Below are descriptors and pictures to support the delivery and practice of the Total Recall badges.

You do not have to test children on these exact questions, but they give you a clear indication and provide consistency for what is expected in order to achieve a badge.

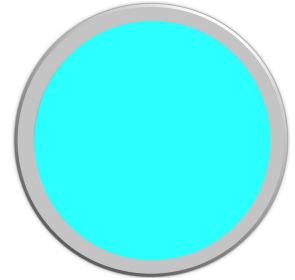
Children must be fingertip quick and not use fingers to count on.

For the Leopard and Half badge they may be given more time as there is a longer Maths process required to answer these questions.

TOTAL RECALL

Zebra - division tables facts 2, 3, 4, 5, 10 and 11.
Tiger - division tables facts 6, 7, 8, 9 and 12.
Leopard - multiplying and dividing whole and decimal numbers by 10, 50, 100 and 1000.
Polka Dot (Shape) - name and describe properties of 2D and 3D shapes; Use terminology (face, edge, vertex).
Rainbow (Time) - days in a week; months in a year, seconds, hours, minutes; tell the time to 5 minutes on a 12 hour and 24 hour clock.
Half - fractions and percentages of numbers up to 100 and multiples of 10/100, e.g., ½ of 60, 20% of 44, ¼ of 180.
Quarter - equivalent fractions, decimals and percentages including tenths, fifths, thirds, halves and quarters, recognising equivalents with hundredths, e.g., 0.45 / 45% / 45/100.

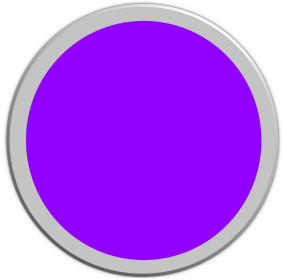
Turquoise



Recalling number bonds to 5 (including subtraction facts).

0 + 5	5 + 0	5 - 1	5 - 2
1+ 4	4 + 1	4 - 2	2 - 1
2 + 3	3 + 2	4 - 3	4 - 1

Purple

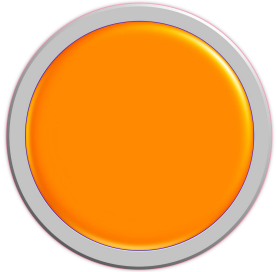


1 more and 1 less to 10. At least 6 questions should be answered.

1 more than 8	1 less than 10	1 more than 5
1 more than 1	1 less than 8	1 less than 3
1 more than 7	1 less than 4	1 more than 9

Orange Number bonds to 10

6 questions should be answered.



3 + ? = 10

? + 7 = 10

10 + ? = 10

0 + ? = 10

4 + ? = 10

6 + ? = 10

5 + ? = 10

2 + ? = 10

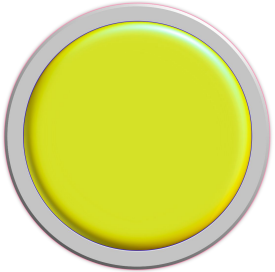
10 = 8 + ?

10 = 9 + ?

1 + ? = 10

Yellow One more or one less to 20

6 questions should be answered



One more than any number up to 19

One more than 15

One more than 6

One less than any number to 20

One less than 20

One less than 18

Doubling and halving to 20

6 questions should be answered

Double		Halve	
1	6	2	12
2	7	4	14
3	8	6	18
4	9	8	20
5	10	10	

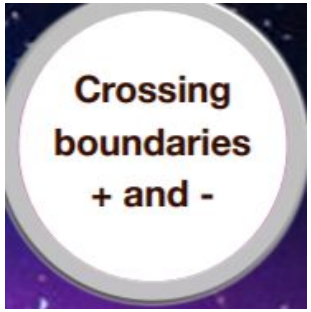
Green Number bonds to 20

Number bonds to 10 can be revisited first. Then 6 questions.

Calculations can be read in any of the ways shown below.

