

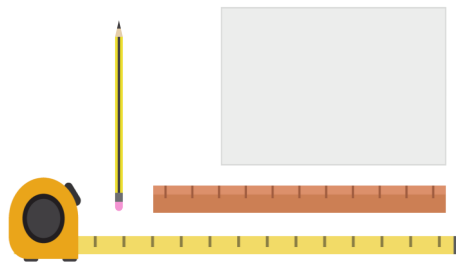


Floor planner

Measure the perimeter of each room in your home to create a floor plan.

You will need a tape measure, pencil, ruler and paper.

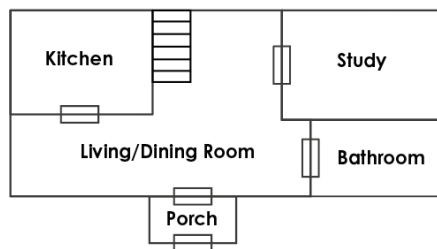
(You may want to recruit a labourer too!)



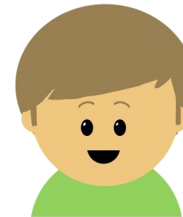
Carefully and accurately, measure each wall length in all of your home's rooms.

Draw each room to the plan as you go, noting the measurements.

Do a different floor plan for each storey if you do not live in a flat or bungalow.

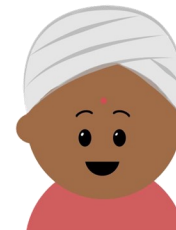
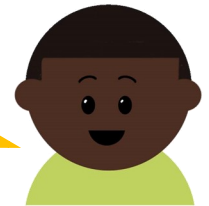


Let's do this!



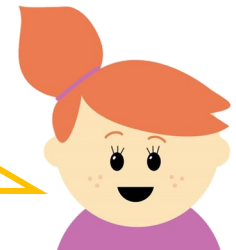
When you have finished, calculate the perimeter of each room.

Do any of the rooms have the same perimeter but are a different shape?



If you have more than one storey, is the total perimeter the same on each storey?

How might you use these findings in real-life?





Parallel punt

On a piece of A4 paper, draw a number of lines with a ruler and pencil or pen. Lines should be a variety of lengths and orientations.



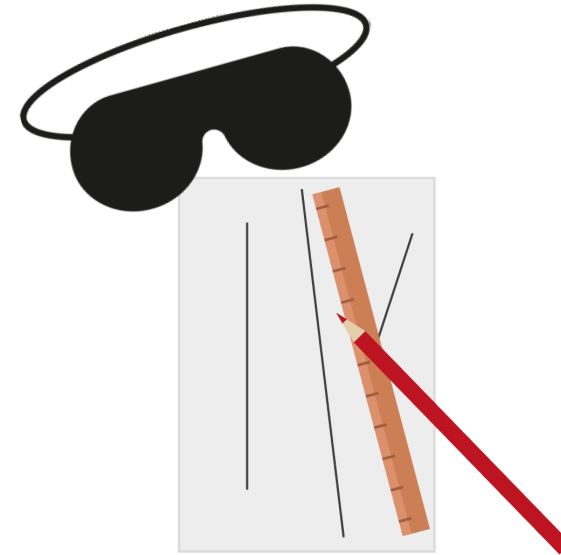
Play on your own or with others. Each player looks at the piece of paper and is blindfolded. They attempt to draw a line which is parallel to one of the lines drawn on the paper using a ruler and their allocated coloured pencil.



If the line is exactly parallel, ensure that conventional markings are used. E.g. The first parallel lines should be marked (>) and the second (>>) and so on.



Keep playing the game for as long as you like. When you decide for it to end, calculate the scores if playing with others.



Challenge



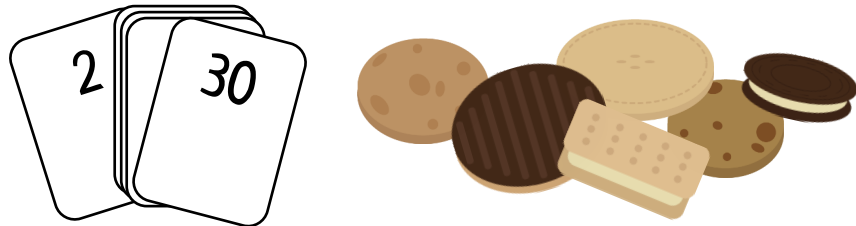
How can you prove that two of the lines drawn are not parallel?





Biscuit stack

Stack biscuits to see which numbers are prime (only divisible by themselves and 1)!
Explore the numbers from 2-30.

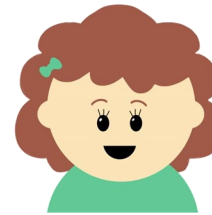


When considering whether a number is prime or not, build its biscuit tower. See if you can divide the biscuits into an equal number of biscuits other than itself (the full stack) and 1 (equal piles of 1 biscuit) e.g. stacks of 2, 3, 4 5 etc..



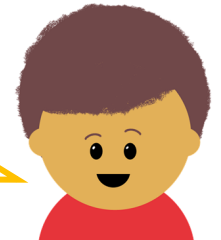
If you can, then you will learn that the number is not prime; if you cannot, you will learn that the number is prime. Above, 6 divides by 3 so it is not prime.

Let's do this!



Make stacks of prime numbers up to 30.

Which number between 2 and 30 can you prove is prime in the most ways? Why?



Challenge

Explore whether two or more prime numbers can add together to make another prime number.

