<u>Instructions for lesson 1:</u>

<u>Step 1:</u> Before setting up the pulley, spend some time with the force meter and the masses provided to see how the force changes as you add or remove mass.

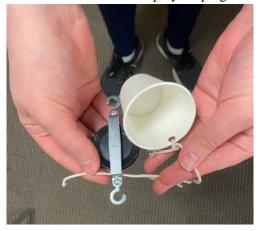
<u>Step 2:</u> Set up two chairs with the back facing each other with \sim 2 feet between them. Then place the meter stick on top of the chairs.



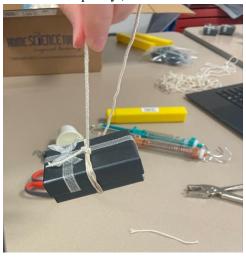
Step 3: Use the short \sim 20 cm string to tie a loop around the meter stick with the pulley hooked into the string.



<u>Step 4:</u> Use the hole puncher provided to cut a hole near the top of a cup. Then attach one end of the longest string provided to the hole in the cup by looping through it and tying it.



<u>Step 5:</u> Unhook the pullet from the string and place the string that is attached to the cup over the top of the pulley then tie the other end of the string to the mystery box firmly. (One person holds up the mystery box to make sure the string stays connected to the pulley.)



<u>Step 6:</u> Follow the instructions given on the worksheet to answer the questions asked. <u>Step 7:</u> If time allows, swap your mystery with another station and repeat the activity.