



You are going to be conducting three demonstrations involving Newton's Third Law, the law of force pairs. Before each demonstration, make a prediction about what you think will happen. After each demonstration, answer the questions.

Demo #1: Push the wall

Question: What will happen when you sit in a wheeled chair and push against the wall?

Prediction: What do you think will happen? Why will it happen??

Observations: _____

What direction did you push?

What direction did you travel?

Draw a diagram that shows what happened. Draw and label an arrow representing the force you exert, and another arrow representing the force exerted on you.

Demo #2: Throw the Ball

Question: What will happen when you sit in a wheeled chair and throw a ball toward your partner?

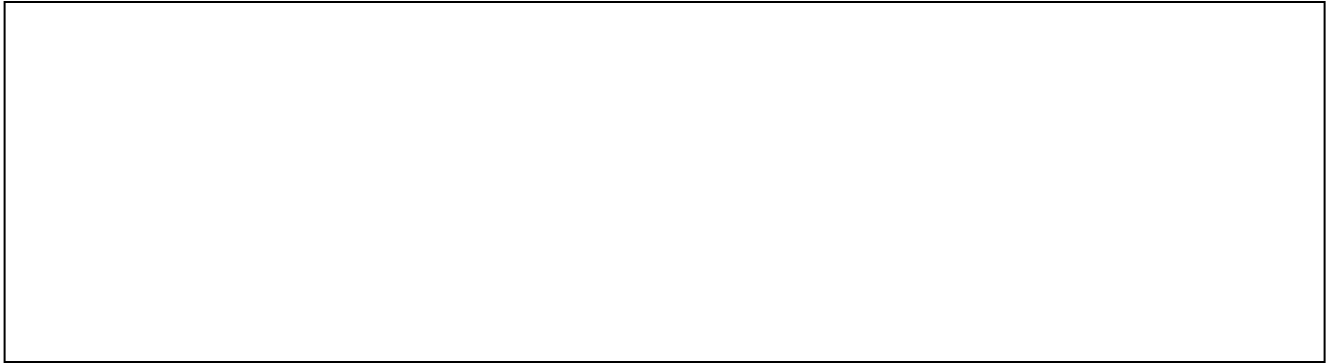
Prediction: What do you think will happen? Why?

Observations: _____

What direction did you throw?

What direction did you travel?

Draw a diagram that shows what happened. Draw and label an arrow representing the force you exert, and another arrow representing the force exerted on you.



Demo #3: Tug-o-war

Question: What will happen in a tug-of-war contest when the contestants are on wheels?

Prediction: What do you think will happen? How come?

Observations: _____

What direction did Team 1 pull? Team 2?

What direction did Team 1 travel? Team 2?

Draw a diagram that shows what happened. Draw and label an arrow representing the force Team 1 and Team 2 exert, and other arrows representing the force exerted on them.