1 + ? = 20	16 + ? = 20	20 = ? + 0
2 + ? = 20	15 + ? = 20	20 = 7 + ?
3 + ? = 20	12 + ? = 20	20 = ? + 6

Crossing boundaries + and -



Addition and subtraction of a single digit number that crosses a tens boundary. Only numbers up to 100

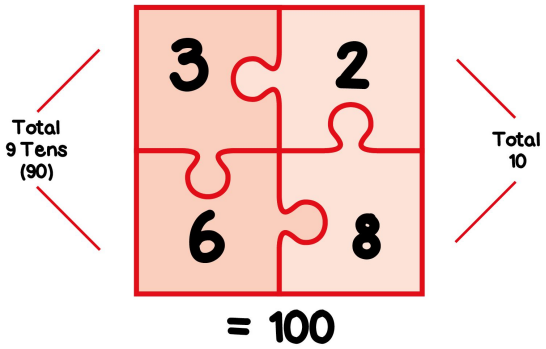
8 questions should be answered.

Addition	Addition	Subtraction	Subtraction
7 + 4 9 + 6 8 + 7 4 + 9 5 + 7	24 + 8 32 + 9 87 + 5 63 + 9 77 + 4	12 - 4 11 - 9 13 - 6 15 - 8 14 - 7	25 - 8 83 - 9 64 - 7 52 - 5 24 - 6

Pink Number bonds to 100

Begin with multiples of 10. Related to jigsaw numbers. 6 questions.

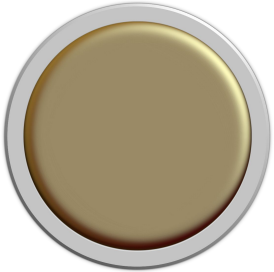
70 + ? = 100 ? + 40 = 100 100 = 0 + ?



Progress to:

73 + ? = 100 99 + ? = 100 13 + ? = 100 4 + ? = 100

100 = 84 + ? 100 = 17 + ? 100 = 45 + ? 100 = 59 + ?



Bronze 2x 5x 10x

Three questions not in order from each x table

2 x 2	3 x 5	10 x 12
7 x 2	5 x 11	10 x 0
2 x 12	7 x 5	10 x 40
6 x 2	0 x 5	10 x 9

Silver 3x 4x 6x 8x

3 questions not in order from each times table.

3 x 4	4 x 7	6 x 3	8 x 8
5 x 3	6 x 4	8 x 6	8 x 11
0 x 3	5 x 4	5 x 6	8 x 4
12 x 3	4 x 11	6 x 6	8 x 7
9 x 3	2 x 4	6 x 7	8 x 12

Gold 7x 9x 11x

3 questions not in order from each times table.

7 x 3	9 x 4	11 x 0
6 x 7	5 x 9	11 x 11
7 x 7	9 x 12	8 x 11
7 x 5	8 x 9	11 x 3
9 x 7	9 x 1	12 x 11

Black badge

Revisit pink, bronze, silver and gold badge

10 questions in total from the previous x tables and number bonds to 100.

Zebra

Division facts 2, 3, 4, 5, 10 and 11

3 questions not in order from each division group.

2	3	4	5	10	11
12 divide by 2 20 divided by 2 2 divided by 2 14 divided by 2	36 divided by 3 9 divided by 3 27 divided 3 15 divided by 3	16 divided by 4 32 divided by 4 4 divided by 4 28 divided by 4	55 divided by 5 60 divided by 5 30 divided by 5 15 divided by 5	10 divided by 10 70 divided by 10 110 divided by 10 90 divided by 10	121 divided by 11 66 divided by 11 11 divided by 11 132 divided by 11

Tiger

Dividing by 6, 7, 8, 9 and 12

3 questions not in order from each division group.

