



Learning Objectives:

- Describe the factors that determine whether two objects will balance each other
- Predict how changing the position of a mass on the balance will affect the motion of the balance
- Use a balance to find the masses of unknown objects

Use the simulation here:

els724.com > K7-8 Physics > 5 Mechanics > Sim: Levers

Directions:

1. *Explore* the **Balancing Act** simulation with your partner. As you explore, *talk* about what you find with your partner (About 5 minutes).

Make bulleted notes here:

2. Is there more than one way to get two objects with **identical masses** to balance? How?

3. Next, try to get two objects with **different masses** to balance.

Try to **describe** at least **2 different** ways that you were able to balance them and **draw** them below.

Make sure you **label** the **masses** and the **distance to each mass from the center** (pivot point).

1.	
2.	



5. **Draw** two examples of balancing a single mass on one side with two other masses
Make sure you **label** the **masses** and the **distance to each mass from the center** (pivot point).

1.	
2.	

6. For your pictures in Question 5, **draw in the forces** from each mass

7. Try to draw what will happen next if the box on the left is **45 kg** and the box on the right is **60 kg**

