Parents Problem Solving

Bromley Heath Infants

Problem Solving

PS / R
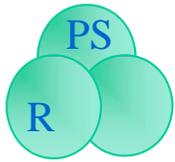
Gather/Organise
What do I know?

Identify
What is the task?

Learn from experience
What have I learned?

Generate
How many ideas
can I think of?

Communicate
Tell someone

Evaluate
How well did I do it?

Decide
Which is the best
idea?

Implement
Do it

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Beacon Authority 2007-2008 Healthy Schools

Beacon Authority 2007-2008 School Improvement

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Types of Problems

- Listing all possibilities
- Finding rules and patterns
- Diagram and Visual puzzles
- Logic problems
- Word Problems

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Listing all possibilities - Y1
Jug of Orange

- A jug holds 10 glasses of orange juice.

- Emma fills some glasses for her friends.
- Ben fills some glasses for his friends.
- There are 3 glasses of juice left in the jug.
- How many glasses could Emma and Ben each have filled?

Giraffes Can't Dance

Some lions, hippos and giraffes have come to the waterhole.

There are 10 animals altogether and at least 2 lions and an even number of hippos.

How many of each type of animal could be there?

Find all the different ways?

Balloon Puzzle

Jessica and Simon were blowing up balloons for Gareth's birthday.

There were at least two of each.

Some balloons had 3 spots on some had 5 spots.

There were 31 spots altogether.

How many balloons had 3 spots and how many had 5 spots?

What if there were 24 spots?
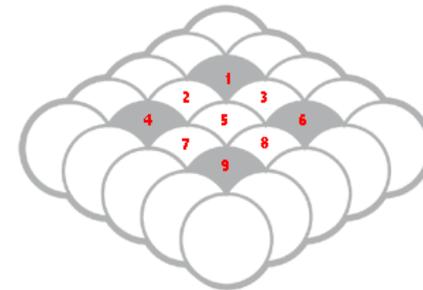
What if there were 65 spots?

Repeating Patterns

What pattern can you see ?
What will come next ? Why ?

What about this pattern ?

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Finding Rules and Patterns –Year 2 – Fruity Pyramid
(Handa's Surprise)

Handa stacks her tangerines in her basket in a pyramid. The bottom layer of the pyramid looks like this
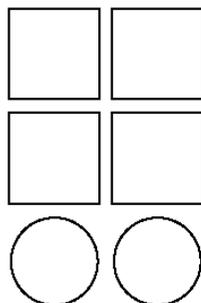

The pyramid has four more layers.

How many tangerines are on each layer ?

How many are in the pyramid altogether ?

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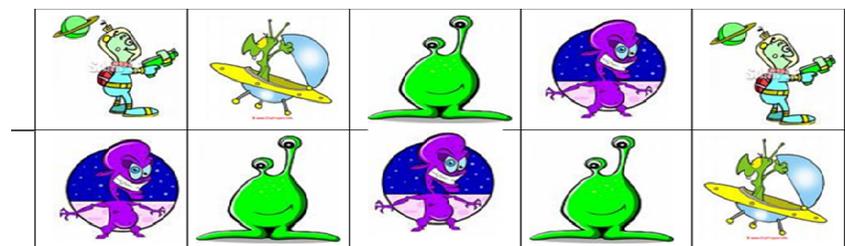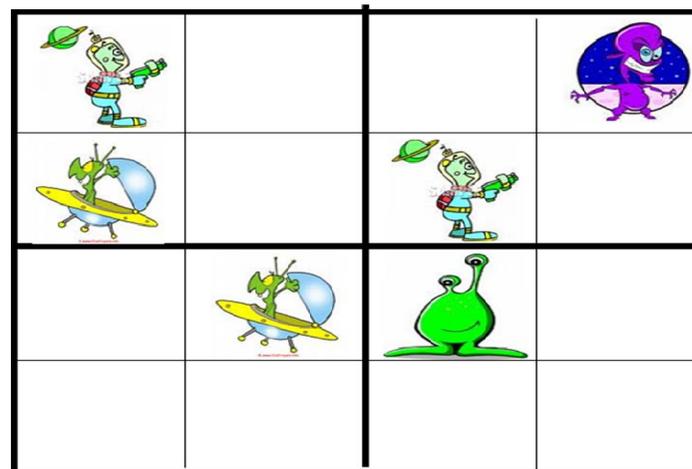Council

