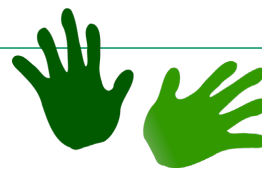


# Investigative Practical Activity

## Investigating Pentominoes

Things you will need:

a set of 12 pentominoes (see next page)

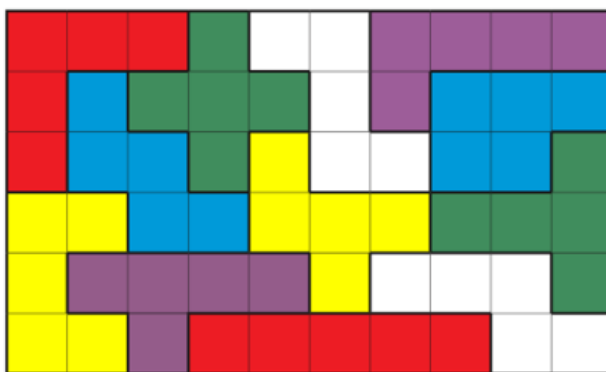


So, did you enjoy trying to find all 12 unique pentominoes?!

Carefully cut out the set of pentominoes to use for these activities.

### Challenge 1

All 12 pentominoes can be arranged to make a 10 by 6 rectangle. Here is one solution:



- Look at the solution for 30 seconds. Now turn over the page and see if you can make the rectangle with all 12 of your pentominoes.
- Remember you will probably need to **reflect** or **rotate** your pentominoes. If you get stuck, have another peek at the solution...

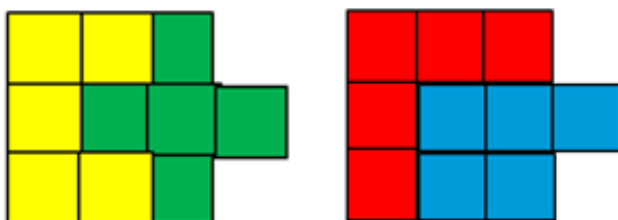
### Challenge 2

Now try to make *other* rectangles with the pentominoes:

- Use three pentominoes to make a 3 by 5 rectangle.
- Use four pentominoes to make a 4 by 5 rectangle.
- Use five pentominoes to make a 5 by 5 rectangle (i.e. a square).
- Use six pentominoes to make a 6 by 5 rectangle.
- Use all 12 pentominoes to make 3 by 20, 4 by 15 and 5 by 12 rectangles!

### Challenge 3

Here is the same shape, each made by joining 2 pentominoes:



- Find 4 more pairs like this.

# Investigative Practical Activity

## Investigating Pentominoes

A set of all 12 pentominoes

