Force and Motion Study Guide Third Grade

**Vocabulary:**

Fill in the blank with the correct vocabulary word.

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| Motion Force Gravity Friction Position  Push Pull Speed Location |

1. \_\_Friction\_\_\_\_\_\_\_\_\_\_\_\_ occurs when two objects rub together.
2. A push or a pull that can change the way something moves is called a \_\_forces\_\_\_\_\_\_\_\_\_\_\_\_.
3. Motion can be cause an object to change \_position\_\_\_ or direction.
4. \_Location\_\_\_\_ is the position of an object.
5. \_Speed\_\_\_\_\_ describes how fast something moves.
6. The pulling force between two objects that brings them toward each other is called \_\_gravity\_\_.
7. \_Motion\_\_\_\_ is a change in position, location, or direction of an object as its moving.
8. Griffin used a bigger force to \_\_push\_\_\_ the lawnmower than to \_\_pull\_\_ a weed out of the ground.

Explain:

1. When Alexander tried to play with his toy racecars, why did the cars move faster on the kitchen tile floor than on his bedroom carpet floor? Use Force and Motion vocabulary.

\_\_The toy car rolled faster on the smooth tile floor because there was less friction to slow it down. The toy car went slower on the rough carpet because there was more friction to stop it from rolling or even start rolling.

10.Give an example of a contact force and a non-contact force. Write and draw an

example of each.

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| **Contact Force** | **Non-Contact Force** |
| Kicking a ball  Pushing a chair  Pulling a door closed  Pushing a pencil | An apple falling from a tree  Rain falling down  Magnets (Two like poles repel each other) |

11.Give an example of a force and a motion. (cause and effect)

Force Motion

The ball moves forward or changes direction

I roll a ball on the floor.