

# REVIEW

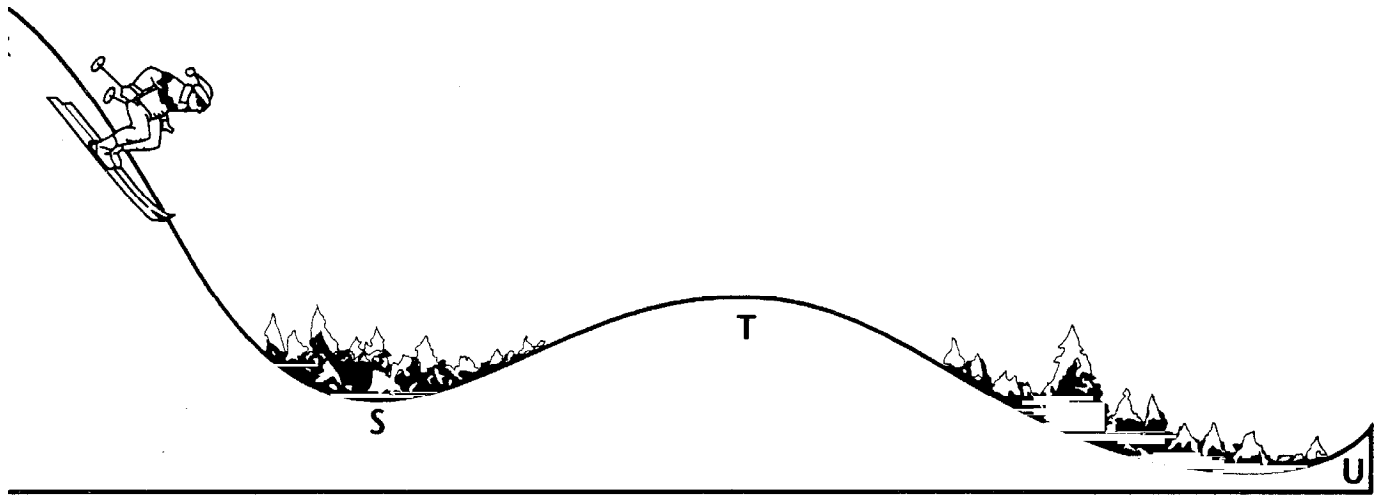
1. What is a force?
  
2. List 5 examples of forces that you have applied today. Be specific, name the object and tell what you did to it.
  
  
  
  
  
  
  
  
  
  
3. What is inertia?
  
  
  
  
  
  
  
  
  
  
4. What type of objects have the greatest inertia?
  
  
  
  
  
  
  
  
  
  
5. Which has a greater inertia, a speeding car or a jet airplane sitting on a runway?
  
  
  
  
  
  
  
  
  
  
6. State Newton's first law of motion.
  
  
  
  
  
  
  
  
  
  
7. Newton's first law is sometimes called \_\_\_\_\_ .
  
  
  
  
  
  
  
  
  
  
8. What is friction?

In the situations below tell whether friction is increased or decreased.

9. \_\_\_\_\_ Drying your hands to open a jar lid.
10. \_\_\_\_\_ Using crutches with rubber tips.
11. \_\_\_\_\_ Using a skate board with ball-bearing wheels.
12. \_\_\_\_\_ Waxing your skis.
13. \_\_\_\_\_ Using rosin on your hands before pitching or batting.

Use the diagram below to answer questions 14 - 16.

**R**



14. A person skis downhill from point R to point U. The speed of the skier increases in going from point R to point S because
- only balanced forces act on the skier.
  - an unbalanced force acts on the skier.
  - only internal forces act on the skier.
  - no forces act on the skier.
15. The skier is able to coast between points S and T even though it is uphill because of
- gravity
  - inertia
  - weight
16. The force that opposes motion between the skier's skis and the surface of the snow is
- net.
  - balanced.
  - friction.
  - inertia.

Weight = mass \* gravity  
Gravity = 10 m/s<sup>2</sup> on Earth

1- What is the weight of a turtle if the mass it 2 kg?



2- How much does a 85 kg man weigh?



3- What is the mass of a candy cane if it weighs 60 N?



4- How much mass does a bowling ball have if it weighs 300 N?



Complete the Table

Object	Mass	Weight on Earth
Person		750 N
Goldfish	0.005 kg	
A brick	2 kg	
10 Coffee Filters		0.093 N
Make up your own		

5- If the net force acting on a 3 kg skateboard is 80 N, what will be the acceleration of the skateboard?



6- You notice a 100 kg dolphin accelerate at a rate of 6 m/s/s.

a) What is the net force on the dolphin?



b) What is the weight of the dolphin?



7- If you apply a net force of 60 N to a mystery box, and the box accelerates at a rate of 2 m/s/s, what is the mass of the mystery box?

