Chapter 3 Study Guide – How Do You Describe Force and the Laws of Motion?

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

1. Mrs. Renn and Mrs. Goodnight are playing tug-of-war. They are pulling on the same rope at opposite ends, and the rope is not moving in either direction. Why is the rope not moving?

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1. A ball is moving at a constant speed. What will happen if it is hit on the side by another ball traveling in a different direction?

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1. Which of the following is an example of balanced forces?

Riding a skateboard downhill

Pushing a box up a ramp

Leaning against a wall

Going down a slide

1. Magnetism is a force that pulls certain materials toward a magnetized object without touching them. Which type of force is magnetism?

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1. A sheet of paper glides softly to the ground. What causes the paper to fall so slowly?

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1. Mr. Norrington pedals his bicycle along the flat sidewalk. Then he takes his feet off the pedals and does not use the breaks. What will cause his bicycle to slow to a stop?

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1. Distance, time, and direction can help describe an object’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. A ball falling to the ground is caused by what type of force? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. When Mr. Drake lifts a backpack, he is using a contact force. Why is this a contact force?

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1. In an investigation, Dr. Riggs drops an orange from a ladder and watches it fall to the ground. What is the force that pulls the orange to the ground? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Mrs. Ferree is pushing a box to make it move across the floor. What is Mrs. Ferree applying to the box as she pushes it?

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1. A woman is using a paddle to make a kayak move. How does the water affect the motion of the kayak? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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1. Mr. Watson was picking blackberries on a windy day. He had two buckets. He filled one bucket with blackberries and set it on the ground. He was about to pick up the empty bucket when the wind began to blow. The wind blew the empty bucket over but not the full bucket. Explain why the wind blew over only the empty bucket and not the full bucket.

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