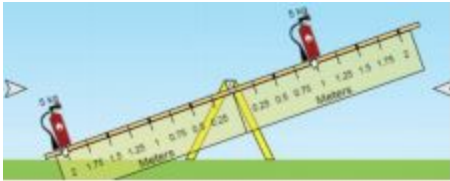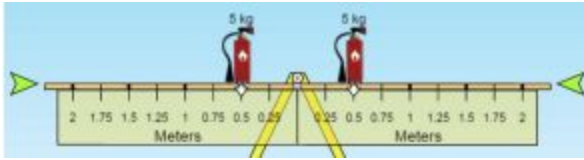3.3 PhET Simulation

1. Go to the [Balancing Act] PhET Simulation

2. Set-up: Choose "Introduction"

3. Check all of the "show" boxes.

4. Add supports.

5. Choose rulers

6. Add masses to each side of the fulcrum.

7. Remove the supports and see if you are balanced.

● Draw 2 different ways to have the seesaw unbalanced AND 2 different ways to balance the masses. **For each side of the fulcrum, find the N*m as shown below. Try different masses and lengths**! USE THE EXAMPLE FOR REFERENCE!!!!!

Unbalanced :(	Balanced! :)
50N*2m = 100N*m ≠ 50N*m =50N*1m	50N*0.5m = 25N*m = 25N*m =50N*0.5m
≠	=
≠	=

● What do you notice about the N*m for your balanced masses?

8. Choose "Balance Lab"

9. Check all of the "show" boxes, add supports, and choose "Rulers"

10. Find the weight of the Mystery objects. Find work (N*m) and divide by distance (m).
● Draw the balanced pictures, below.

Mystery	Balancing picture	What does each mystery object weigh?	
A		N	N
B		N	N
C		N	N
D		N	N
E		N	N
F		N	N
G		N	N
H		N	N

● What are the two main factors in the weight on each side of the fulcrum?