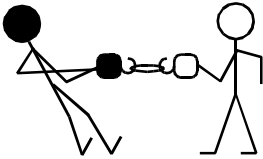


j. i. Connect both force sensors to a **single** rubber band.

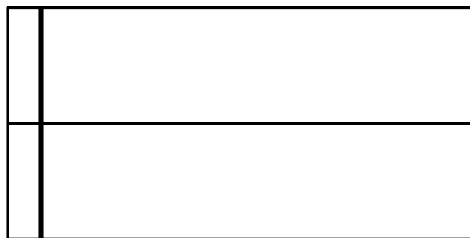
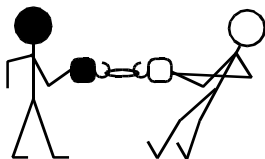
ii. Allow the rubber band to relax completely and press the ZERO button on each force sensor.

iii. Click the on-screen **“Start”** button to initiate the data sampling.

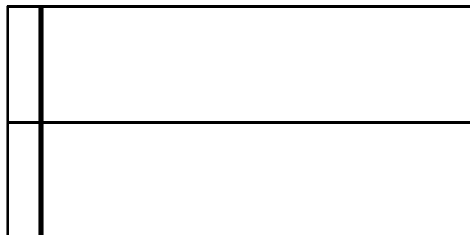
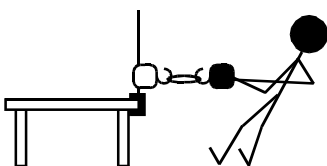
k. Allow one person to pull their force sensor while the other one holds their force sensor in place. The puller should vary their force. When the time is up, find and select **“Scale to fit.”** It’s the first icon at the top of the graph window. What does the display show and what does it mean?



l. Reverse roles: the puller becomes a holder and the holder becomes a puller. No need to switch sensors; don’t clear the screen. Is the meaning of the result the same or different from what happened last time?



m. If possible, obtain and attach a table clamp and support rod to the table. Attach one force sensor to the support rod. With the support rod as the holder, repeat the previous activity. Is the result the same as or different from what happened last time?



n. Complete the statement. Include the terms **“magnitude”** (size) and **“direction”** in your response.

Whenever one object exerts a force on a second object, the second exerts a force on the first that is