

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Vocabulary**

In the space below, write the definitions of motion, distance, speed, velocity and acceleration. It's okay if you don't know the definition. Make your best guess or make up a silly definition for the words based on what it reminds you of or what it sounds like.

| Word         | Definition |
|--------------|------------|
| Motion       |            |
| Distance     |            |
| Speed        |            |
| Velocity     |            |
| Acceleration |            |

**Let's Play Catch!**

Grab a friend and a ball (it can be any kind of ball — try a couple different balls if possible) and play catch. Watch the motion of the ball while you are playing. Think about the motion of the ball and the following questions:

- When is the ball moving the fastest?
- When is the ball moving the slowest?
- When is the ball going up?
- When is the ball going down?
- If you throw the ball harder or lighter does it change the movement of the ball?
- What shape does the ball's path take through the air?
- What do you feel as you release the ball and catch it again?

In the space below, write a narrative describing your observations of the motion of the ball as you played catch. Use as many of the vocabulary words on the first page as you can. Don't worry about if you are using the words correctly yet — you will have a chance to revise this writing again later.

What questions came to mind about the motion of the ball as you played catch? Write them in the space below.