students play the game of the tug of war, the rope will move if the forces acting on the two sides are _____.
   a. balanced
   b. equal in magnitude and opposite in direction
   c. unequal in magnitude and opposite in direction
2. When the force acting on a moving body increases, its speed will _____.
   a. increase b. decrease c. not change
3. When we pull a box on the ground to the right direction, the friction force that exists between the box and the ground will act in the _____ direction.
   a. left b. right c. south
4. A moving object moves faster when _____ force is applied on it.
   a. more b. less c. friction
5. Rocket can move and get out of the planet _____.
   a. during launch because the forces acting on it are balanced
   b. before launch because the forces acting on it are unbalanced
   c. during launch because the forces acting on it are unbalanced
6. From the following, if we push the two cars with the same force, what do you think which one of them will travel a greater distance?

   a. The green car.
   b. The red car.
   c. The two cars travel the same distance.

2 Complete the following sentences:

1. We need a _____ to move an object.
2. When Ali kicked the ball, it moved away from his starting position and started to slow down until it stopped completely due to the effect of a _____ force.
3. When you press the brakes of the bike, it is an example of the _____ force.
4. Falling the book from your hand on the ground is considered _____ force.
5. If an unbalanced forces are applied on an object, the object will _____ force acting on them.
6. Objects stop moving when a _____ makes it fall downward.
7. When you throw a ball, Earth's