Shape balancing 1

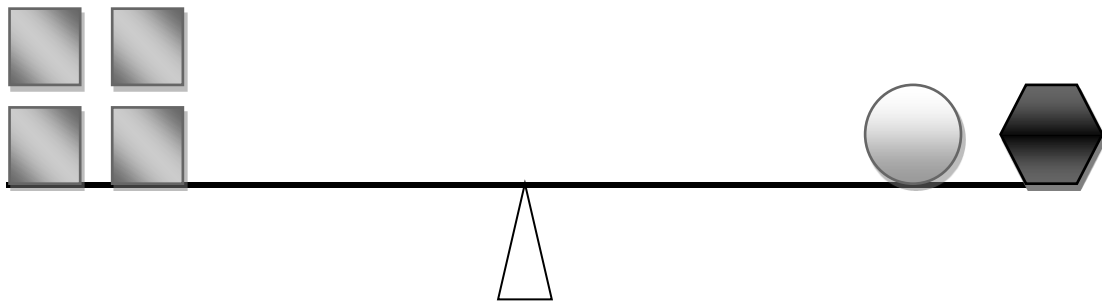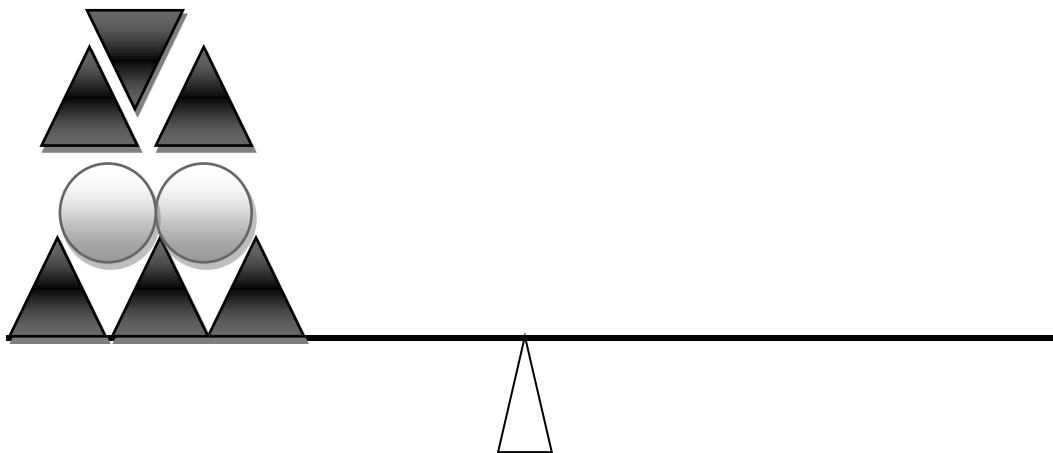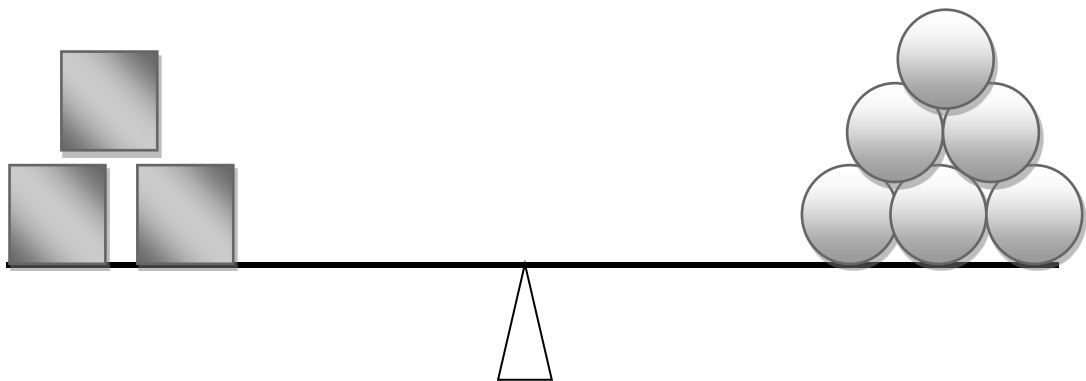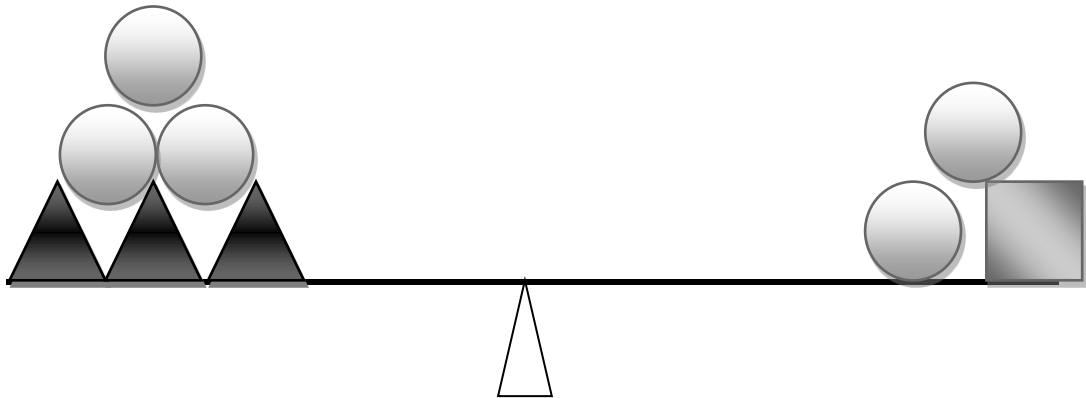How many hexagons