SCIENCE 8 – TYPES OF FORCES WORKSHEET

NAME: _____

Vocabulary		
Action-at-a-distance	Electrostatic	Gravitational
Contact	Force	Magnetic
Elastic	Friction	Tension

Use your notes from pages 11 – 12 and the terms in the vocabulary box to fill in the blanks for the following five questions. Each term may be used more than once.

1) A(n) _____ is a push or a pull that acts on an object.

2) _____ forces only have an effect on objects that they touch.

3) _____ forces act on an object without touching them.

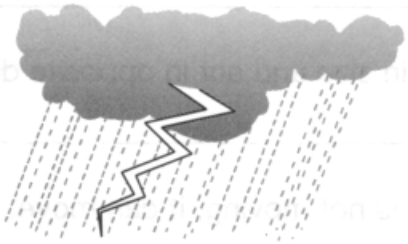
4) _____ works to slow down or stop motion due to surfaces rubbing against each other. _____ force is experienced by a rope when it is pulled at either end. _____ force is exerted when a spring returns to its normal shape. These are examples of _____ forces.

5) A(n) _____ force pulls objects toward each other because they have mass. A(n) _____ force pulls or pushes on metals such as iron. A(n) _____ force causes pushing and pulling forces due to differences in charge of the small particles that make up matter. These are examples of _____ _____ forces.

6) Match each **Descriptor** on the left with the best **Force** on the right. You may use some forces more than once.

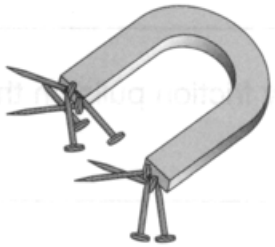
Descriptor		**Force**	
	An apple falls from a tree branch	A.	Elastic
	A person uses a rope to pull a friend on a sled	B.	Tension
	A magnet holds a picture on a fridge	C.	Friction
	A person pulls a bow back and shoots the arrow	D.	Magnetic
	A sock is stuck to a sweater as it comes out of the dryer	E.	Electrostatic
	When a person stops pedalling, the bicycle slows down	F.	Gravitational
	A meteor travelling through space moves faster and faster as it approaches Earth		
	A bungee cord pulls a jumper back up toward the platform from which he jumped		
	Your hands become warmer as you vigorously rub them together		
	When combing your hair, you notice hairs move outward from your head toward the comb		

7) On the first blank line, state what type of force is illustrated in the picture (tension, friction, elastic, gravitational, electrostatic, magnetic). On the second blank line, state whether it is a contact force or an action-at-a-distance force.



_____ _____

_____ _____



_____ _____

_____ _____

Read the statements given below. If the statement is true, write "T" on the line in front of the statement. If it is false, write "F" ***and rewrite the statement to make it true.***

8) _____ A force cannot set a motionless object in motion.

_____

9) _____ A force can make a moving object change direction.

_____

10) _____ A force can change the shape of an object.

_____

11) _____ Tension force slows down or stops motion due to surfaces rubbing against each other.

_____

_____

12) _____ Elastic force pulls objects toward each other.

_____

13) _____ An example of magnetic force is lightning.

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