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## Notes - Forces

A force is a $\qquad$ or a $\qquad$ Forces are needed to change the $\qquad$ of objects.

Use the following chart to identify the three types of forces.

| Type: | Type: | Type: |
| :--- | :--- | :--- |
| Definition: | Definition: | Definition: |
| Example: | Example: | Example: |



Draw and label arrows around the following illustration to show the three types of forces acting on this baseball player and the ball.

What does it mean when force is called a 'vector'?

What is a net force?
Compare and contrast balanced and unbalanced forces. (Make sure to say how they affect an object's motion.)


Draw an illustration of one of the following situations. Once you have drawn your illustration, identify where friction, gravity, and contact forces acted on the objects in the situation. Your illustration must be neatly drawn, include sufficient detail, and be clearly labeled. You should color your illustration if you have time. Make sure your illustration clearly shows that you know the difference between contact force, gravity, and friction.

Situations:

1. A soccer player kicking a ball past the goalie and scoring.
2. A parachuter releasing their parachute and gliding to the ground.
3. A student sitting on the couch playing video games.
4. A driver slamming on brakes to avoid hitting an animal in the road.
