Ongoing Activities (2) after half term

Activities from previous (2) documents can be adapted and scaled to suit. In this document, children are presented with a wide variety of challenges to encourage them to use and apply what they know.

These activities cover a range of objectives and can be adapted to suit. Work through this at your own pace. The activities get progressively more challenging and incorporate all operations $(+, -, x \text{ and } \div)$ into activities involving money, time and shape as well as sequencing. ALL SEND ACTIVITIES ARE IN THIS DOCUMENT AND GET PROGRESSIVELY MORE CHALLENGING. Please choose ability-appropriate activities and do not think you have cover everything. Things you need to practise will become evident.

If children are finding all activities a struggle then Activities (1) can be found on our website in the 'Children' hut, SEND Home

Learning Maths.

This involves putting the maths in context and using prior knowledge to solve a problem. It's a good idea to have some spare paper handy to write your own questions when you finish. Go through each question and answer and get the child to **explain** how they worked it out Ask them to 'teach' you how to solve a question and have a go at a few yourself (make some errors to see if they spot them and can explain where you went wrong!)

If you have any extra resources (shapes, money, counters, beads, straws, etc) you could use them to help show how you **prove** the answer is correct.

The questions get harder as you go through. If they are too tricky, stop and revisit previous ones, changing the numbers appropriately. What's important is that children can apply what they know and use the method shown, as well as explain how they got to the answer.

Please make sure children have silent 'thinking time' before answering questions. This requires the adult to stay silent for at least 10 seconds

Here are a few tips to help you deliver these activities and engage your child in learning:

Use objects/real resources where possible.

Many children are kinaesthetic learners which means they learn through doing. As children move tangible objects around it helps them comprehend the concept of numbers more deeply. You can use anything you want – buttons, pebbles, or, if you're struggling to get them enthused, something they're crazy about like cars or Lego.

Put the larger number in your head

When encouraging children to do mental arithmetic, teach them to put the largest number (of the two you are adding) in their head. Model this physically as you say it. For example, if the addition is 9 + 4, say: "Right, let's put the largest number in our heads, so that's nine." Then tap your head and say: "So we're putting nine in our heads and then counting on four." This clear, precise modelling will help them to learn this useful strategy. Once they have put the largest number 'in their head' they can then use their fingers to count on until they are secure with mental + / -.

Number squares and number lines

At school, children will be using number lines and number squares (or 100 squares) regularly. Depending on their learning style some will find it more beneficial than others, but it's certainly worth a try. There are lots free to print on the internet of you do not have one. (There are examples on the last page of this document)

Draw pictures

This works first of all because many children enjoy drawing and secondly because it gives a physical representation of the addition. Urge your child to keep the drawings small and basic (otherwise you'll be there all day!)

Practise rapid recall

When children come to school, learning number facts is a principal focus. For example, children are expected to learn number bonds to ten (e.g. 7 + 3 = 10, 9 + 1 = 10 etc.) Support your child by reciting the possible combinations together. Also explain that you can always swap the number order around when it comes to addition, so if 6 + 4 = 10 so does 4 + 6

Encourage real life situations

The fundamental purpose of learning in maths lessons is that children (and the adults they'll grow to be) can **use** it in their everyday life. Giving them **real-life opportunities** to practise their addition skills also makes them feel grown up and boosts their self-esteem. So at the supermarket get them to put, for example, five oranges and four apples in your basket and ask them how many pieces of fruit you'll be buying.

Similarly learning money basics when you're out and about can be a great incentive for getting their number brain working!

to the fact the fact

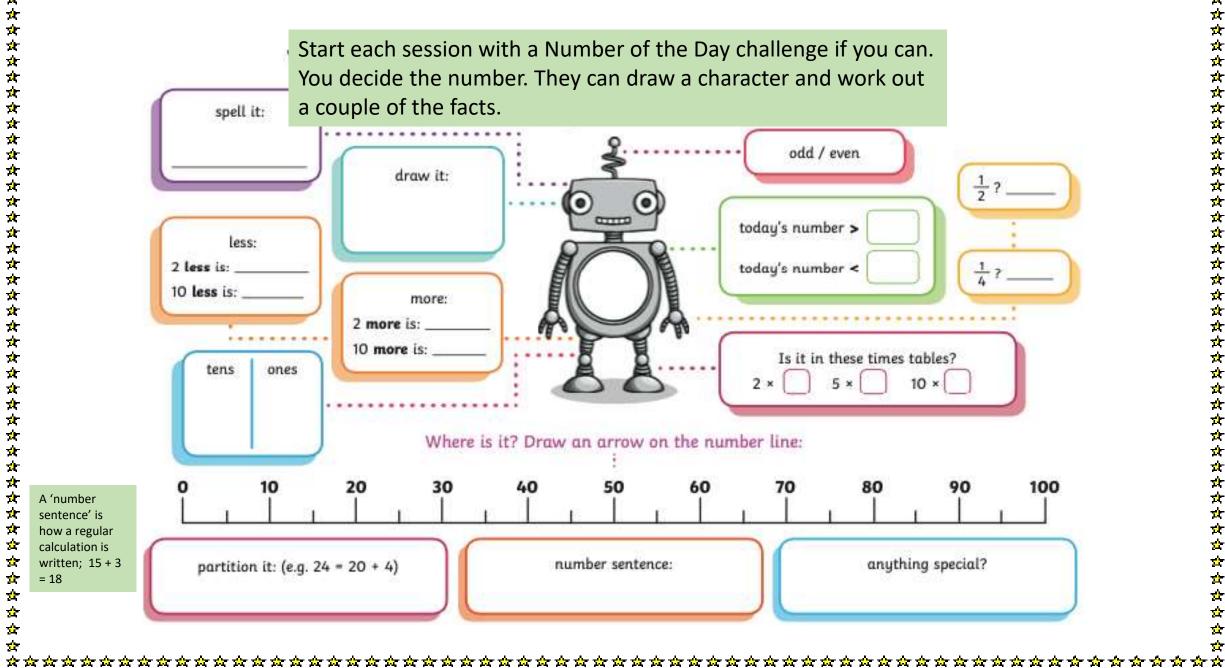
Invent story questions

Devising and working through story questions is a crucial element of maths. Children can really enjoy this especially if you make the stories about something they have an interest in, e.g. using characters from their favourite book or TV programme, food they love or their school friends. A story question (also known as a word problem) might read as follows: There were seven cupcakes and six biscuits on a tray. How many treats were there altogether?

