1 Academy
Remedial Training (Forces)

Name: _____ **Date:**_____

Parent's signature: _____

Let's revisit areas of weaknesses:

1. State one application of **magnetic force** and one **disadvantage of frictional force**.[2m]

   Application of Magnetic Force:

   - Use to separate magnetic materials from _____ materials.
   - Powerful electro-magnets used in Maglev trains to allow the trains to float above the tracks, thus greatly reducing _____.

   Disadvantage of frictional force:

   - Causes wear and _____.
   - Creates unnecessary h_____ or s_____.

2. In outer space, there is no air, so there is no air _____. Therefore, there is no f_____ force during space travel. However, when a space-craft re-enters earth's atmosphere, its speed is being slowed down by the layer of air, creating _____, which can increase the temperature of the body of the space craft to more than 500 deg C. This shows that f_____ o_____ motion and produces h_____.

3. L_____, w_____ and rollers can be used to _____ fr_____ forces between surfaces.

4. Write "T if the statement is true and "F" is the statement is false.

(a) A stationary object **may not move** when a force is exerted on it. ( )

(b) When an object is raised above the ground, it **gain gravity**. ( )

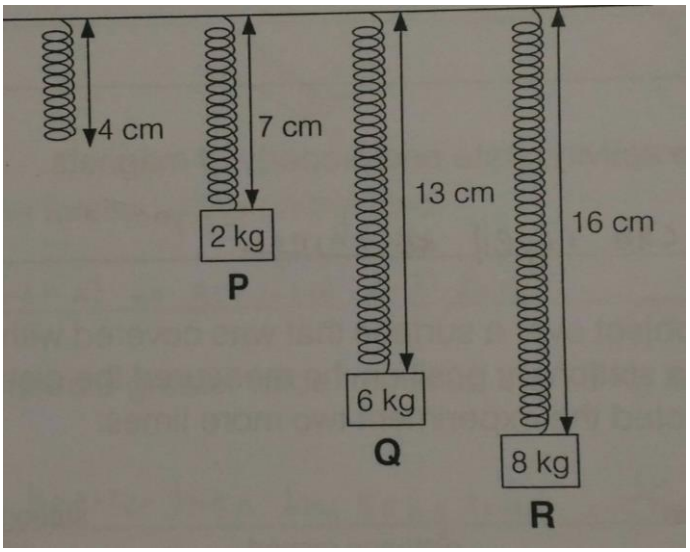
(c) As an object moves further away from the Earth, its weight **decreases**. ( )

(d) Maglev trains float on a layer of air caused by magnetic **attraction**. ( )

(e) Frictional force **cannot act** at a distance. ( )

(f) A drag chute **increases** the speed of the moving space shuttle. ( )

5. The diagram below shows the length of the same spring being extended when three different loads, P, Q and R, were being hung on it.



The **extension** of the spring will be _____ if a 10-kg mass is attached to it. [1m]

The **total length** of the spring will be _____ if a 12-kg mass is attached to it. [1m].

Keep Calm and May The Force Be With You