# Colin and Coco's 

 Daily Maths Workout
## Workout 1.7

## Geometry




Draw more triangles, squares and circles of your own.

## Shape Workout



Colour triangles in blue, squares in yellow, and rectangles that are not squares in red.
Leave other shapes white.


Shapes Cards (You could make your own cards.)

To play:
Look at the Shape Cards.
Choose one but don't tell your opponent which one.
Your opponent needs to work out which card you have chosen by asking you questions to which you can answer 'yes' or 'no.'
Keep count of how many questions they take to work out which card you chose.
Swap roles. The person who takes fewer questions scores a point.


To win:
The winner is the first player to get 5 points.

Shape Cards


Colin is playing with different types of 2-D shapes. Place digits in the empty boxes to complete the statements in several different ways.


Now try and complete all the statements together using the digits $0,1,2,3,4,5,6,7,8$ and 9 once each.

Which digit have you not used?
Create a statement using this digit.

## Sides Challenge

Colin has some sticks and he is using them as the sides of shapes.
If Colin has 3 sticks all he can make is a three sided shape!
If Colin has 8 sticks and uses them all, how many sides could his shapes have? (You don't need to name the shapes, just describe them by the number of sides they have.)

What different combinations of shapes could he make?

What shapes could Colin make if he has 10 sticks?

3 Coco has a bag of cards with shapes on them.

1. She pulls out 2 triangles.

How many sides can she count in total?
2. She pulls out 3 rectangles.

How many corners can she count in total?
3. She pulls out 1 triangle and 1 square.

How many sides can she count in total?
4. She pulls out a mixture of triangles and squares. She counts 10 corners.
How many of each shape has she pulled out?
5. She pulls out a mixture of triangles and rectangles. She counts 18 sides. How many of each shape has she pulled out?
6. Colin likes to go on a Shape Treaure Hunt. If Colin visited your house, where would he find ....

| Shape | Name | Where in your house? |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |

Use the clues to work out Colin's mystery number.
You may want to cross numbers out on the 100 grid as you consider each clue.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

1) I am more than 55
2) I am less than 90
3) My digits are not equal
4) The tens digit is greater than the ones digit
5) If you count in $2 s$ from zero you will say me
6) The difference between my digits is more than 4
7) If you count in 5 s from zero you will not say me
8) The total of my digits is 9

Colin's mystery number is $\square$

## Create your own 'Who am I?' puzzle

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

Please share your puzzle with Colin @MathsCanDo

