

## Force and Motion Study Guide

-If a ball is hit by two different people, why could the ball move different distances with each person?

(Force is a key word that should be included in your answer)

-If a ball is rolled down a hill, explain how friction and gravity play a roll?

- What force keeps the book in motion?



-What force stops or slows down motion?

-Imagine someone standing on a skateboard facing a wall. If they push against the wall, in what direction will they move?

-The table below lists the weight of four blocks.

### Weight of Blocks

Block Number	Weight of Block
1	1 kg
2	5 kg
3	10 kg
4	50 kg

The four blocks are each pushed with the same amount of force. Which block will move the shortest distance? In addition, explain why the block you chose will move the least amount of distance compared to the other blocks.

-Explain a situation in which gravity and/or friction is helpful.

-Explain a situation in which gravity and/or friction is not helpful.

-Define friction.

-Define gravity.

