Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Motion and Forces Review

1. A boat travels a distance of 56 meters in 3 seconds. What is the average speed of the boat during the 3 second interval?
   1. 19m/s b. 168 m/s c. 1.9 m/s d. 16.8 m/s
2. When a lion is on the hunt and changes it speed from 4m/s to 6 m/s, this an example of
   1. Direction
   2. Velocity
   3. Constant speed
   4. Acceleration
3. A force is
   1. A change in speed
   2. How much distance is covered in a certain period of time
   3. The push or pull on an object
   4. the amount of matter in an object
4. As a ball rolls to stop on a grassy field, the force that is present is
   1. Kinetic force
   2. Potential force
   3. Frictional force
   4. Applied force
5. Block is sliding down the ramp as seen in the diagram below

Which arrow best represents the direction of the force of friction acting on block A?

* 1. B. c. d.

1. All the matter in an object is known as
   1. Matter b. weight c. mass d. velocity
2. If someone has a mass of 50kg on Earth, what will their mass be on the moon?

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1. What is the weight of a person on Earth who has a mass of 55kg?

Weight = mass \* 9.81 m/s2

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1. On the surface of planet Y the acceleration due to gravity is 25 m/s2. What is the weight of a person who has a mass of 50kg?

Weight = mass \* acceleration due to gravity

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1. If an object’s mass increases then the it’s inertia will \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. In the diagram below box X is on a frictionless table with 2 forces acting upon it.

If F1 is smaller than F2, then box X will

X

F1

F2

1. Move in the direction of F2
2. Move in the direction of F1
3. At rest
4. Will state in a state of equilibrium
5. If a women weighing 300N is laying on a bed, in order to support her weight the bed is exerting a force of
   1. Less than 300N b. more than 300N c. 300N