Recognizing Motion

1. Nikki is doing cartwheels. Using the information from the app screenshot below, describe her motion as she begins moving by filling out the following information:

   a. Speed: __________

   b. Distance traveled along the path: __________

   c. Horizontal distance from the start: __________

   d. Height from the ground: __________

   e. Direction of motion (draw an arrow): __________
2. Now Nikki is standing up from completing her first cartwheel. This moment is marked with a high-speed sticker indicated by the green burst of color coming from Nikki’s path of motion. Using the information from the app screenshot below, describe her motion by filling out the following information:

a. Speed: _____________
b. Distance traveled along the path: _____________
c. Horizontal distance from the start: _____________
d. Height from the ground: _____________
e. Direction of motion (draw an arrow): _____________
3. Now Nikki is standing on her hands in the middle of her third cartwheel. This moment is marked with a low-speed sticker indicated by the orange burst of color coming from Nikki’s path of motion. Using the information from the app screenshot below to describe her motion by filling out the following information:

a. Speed: _____________
b. Distance traveled along the path: _____________
c. Horizontal distance from the start: _____________
d. Height from the ground: _____________
e. Direction of motion (draw an arrow): _____________
Describe Your Own Motion

Using the video you filmed of two people playing catch, place points on the ball to create a path of motion in the video. Choose three different spots in the video and sketch screenshots of those spots in the boxes on this worksheet.

Answer the following questions for the screenshots you have sketched below:

1. Describe what is happening in your video: ________________________________
   ________________________________
   ________________________________

   a. Speed: _____________
   b. Distance traveled along the path: _____________
   c. Horizontal distance from the start: _____________
   d. Height from the ground: _____________
   e. Direction of motion (draw an arrow): _____________
2. Describe what is happening in your video: ____________________________________________
   ____________________________________________
   ____________________________________________
   ____________________________________________
   ____________________________________________
   ____________________________________________

   a. Speed: _____________
   b. Distance traveled along the path: _____________
   c. Horizontal distance from the start: _____________
   d. Height from the ground: _____________
   e. Direction of motion (draw an arrow): _____________
3. Describe what is happening in your video:

____________________________________________________________________

a. Speed: _____________
b. Distance traveled along the path: _____________
c. Horizontal distance from the start: _____________
d. Height from the ground: _____________
e. Direction of motion (draw an arrow): _____________