The activities in this document are varied and quite practical. Be as creative as possible when delivering sessions. Look for opportunities to extend the learning and adapt it where necessary.

If children are struggling, try modelling how you'd solve a similar problem and try speaking aloud your thoughts; slowly articulating what you see, do, and reason, will help them process what to do.

It can be very challenging engaging children and getting them to focus. Don't think you have to 'teach' an hour a day of maths *every day*; you may wish to do 10-minute activities throughout the day or have a day where you don't do formal maths.



Over the following pages, there are lots of challenge activities. These do not need to be done as a lesson, they can be approached and used as you see fit.

Using the challenges as a starting point for similar questions will be useful. E.g with the money question, firstly identify if the child recognises and can order all coins. Then try 'different ways to make 10p' if the activity here is challenging.

If you are finding these are too tricky, you may like to look at questions in the Activities (1) document, on our website in SEND Home Learning.

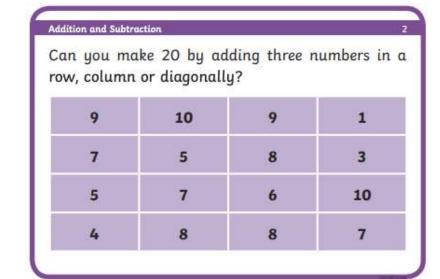
Addition and Subtraction

A palindromic number is the same forwards as it is backwards. E.g.

131

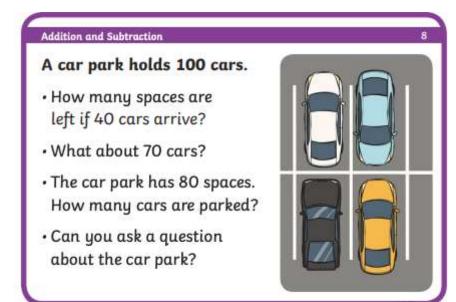
Find different ways to make palindromic numbers by adding and subtracting 2-digit numbers.

$$12 + 10 = 22$$



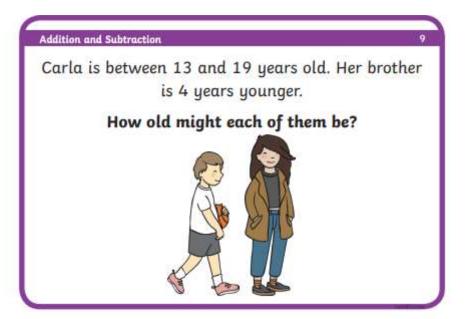
to the fact the fact

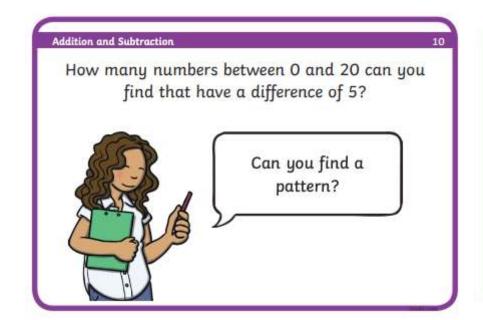


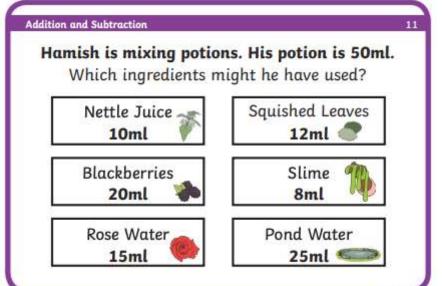


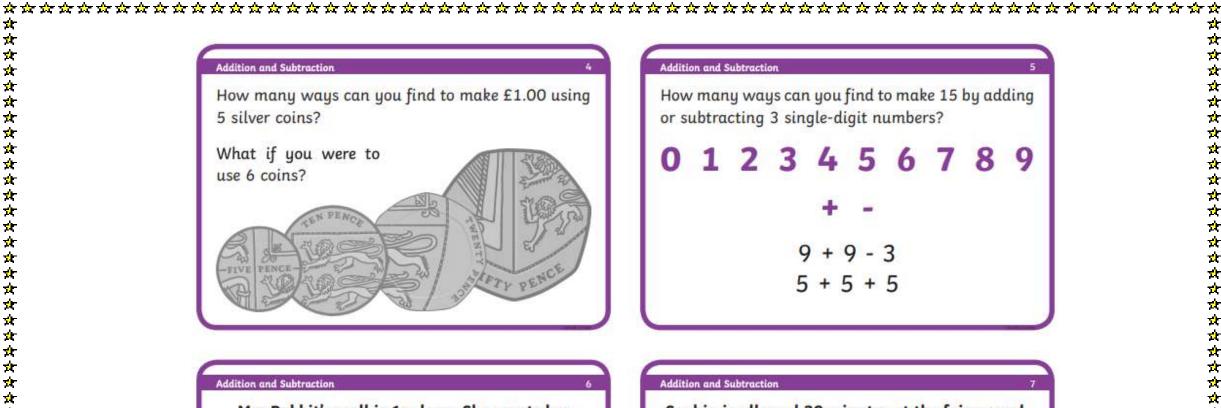
女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女