do we have to add to the third teeter-totter to make it balance? Use the first two for hints!
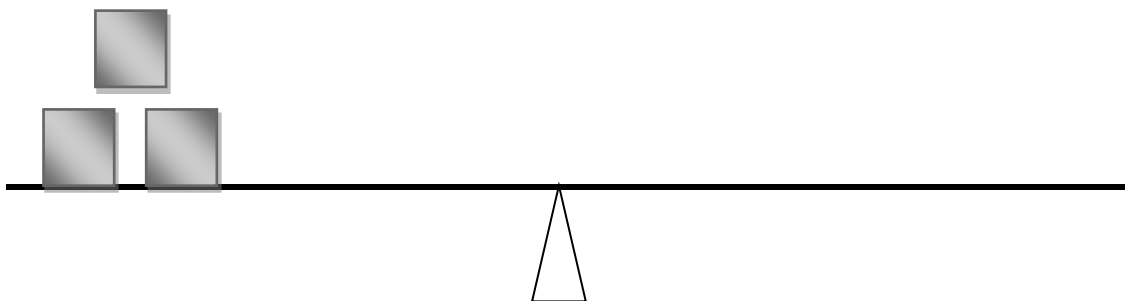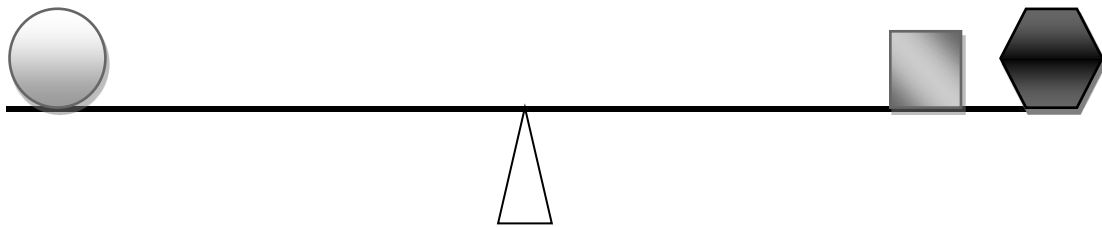
Shape balancing 2

