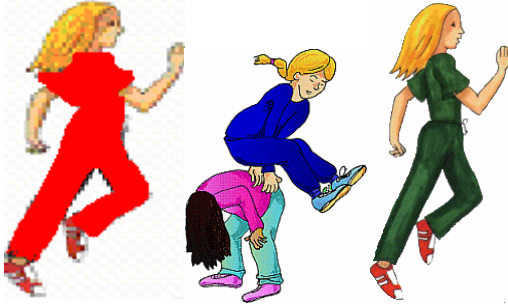


Tracksuits

You have three new tracksuits



One red top and red pair of trousers
 One blue top and blue pair of trousers
 One green top and green pair of trousers

You wake up one morning very early and find there is a power cut but you need to get dressed. Without bothering to get a torch or a candle you reach into your clothes cupboard and take out a top and a pair of trousers.

- What colour might your outfit be?
- How many different possible outfits are there?
- If you buy a yellow tracksuit, how many more possibilities will there be?
- What number patterns can you find?

Learning and Teaching Objectives

- Have a system for finding all possibilities
- Record in an appropriate way (drawings, symbols, table)
- Recognise, extend and describe a number pattern

Tracksuits Solution

top	trousers
R	R
R	B
R	G
B	B
B	R
B	G
G	G
G	R
G	B
9 possible outfits	

Red and blue tracksuits - 4 outfits

Red, blue and green tracksuits - 9 outfits

Red, blue, green and yellow tracksuits - 16 outfits

$2^2, 3^2, 4^2, \dots$

top	trousers
R	R
R	B
R	G
R	Y
B	B
B	R
B	G
B	Y
G	G
G	R
G	B
G	Y
Y	Y
Y	R
Y	G
Y	B
16 possible outfits	