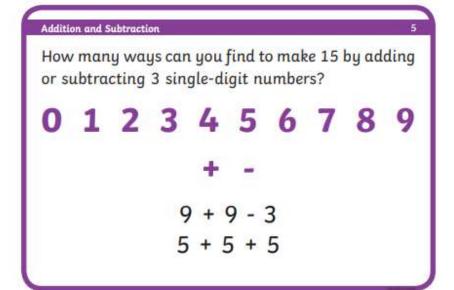
女女女女女

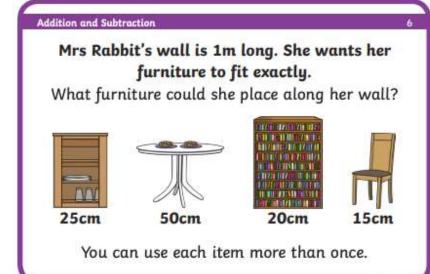


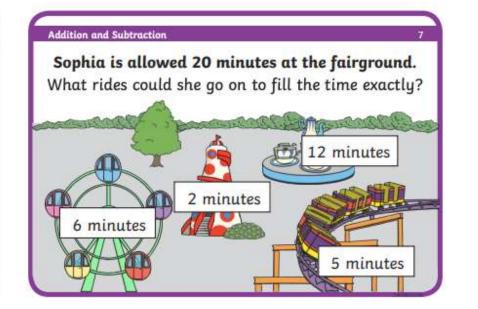












3, 5, 7, and 9

How many numbers from 1-20 can you make by adding or subtracting any of these numbers?

You can use each digit more than once.

Addition and Subtraction

Henry has found some old weighing scales. He can only find 1kg, 2kg, 3kg, and 6kg weights. How many different weights can he make?



If I put the 3kg and the 5kg on the scales together, I can make 8kg.

女女女女女

Addition and Subtraction

Beth starts with 20 and subtracts 1. She keeps repeating this, but each time, she takes one more

away than the last time. Will she arrive at zero?



20 - 1 = 19

19 - 2 = 1717 - 3 = 14

14 - 4 = 10

I wonder if I will get to zero?

Can you think of a different starting number where Beth would get to zero?

Addition and Subtraction

Hamish goes to the shop with 50p. What 2 items can he afford to buy? Find all possibilities.











the factor for the fa

20p

25p

28p

34p

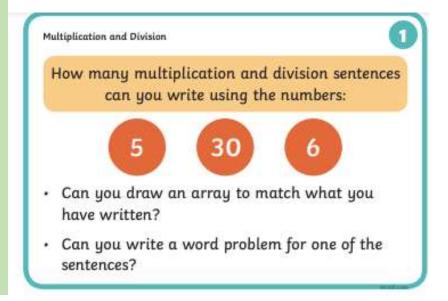
Beth went to the shop with £1.00. She bought 2 items. How much money might she have left?

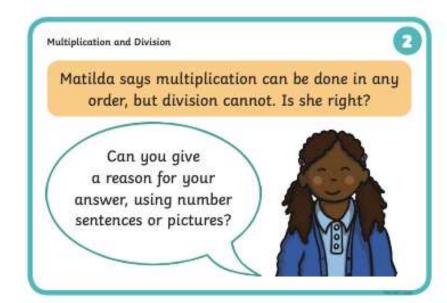
As with the + and – challenges, use these as a starting point and scale to suit.

These are quite tricky as they are not presented in classic 'number sentence' format like 5 x 3 (which is abstract)

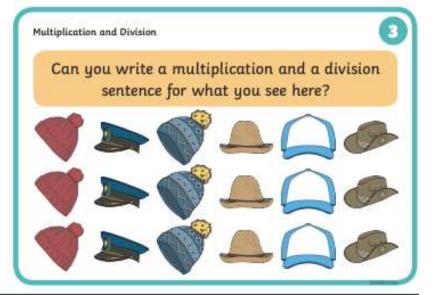
If these are tricky, there are more challenges in the Activities (1) pdf on the website in SEND Home Learning Maths.

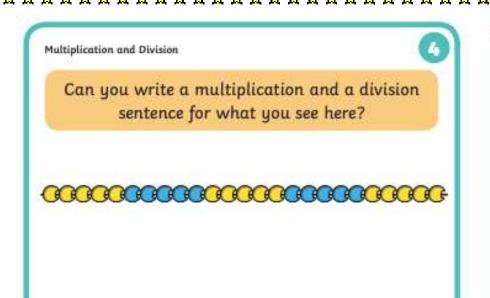
女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女

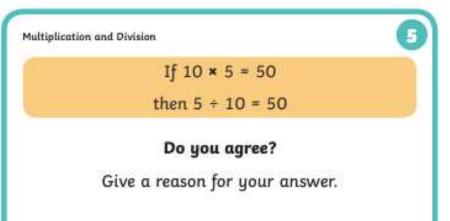




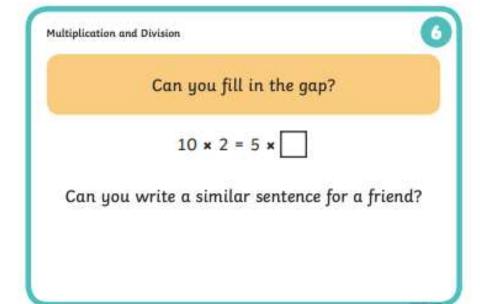
the first the fi



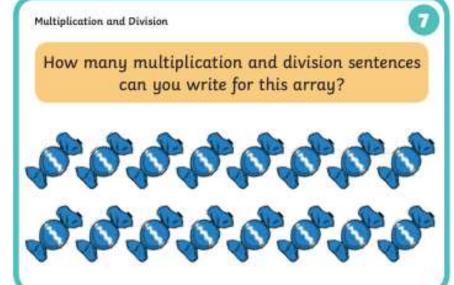


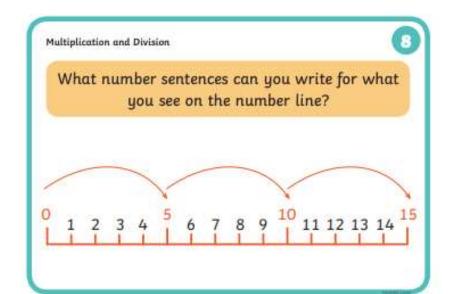


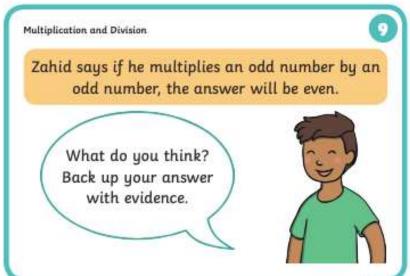
女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女