How many squares do we have to add to the third teeter-totter to make it balance? Use the first two for hints!

Shape-balancing notes

This is algebra! The idea is to build algebraic intuition before introducing letters and formal equations. The balance point represents the equals sign.

This game is most appealing if you have lots of coloured shapes cut out of construction paper or plastic foam.

Use the shapes provided to set up the system, then make exchanges to figure out what the blank has to be. Watch carefully to be sure all exchanges are legal. Not all exchanges may be useful – so you may need to start over.
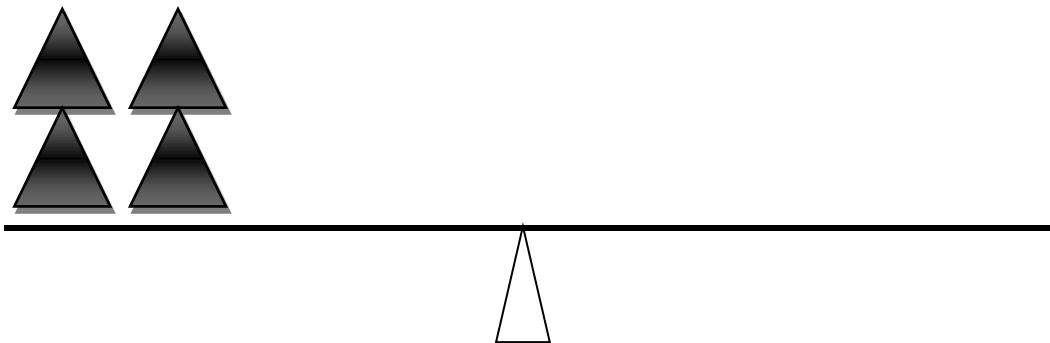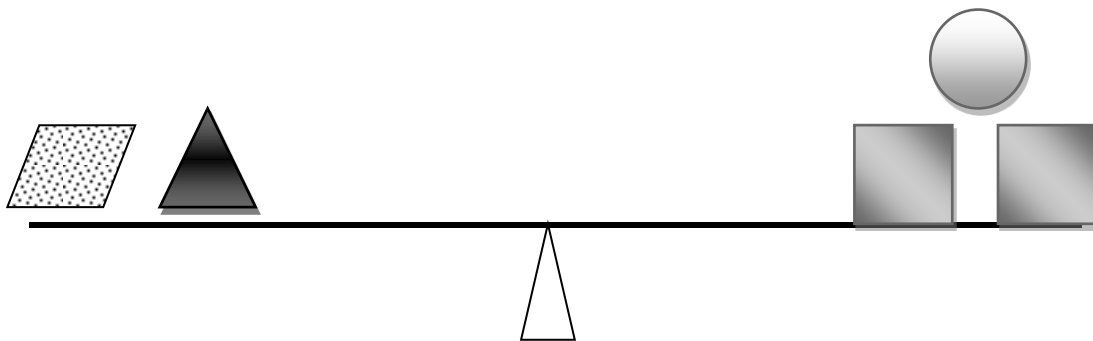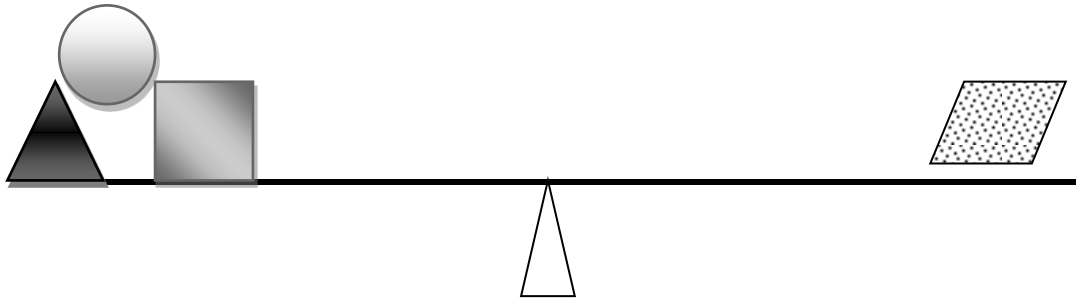
There is only one correct answer for each page.

      1) 2 hexagons
      2) 2 squares
      3) 2 squares
      4) 7 rhombuses (or rhombi)
      5) 12 triangles