6	7	8	9	12
36 divided by 6	28 divided by 7	64 divided by 8	45 divided by 9	96 divided by 12
12 divided by 6	77 divided by 7	24 divided by 8	18 divided by 9	72 divided by 12
42 divided by 6	84 divided by 7	96 divided by 8	54 divided by 9	48 divided by 12
18 divided by 6	49 divided by 7	8 divided by 8	81 divided by 9	144 divided by 12
72 divided by 6	63 divided by 7	40 divided by 8	108 divided by 9	132 divided by 12

Leopard

x and dividing whole and decimal numbers by 10, 50, 100 and 1000

Two questions from each area.

X 10	X 50	X 100	X 1000
13 x 10 = 130 765 x 10 = 7650 4.3 x 10 = 43 1.07 x 10 = 17	All are multiples of 2 14 x 50 = 700 46 x 50 = 2300 142 x 50 = 7100 280 x 50 = 14,000	56 x 100 = 5600 731 x 100 - 73,100 4.5 x 100 = 450 0.32 x 100 = 32 4.06 x 100 = 406	23 x 1000 = 23,000 5.6x1000 = 5600 14.2 = 14,200 0.5 x 1000 = 500 1.06 x 1000 = 1060
÷ 10	÷ 50	÷ 100	÷1000
234÷10 = 23.4 40÷10 = 4 4800 ÷ 10 = 480 7÷10 = 0.7 3.6 ÷ 10 = 0.36	160 ÷ 50 = 3.2 2400 ÷ 50 = 48 370 ÷ 50 = 7.4 8700 ÷ 50 = 174	45 ÷ 100 = 0.45 327 ÷ 100 = 3.27 8.3 ÷ 100 = 0.083 1345 ÷ 100 = 13.45	4567 ÷ 1000 = 4.567 345.6 ÷ 1000 = 0.3456 12,304 ÷ 1000 = 12.304

Polka Dot

Name and describe properties of 2D and 3D shape

6 questions.

2D Shapes

Name	Sides	Vertices
triangle	3	3
circle	1	0
square	4	4
rectangle	4	4
pentagon	5	5
hexagon	6	6
oval	1	0
rhombus	4	4
trapezium	4	4
parallelogram	4	4

3D Shapes

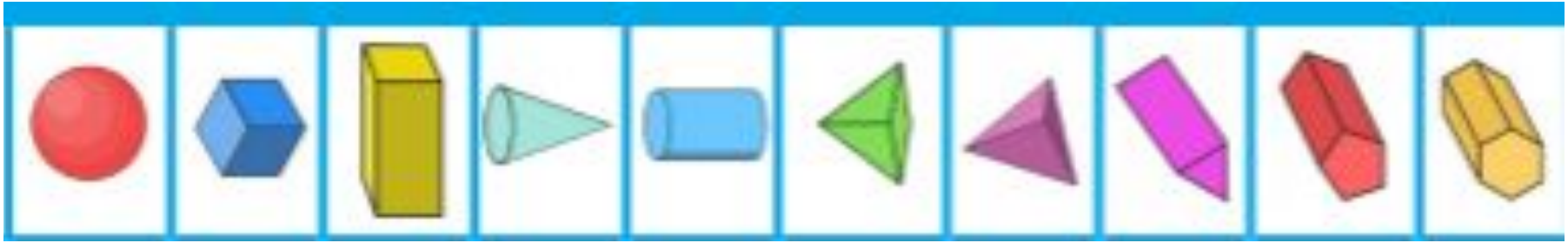
Name	Surfaces		Edges		Vertices	Picture
	Flat	Curved	Flat	Curved		
sphere	0	1	0	0	0	
cube	6	0	12	0	8	
cuboid	6	0	12	0	8	
cone	1	1	0	1	0	
cylinder	2	1	0	2	0	
square-based pyramid	5	0	8	0	5	
tetrahedron	4	0	6	0	4	
triangular prism	5	0	9	0	6	
pentagonal prism	7	0	15	0	10	
hexagonal prism	8	0	18	0	12	

