Balance Scales

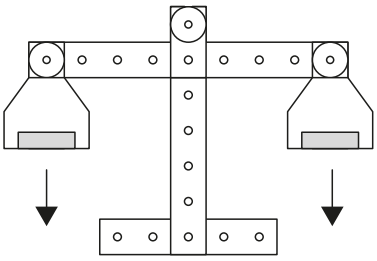
creation crate junior ft. TechCard

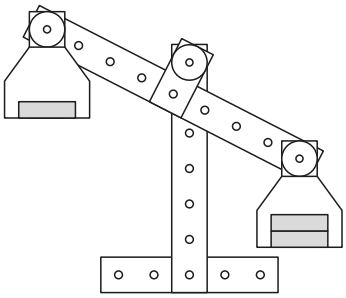
Answer Key

1. With two equal weights it might n on each side. Remove one of the weights to see the effect of gravity!

2. The beam is folded into a strong shape and the vertical walls of the beam keep it rigid. This shape is called a 'channel beam' and is used in real construction.

3. Arrows indicate the forces acting on the scales. Pupils could also indicate that the force of gravity is also acting on the entire structure as well as the 'weights'.





4. The balance will tip with a heavier load on one side.

5. This experiment shows that the 'weight' of an object is not caused by its shape or its size but by the density of the material the object is made from. Denser material tends to be harder as more material is packed into the space the object occupies.

6. Gravity!