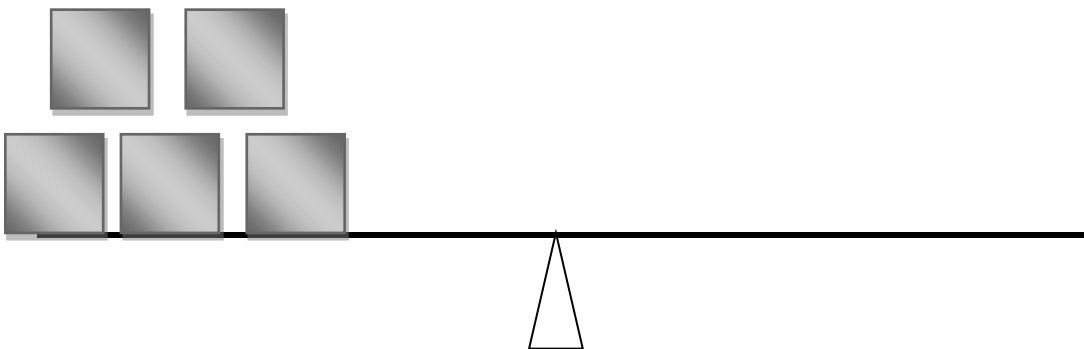Students might enjoy making up puzzles for each other, once they have tried these.
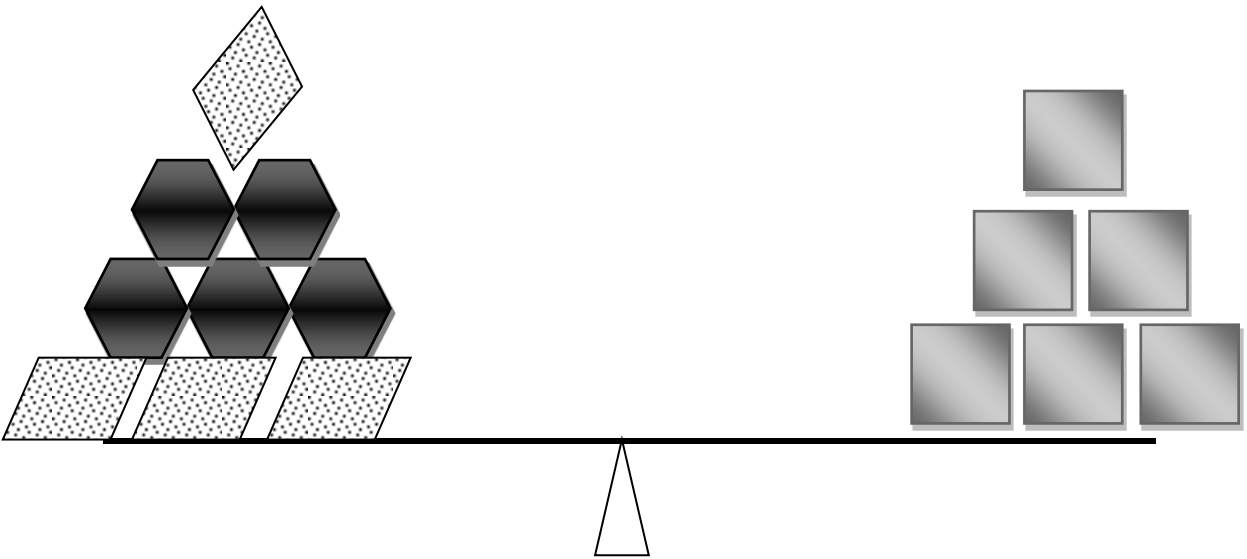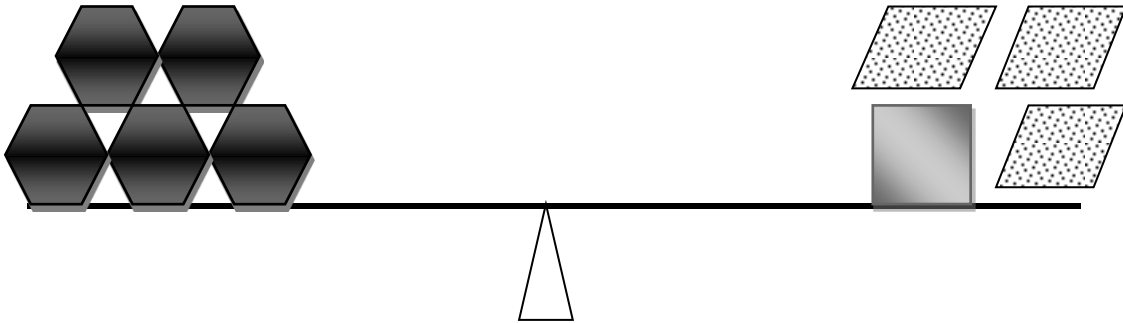
Shape balancing 3

How many squares do we have to add to the
third teeter-totter to make it balance?

Shape balancing 4

How many rhombuses do we have to add to the
third teeter-totter to make it balance?

Shape balancing 5

How many triangles do we have to add to the third
teeter-totter to make it balance?