Student Name: _____ Date: _____

Module Test: Forces and Motion

1) Which of the following are ways to measure movement? Select **all** that apply.

- ☐ distance
- ☐ prediction
- ☐ speed
- ☐ time

2) A force that happens when an object rubs another object is called _____.

3) Cooper designs and builds a toy car and is about to test the speed of the car by pushing it down a ramp. What tools should he use to measure the speed of the toy car?

- ○ a ruler and a scale
- ○ a scale and a stopwatch
- ○ a stopwatch and a ruler
- ○ a measuring cup and a scale

4) Balanced forces cancel each other out when acting on an object.

- ○ True
- ○ False

5) Hitting a nail with a hammer is a _____.

- ○ pull
- ○ strike
- ○ push
- ○ crash

Student Name: _____ Date: _____

Module Test: Forces and Motion

6) Fill in the blanks using the available answer choices.

_____ forces act on an unmoving object.
(Blank 1)

Blank 1 options
- Balanced
- Unbalanced

7) A force is _____.

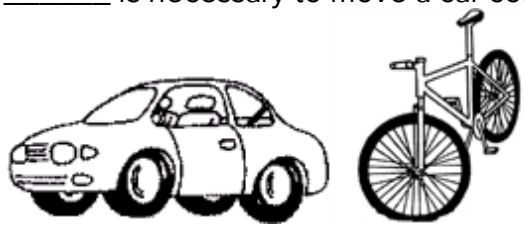
- pushing
- a pull between two objects
- the amount of gravity between two objects
- a push or pull

8) Fill in the blanks using the available answer choices.

An object will have a change in motion when the forces acting on it are _____.
(Blank 1)

Blank 1 options
- equal
- not equal

9) _____ is necessary to move a car compared with a bicycle.



- More force
- Less force
- The same force
- No force

10) Objects can only move in a straight line.

- True
- False

11) Motion is the process of change in an object's _____.

Module Test: Forces and Motion

12) A child pushes a box around a room. This is an example of _____.

- balanced forces
- unbalanced forces
- potential energy
- chemical energy

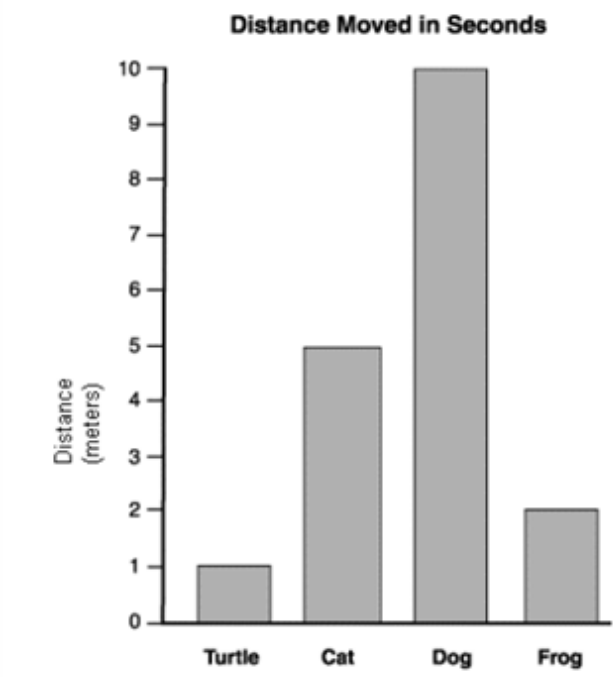
13) What force makes a basketball slow down as it rolls on a flat surface?

- gravity
- friction
- inertia
- an electrical force

Student Name: _____ Date: _____

Module Test: Forces and Motion

14) A group of students placed four animals on a path. Each animal ran, walked or jumped down the path. After 10 seconds, the students measured the distance travelled by each animal. The results are shown in the bar graph below.



Order the animals from fastest to slowest.

cat	**1)** _____
dog	**2)** _____
turtle	**3)** _____
frog	**4)** _____

15) Two children are holding one end of a rope each. They pull on the rope in opposite directions. The rope is not moving. What conclusion can be made about the forces that the children apply on the rope?

16) Jacob is walking a small dog and a big dog. Suddenly, the dogs pull on opposite directions. Which direction will Jacob be pulled?

- ○ towards the smaller dog
- ○ towards the bigger dog
- ○ in the opposite direction of the dog that applies more force
- ○ towards the dog that applies more force

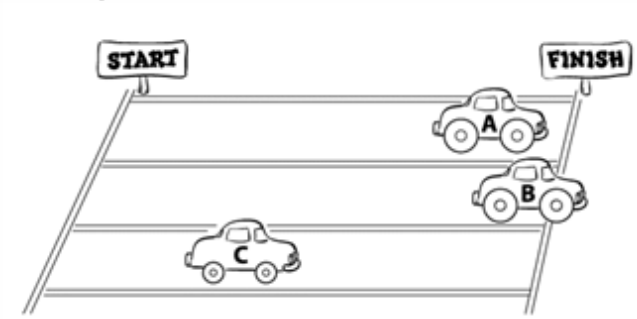
Module Test: Forces and Motion

17) Fill in the blanks using the available answer choices.

The forces that make an object move are called _____ forces.
(Blank 1)

Blank 1 options
- balanced
- unbalanced

18) Some kids played racing three toy cars. Each one started at the same time. The following drawing shows the end of the race.



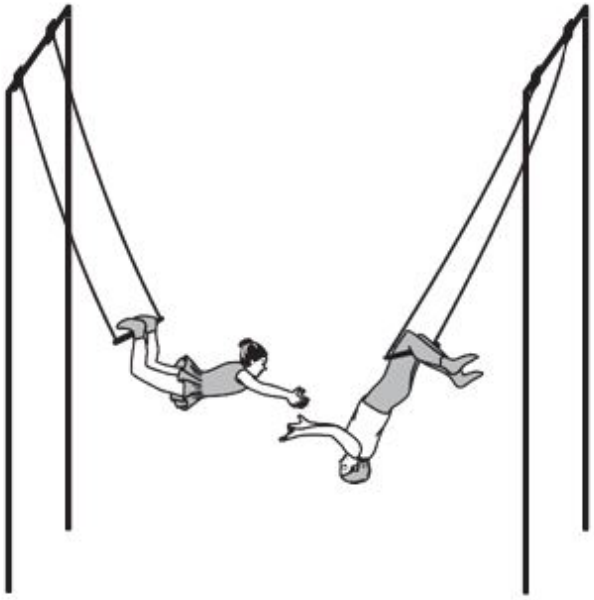
Which was the fastest car?

- ○ Car A
- ○ Car B
- ○ Car C
- ○ All had the same speed.

Student Name: _____ Date: _____

Module Test: Forces and Motion

19) Marla is watching the trapeze artists in a circus. A trapeze moves like a swing. The artists hold on a bar and swing back and forth getting close to and apart from each other, as shown.



The trapeze artists swing back and forth some times until they reach each other. The table shows the distance between the artists' hands with every swing.

Distance Information

Swing	Distance between Hands (centimeters)
1	40
2	30
3	20

Predict how many swings they will need to touch each other's hands. Explain how the data pattern in the table supports your reasoning.