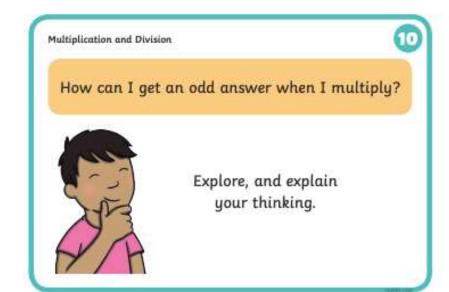


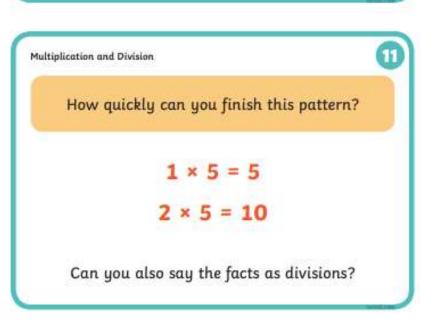
the factor for the fa









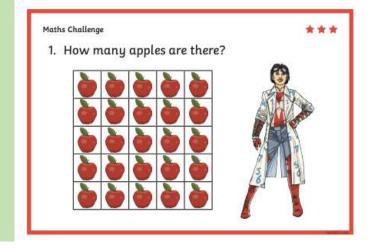


女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女

Please refer to the Activities (1) document found on our website in 'Children' hut, Home Learning, SEND Home Learning, Maths if your child is struggling or scale the questions to suit.

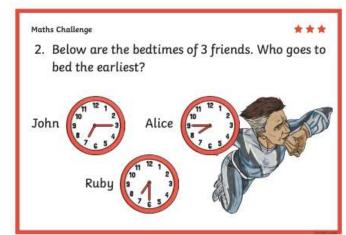
The objectives for these tasks are 1. efficiency of counting objects; using an array to save time and counting in 1's to begin.

(counting rows; there are 5 rows of 5 apples; 5 lots of 5, 5 x 5 etc. encourage links to be made)



Use actual analogue clocks if possible.

水水





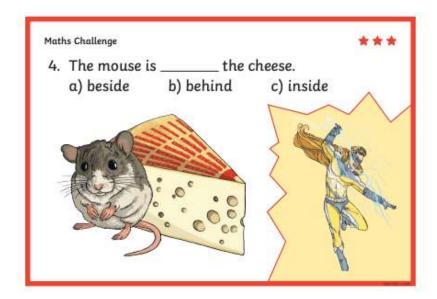
This prompts a pattern-spotting discussion.
Ask how they worked it out and use 'real' objects where possible.

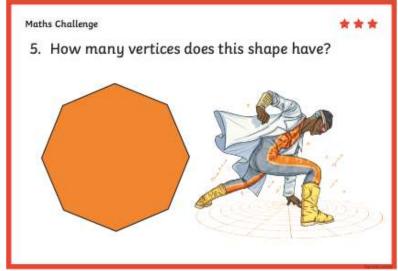
Again, use these activities as starting points for a discussion of target language.

With number 6, repeat the exercise with different multiples of 10.

You could model examples of how *you* solved it first.

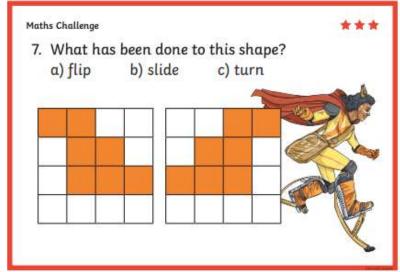
e.g. I know 3 add 4 makes 7, so 3 tens add 4 tens makes 7 tens. That's 70.







the factor for the fa



女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女

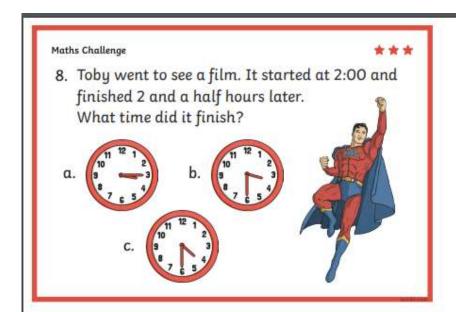
As with previous challenges, use these as a starting point for a discussion.

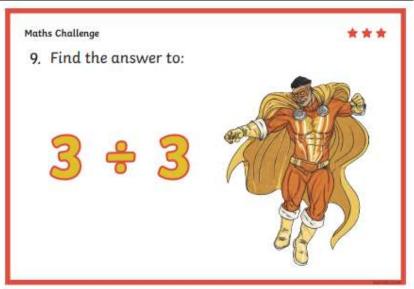
With number 9, you might like to introduce the question; 'how many __ are in __ ?'

Show me.

Make the link with multiplication.

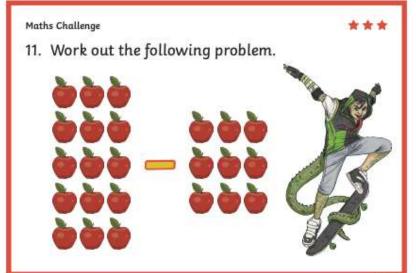
So, 1 lot of 3 is 3, 1 x 3 equals 3.







the factor for the fa



Formal written + and – practice.

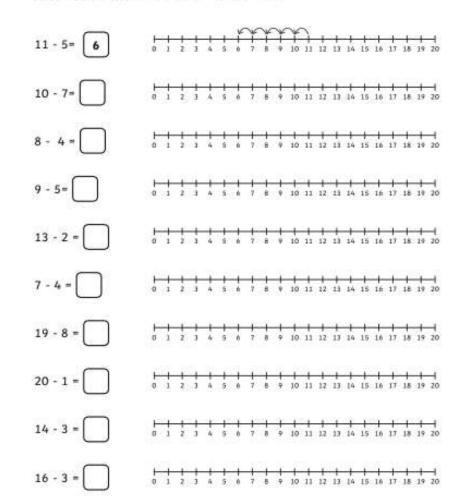
If you don't want to draw a number line you can use a ruler as a number line to help count

Addition to 20 on a Number Line - Sheet 3

Practise what you have learnt so far on a number line to 20 and progress to see if you can draw your own number line!

the factor for the fa

Subtraction within 20 on a Number Line



女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女

work out 70 plus 20.

