

# CHALLENGE

## Prospero's Library-Maths challenges and games

**These are challenges, games and investigations to build on the learning from earlier in the week.**

### AREA AND PERIMETER

**Click on the link to the right.**

This NRICH article (which comes with printable resources) has a range of fun challenges that'll get your child exploring the relationship between area and perimeter for themselves.

**Building on the exercises they did earlier in the week it involves:**

Drawing a shape where the area and perimeter are the same

Drawing one where the perimeter is numerically twice the area (and vice versa)

Making the area of a shape go up while the perimeter goes down

And drawing shapes that have the same area but different perimeters

**Challenge at**

<https://nrich.maths.org/7280>

### ROMAN NUMERALS

#### MATCHSTICK GAMES AND ACTIVITIES

Be safe when using matchsticks. Never leave a child alone with a box of matches.



1. Use safe matchsticks/sticks to make Roman numerals:

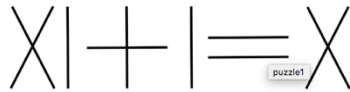
2. Play a sequence game where you time your yourself to see how fast you can put Roman numerals in the correct sequence starting with the smallest number.

Children could play against each other or child vs adult!

3. Use matchsticks to make simple equations for children to 'decipher'

4. Replace the numerals on a clock in the house with Roman Numerals! Or make your own clock face with Roman Numerals

## MATCHSTICK CHALLENGE


$$XI + I = X$$

This is incorrect.

1. Re-make this equation using your own matchsticks/cocktail sticks/sticks.
2. Your challenge is to now remove one matchstick so that the equation is correct
3. Make your own 'Roman numeral Matchstick Challenge' and send it to your teacher or to us at PSC to see if we can solve!