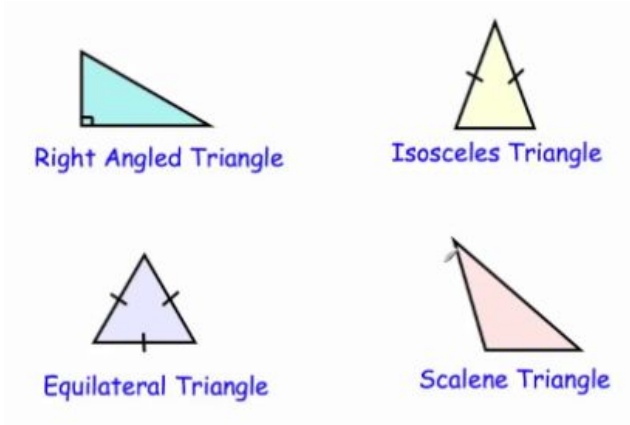
2D

- How many sides does a hexagon have?
- What shape has 5 vertices?
- What is the name of X shape?
- Name the triangle which has sides of equal length.

3D

- Name the faces on a square based pyramid
- How many edges does a cube have?
- Describe the properties of a cylinder.




Right Angled Triangle
Isosceles Triangle
Equilateral Triangle
Scalene Triangle

Blue

Range of conversions for length, capacity and mass. Including decimals conversions. 6 questions

4m = ? cm

13mm = ? cm

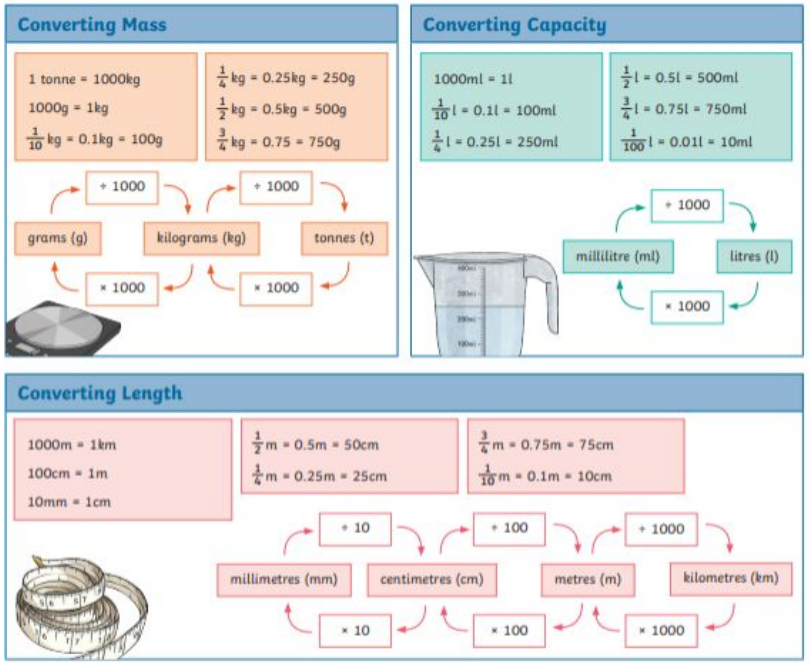
3km = ? m

4.2 kg = ?g

630g = ? kg

2500 ml = ?l

Questions must include whole and decimal amounts.



Rainbow

Days in a week, months in a year, seconds, hours minutes.

Tell the time to 5 minutes on a 12hr and 24hr clock.

8 questions - 2 questions must use clocks.

How many days are there in a week?

What day comes after Wednesday?

What day is before Saturday?

How many months in a year?

How many months have 31 days?

Which month has less than 30 days?

60minutes = ? hours

180 minutes = ? hours

2 hours = ? minutes

120 seconds = ? minutes

4 minutes = ? seconds

24 hours = ? days

There are
60 seconds
in an minute.

There are
60 minutes
in an hour.