Deriving Facts to 100

For each of the following, complete the number fact to 10 and then derive the number fact to 100. The first one has been done for you.

	97	T. 170, 140
7 + 2 = 9	7 - 4 =	(Ba
70 + 20 = 90	70 - 40 =	10
4 + 6 =	3 + 6 =	10
40 + 60 =	30 + 60 =	A STATE OF THE STA
5 - 3 =	8 - 3 =	D.
50 - 30 =	80 - 30 =	
10 - 7 =	9 + 1 =	1 1
100 - 70 =	90 + 10 =	
5 + 4 =	3 - 2 =	
50 + 40 =	30 - 20 =	
9 - 8 =	10 - 5 =	
90 - 80 =	100 - 50 =	

Use the appropriate number fact to ten mentally to derive the number fact to 100.

50 + 50 =	40 + 30 =
60 - 40 =	80 - 30 =
10 + 80 =	20 + 60 =
90 - 60 =	50 - 40 =
20 + 80 =	80 - 70 =
40 + 40 =	70 - 20 =

Adding 2-Digit Numbers and Ones Crossing 10

7 + 4 =	8 + 6 =
17 + 4 =	18 + 6 =
47 + 4 =	28 + 6 =
67 + 4 =	68 + 6 =
6 + 8 =	7 + 6 =
16 + 8 =	17 + 6 =
56 + 8 =	47 + 6 =
86 + 8 =	67 + 6 =
12 + 2 =	9 + 7 =
22 + 2 =	19 + 7 =
62 + 2 =	39 + 7 =
92 + 2 =	99 + 7 =
11 + 3 =	4 + 8 =
19 + 3 =	14 + 8 =
59 + 3 =	44 + 8 =
99 + 3 =	64 + 8 =
9 + 8 =	5 + 8 =
19 + 8 =	15 + 8 =
49 + 8 =	65 + 8 =
79 + 8 =	85 + 8 =

As with the previous questions, you can see how the questions link to each other and will support your child in seeing the connections between the numbers.

The questions in boxes 9 and 10 really check a child's understanding of what they have done previously.

Adding 2-Digit Numbers and Tens, Not Crossing 100

1. 30 + 10 =	2. 20 + 30 =
35 + 10 =	
37 + 10 =	V253 - 1 C 000
38 + 10 =	
3. 10 + 20 =	
16 + 20 =	43 + 50 =
17 + 20 =	
19 + 20 =	The state of the s
5. 50 + 30 =	6. 20 + 60 =
54 + 30 =	
55 + 30 ==	02.201.000.00
58 + 30 =	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
7. 60 + 20 =	8. 70 + 20 =
61 + 20 =	
64 + 20 =	
68 + 20 =	
9 + 40 = 70	10 + 60 = 90
<u> </u>	+ 60 = 93
<u>+ 40 = 74</u>	+ 60 = 96
+ 40 = 77	+ 60 = 99

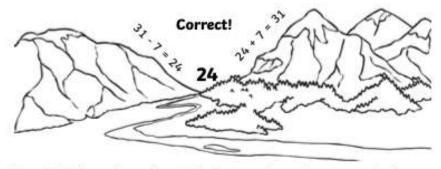
Subtracting Tens from 2-Digit Numbers, Not Crossing 100

20 - 10 =	21 - 20 =
25 - 20 =	59 - 50 =

These are interesting activities where the answer is given and children have to work out if the answer is correct.

Using the inverse (doing the opposite calculation) will help.

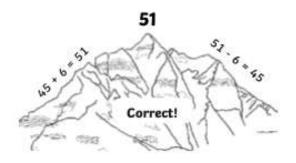
e.g. 15 -7 = 8, I can check by using the inverse; 8 + 7 = 15 to make sure.



For each of these subtraction calculations, work out the answer to the inverse operation, to check whether each answer is right or wrong.

	Correct?		Correct?
45 - 6 = 39		22 - 4 = 19	
39 + 6 =		19 + 4 =	
37 - 9 = 26	_3	15 - 8 = 10	
26 + 9 =		10 + 8 =	
31 - 3 = 28		34 - 7 = 26	
28 + 3 =		26 + 7 =	
42 - 6 = 38		51 - 6 = 45	
38 + 6 =		45 + 6 =	
62 - 7 = 54		17 - 9 = 8	
54 + 7 =		9 + 8 =	

Using Inverse Operations to Check



For each of these addition calculations, work out the answer to the inverse operation, to check whether each answer is right or wrong.

女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女

	Correct?	_	Correct?
37 + 7 = 43		26 + 8 = 44	
43 - 7 =		44 - 8 =	
25 + 8 = 33		17 + 9 = 25	
33 - 8 =		25 - 9 =	
47 + 5 = 52		22 + 9 = 30	
52 - 5 =		30 - 22 =	
34 + 6 = 40		19 + 9 = 28	
40 - 34 =		28 - 9 =	
76 + 8 = 85		46 + 7 = 53	
85 - 76 =		53 - 46 =	

Section 1

Fill in the missing boxes.

Write the last division number sentence in the pattern:

Section 2

I think of a number.

I double it.

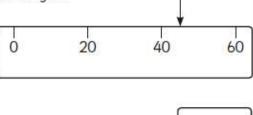
I subtract 4.

My answer is 40.

What was the number I was thinking of?

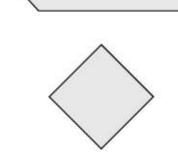
Section 3

What number would the arrow be pointing to?



Section 5

How many lines of symmetry are there on both these shapes? Draw them in.

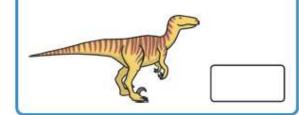


Section 6

Write down as many words as you can, that mean +

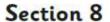


Kalim is saving up to buy a toy T.Rex. He needs £35. He has £16. How much more does he need to save?