Logic Puzzles

Sudoku
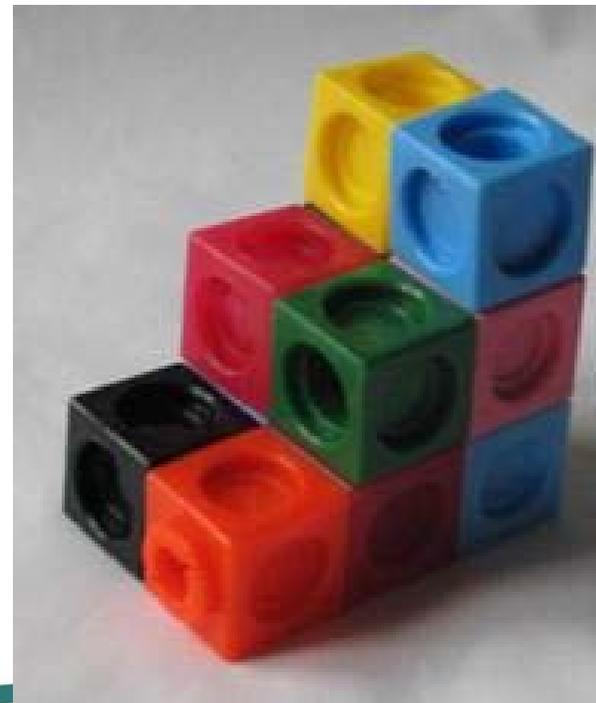
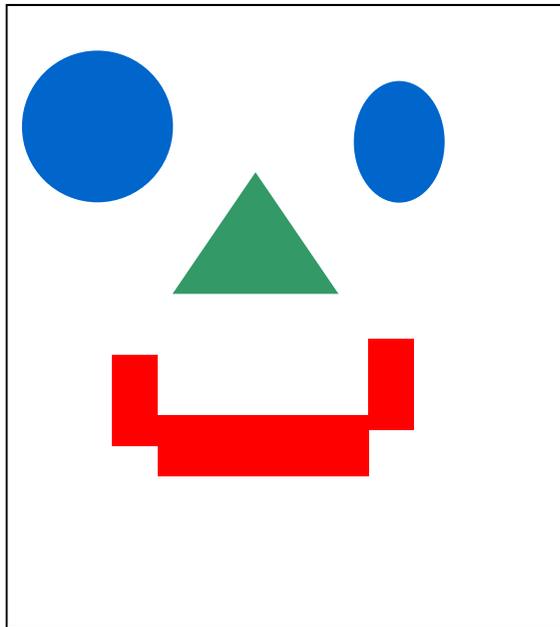### Coloured shapes

What colour is each shape?
Write it on the shape.

Clues

- Red is not next to grey.
- Blue is between white and grey.
- Green is not a square.
- Blue is on the right of pink.

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Choose or make a mathematical image.
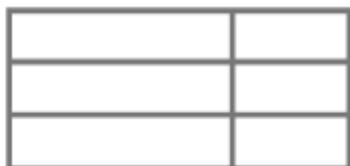# Describe it for a colleague to draw/make

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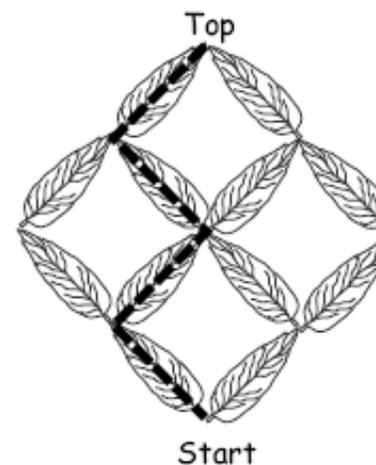# Spot the shapes 1

1. How many triangles can you count?

2. How many rectangles can you count?

3. Draw your own diagram to count triangles.
   How many can a friend find?
   Can you find more?

Jack and the beanstalk

Jack climbed the beanstalk.
He always went upwards.

Top

Start

He first did it like this: left, right, left, right.

Find five other ways that Jack can climb the beanstalk.

Word Problems…..

- Kajal has 10p more than me. I have 38p. How much does Kajal have?There are 18 gloves in the cloakroom. How many pairs of gloves might that be?

- There are 12 biscuits in a pack. Sam ate ¼ of them. How many did he eat?

- Tom's small birthday cake is divided equally between four people. What fraction of the cake do they each get?

- I think of a number and add 10. The answer is 68. What is my number?

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Today…

ICT problems with Beebots

Numicon problem solving

Logic problems

Visual problems

Domino puzzles

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