There are
24 hours
in a day

There are
7 days
in a week.

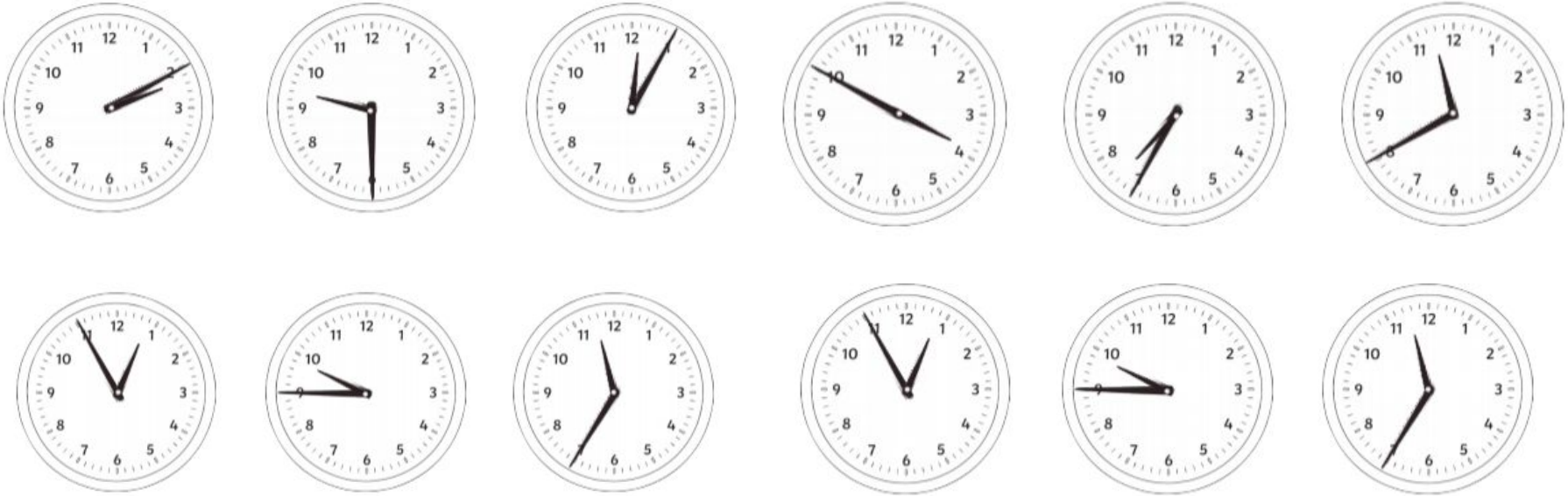
There are

Compare Durations of Time

Compare the time using the vocabulary 'longer' and 'shorter'.

180 seconds	**is the same as**	3 minutes.
90 minutes	**is shorter than**	2 hours.
48 hours	**is longer than**	1 day.

Using these clocks can you tell the time to 5 minutes? Can you read the time and convert it from am to pm?



Half

Fractions and percentages of numbers up to 100 and multiples of 10 and 100.

8 questions - two from each section.

Fractions of numbers to 100	Fractions of multiples of 10 and 100	Percentages of numbers to 100	Percentages of multiples of 10 and 100
⅓ of 36 ¼ of 88 ½ of 32 ⅕ of 45	1/10 of 80 ⅕ of 50 ¼ of 200 ½ of 700 1/10 of 300	10%, 20%, 50%, 25%, 40% of different numbers up to 100	10%, 20%, 50%, 25%, 40% etc 300 80 40

Quarters

Equivalent fraction, percentages and decimals

6 questions.

37/100 = 37% = 0.37	¾ = 75% = 0.75	1/10 = 10% = 0.1
3/100 = 3% = 0.03	7/10 = 70% = 0.7	⅗ = 60% = 0.6
⅓ = 33.3% = 0.33	⅕ = 20% = 0.2	¼ = 25% = 0.25