Section 7

A gardener plants 5 rows of daffodil bulbs, and plants 9 in each row. How many daffodils will they have?



Explain 3 features of a cuboid.

Missing Number

Fill in the missing number:

女女女

含金金

Interpreting Tally Charts

Which is the most common colour?

Which is the least common colour?

How many more yellow sweets are there than purple sweets?

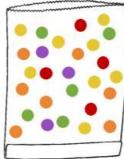
How many sweets are in the packet altogether?

Tally Chart

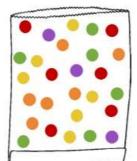
This tally chart shows the different colours in a bag of sweets. Fill in the missing boxes:

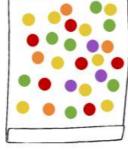
Colour	Tally	Number
red		4
green		5
orange	WI II	
yellow		8
purple	III	

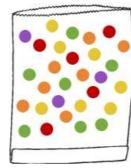
Which bag shows the sweets in the tally chart?











Shapes

Which are correct?

- 1. A cylinder has a curved face.
- 2. A cylinder has four vertices.
- 3. A cylinder has six faces.
- 4. A cylinder has two circular faces. Answer:

What Shape am I Thinking of?

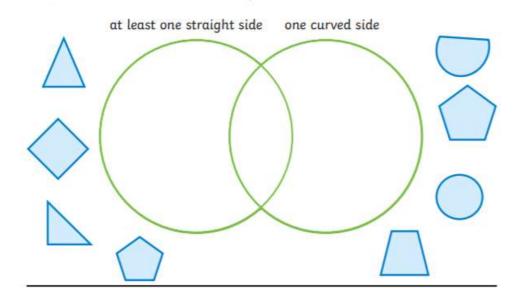
I'm thinking of a 2D shape. It has 6 sides. It has 6 corners. What is my shape?

I'm thinking of a 2D shape. It has 4 sides. It has 4 corners. What is my shape? What else does Daisy need to tell us about her shape so we can be certain what it is?

Shape Sorting

the factor for the fa

Sort these shapes into the Venn diagram:



Rotation

女女女女女女女女女女女

女女女女女女女女女

女女女女女女女女女



This arrow has been rotated clockwise. How far has the arrow been rotated?

- 1. quarter turn
- 2. half turn
- 3. three-quarter turn

4.	full turn	Answer:

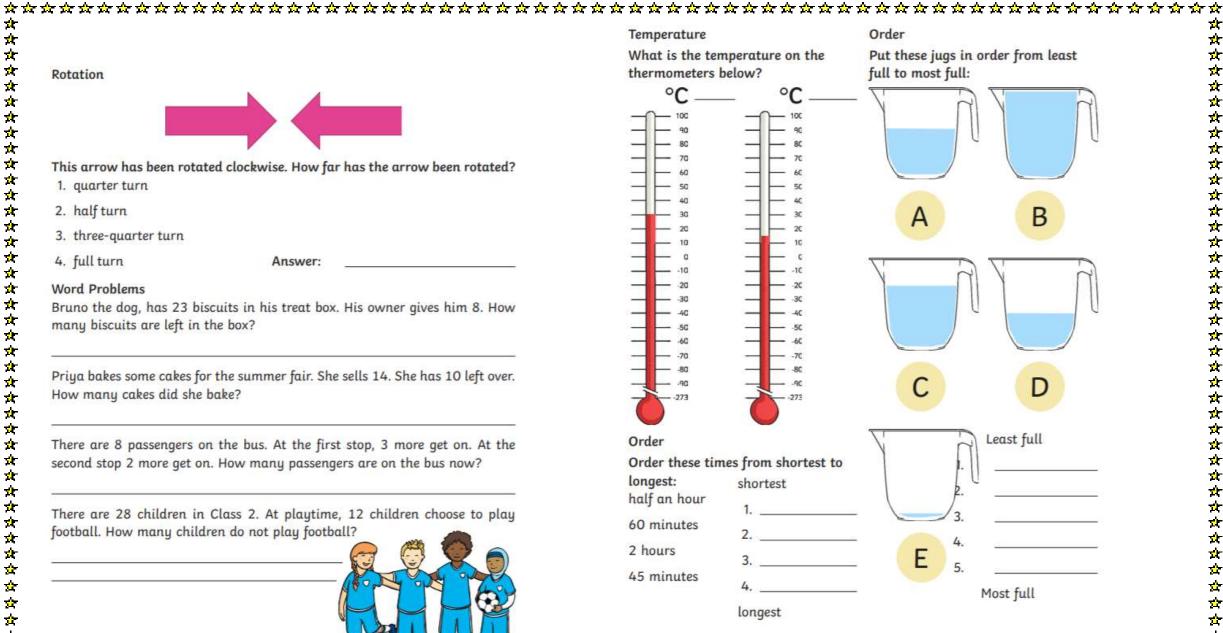
Word Problems

Bruno the dog, has 23 biscuits in his treat box. His owner gives him 8. How many biscuits are left in the box?

Priya bakes some cakes for the summer fair. She sells 14. She has 10 left over. How many cakes did she bake?

There are 8 passengers on the bus. At the first stop, 3 more get on. At the second stop 2 more get on. How many passengers are on the bus now?

There are 28 children in Class 2. At playtime, 12 children choose to play football. How many children do not play football?



Word Problems

Nate is doing a maths quiz. He starts the quiz at half past nine and finishes at 10 o'clock. It takes him 2 minutes to answer each question. How many questions does he answer?

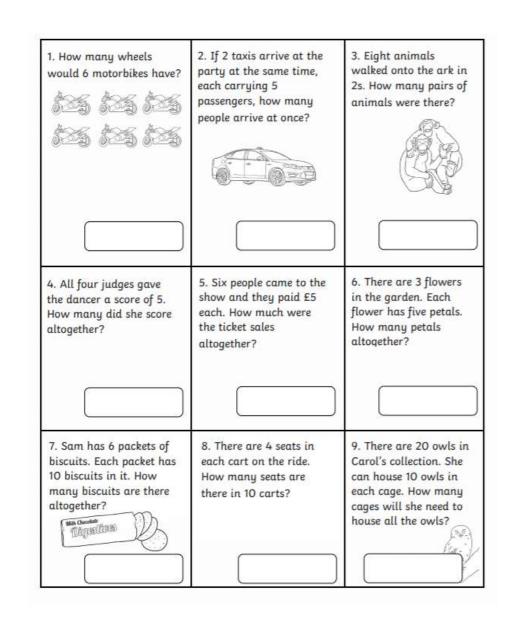
the factor for the fa

Missing Number

Fill in the missing number:

Fill in the missing number:

女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女



女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女

女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女

女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女

Multiplication Dice Game Worksheet

How to play:

女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女

- 1. Roll a pair of dice.
- 2. Multiply your 2 numbers.
- 3. Colour your answer in on the grid.
- 4. The first person to colour 4 in a row wins!

18	12	24	8	10	24	6	15
36	30	12	9	2	5	4	18
4	24	4	8	6	8	15	3
10	12	25	15	20	6	16	8
36	12	12	30	5	12	5	30
10	25	1	9	5	6	10	20
18	20	9	10	16	15	4	3
1	30	4	20	2	3	6	15

女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女

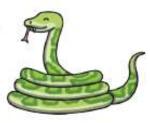
女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女

女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女

You will need...

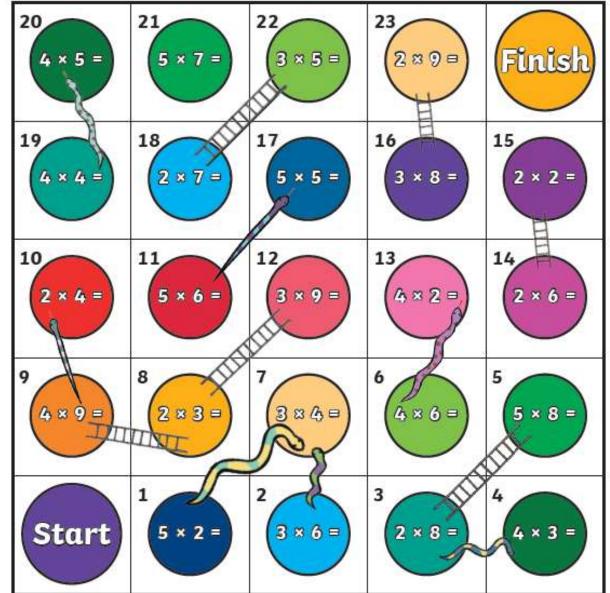
- The Snakes and Ladders Board Game board
- A dice

 A counter per player



How to play...

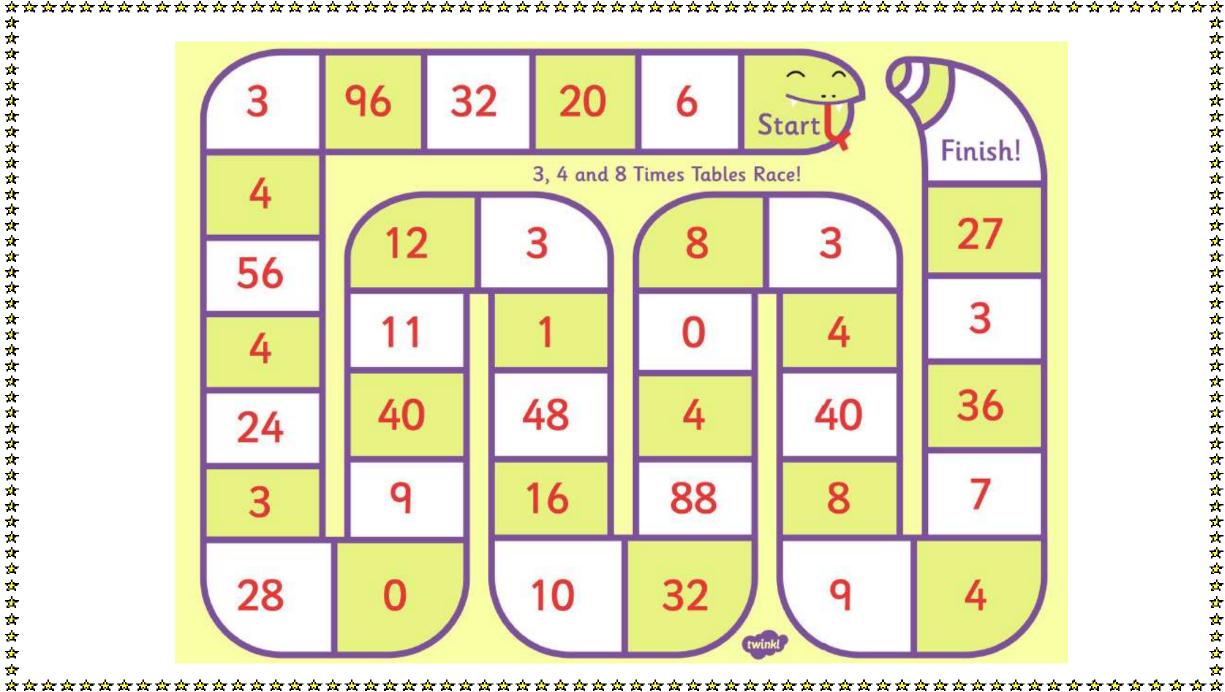
- Players take it in turns to roll the dice.
 The player with the highest number goes first, the player with the second highest goes second and so on.
- When it's their turn, players move the counter the number of spaces shown on the dice and answer the calculation they land on.
- If the answer given to the calculation is correct, play continues as usual:
 - landing on a snake's head the player's counter slides down;
 - landing at the bottom of a ladder
 the player's counter climbs up.
- If the answer given to the calculation is incorrect, the player misses a go.
- The first player to reach the finish is the winner!



女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女

5x8= 9X4= 2x3= 4x3= 5x_=15 $7x_{=21}$ $3x_{=33}$ 2x_=8 4x8= 10x = 308x1= 3x1= 4x10 =9x3= $8x_{=56}$ 8x12= 4x7 =8x4 =2x_=16 $4x_{=4}$ 10x_=40 5x4 =4x0 =4x12 = $8x_{=80}$ $4x_{=}16$ $3x_{=12}$ $8x_{=72}$ $2x_{=8}$ 3x8 =8x2= 3x0= 3x3 =8x11 = $6x_{=18}$ 7x8= news twinki en uk

女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女



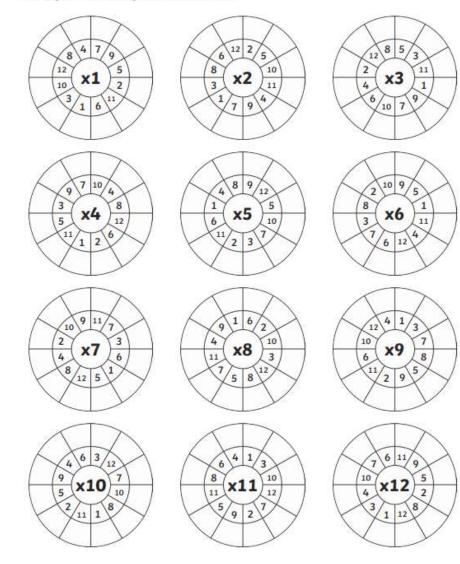
女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女

Multiplication Square

×	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

Multiplication Wheels

Multiply the numbers by the middle number.



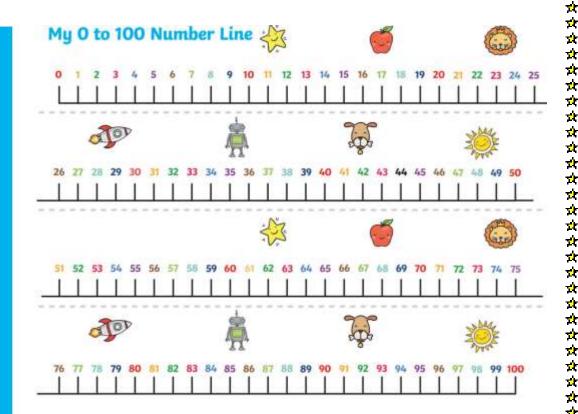
女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女

1x table	2x table	3x table	4x table	5x table	6× table
1 × 1 = 1	1 * 2 = 2	1 × 3 = 3	1 × 4 = 4	1 × 5 = 5	1 × 6 = 6
2 × 1 = 2	2 * 2 = 4	2 × 3 = 6	2 × 4 = 8	2 × 5 = 10	2 × 6 = 12
3 × 1 = 3	3 * 2 = 6	3 × 3 = 9	3 × 4 = 12	3 × 5 = 15	3 × 6 = 18
4 × 1 = 4	4 * 2 = 8	4 × 3 = 12	4 × 4 = 16	4 × 5 = 20	4 × 6 = 24
5 × 1 = 5	5 * 2 = 10	5 × 3 = 15	5 × 4 = 20	5 × 5 = 25	5 × 6 = 30
6 × 1 = 6	6 * 2 = 12	6 × 3 = 18	6 × 4 = 24	6 × 5 = 30	6 × 6 = 36
7 × 1 = 7	7 * 2 = 14	7 × 3 = 21	7 × 4 = 28	7 × 5 = 35	7 × 6 = 42
8 × 1 = 8	8 * 2 = 16	8 × 3 = 24	8 × 4 = 32	8 × 5 = 40	8 × 6 = 48
9 × 1 = 9	9 * 2 = 18	9 × 3 = 27	9 × 4 = 36	9 × 5 = 45	9 × 6 = 54
10 × 1 = 10	10 * 2 = 20	10 × 3 = 30	10 × 4 = 40	10 × 5 = 50	10 × 6 = 60
11 × 1 = 11	11 * 2 = 22	11 × 3 = 33	11 × 4 = 44	11 × 5 = 55	11 × 6 = 66
12 × 1 = 12	12 * 2 = 24	12 × 3 = 36	12 × 4 = 48	12 × 5 = 60	12 × 6 = 72
7x table	8x table	9x table	10x table	11x table	12x table
1 × 7 = 7	1 × 8 = 8	1 × 9 = 9	1 × 10 = 10	1 × 11 = 11	1 × 12 = 12
2 × 7 = 14	2 × 8 = 16	2 × 9 = 18	2 × 10 = 20	2 × 11 = 22	2 × 12 = 24
3 × 7 = 21	3 × 8 = 24	3 × 9 = 27	3 × 10 = 30	3 × 11 = 33	3 × 12 = 36
4 × 7 = 28	4 × 8 = 32	4 × 9 = 36	4 × 10 = 40	4 × 11 = 44	4 × 12 = 48
5 × 7 = 35	5 × 8 = 40	5 × 9 = 45	5 × 10 = 50	5 × 11 = 55	5 × 12 = 60
6 × 7 = 42	6 × 8 = 48	6 × 9 = 54	6 × 10 = 60	6 × 11 = 66	6 × 12 = 72
7 × 7 = 49	7 × 8 = 56	7 × 9 = 63	7 × 10 = 70	7 × 11 = 77	7 × 12 = 84
8 × 7 = 56	8 × 8 = 64	8 × 9 = 72	8 × 10 = 80	8 × 11 = 88	8 × 12 = 96
9 × 7 = 63	9 × 8 = 72	9 × 9 = 81	9 × 10 = 90	9 × 11 = 99	9 × 12 = 108
10 × 7 = 70	10 × 8 = 80	10 × 9 = 90	10 × 10 = 100	10 × 11 = 110	10 × 12 = 120
11 × 7 = 77	11 × 8 = 88	11 × 9 = 99	11 × 10 = 110	11 × 11 = 121	11 × 12 = 132
12 × 7 = 84	12 × 8 = 96	12 × 9 = 108	12 × 10 = 120	12 × 11 = 132	12 × 12 = 144

女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女

100 Square

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



If you search Twinkl website you will find a large variety of colourful resources, like the ones above to print and cut out.

There are lots of videos online on how to effectively use these resources, if you are not sure.