Reasoning and Problem Solving
Mixed Problems

About This Resource:

This resource is aimed at Year 2 Expected and has been designed to help children practise their problem solving skills. The questions are designed in such a way that children can work through it independently or in pairs to prompt discussion and understanding.

National Curriculum Objectives:

This pack covers some objectives from the following strands:

Place Value
Addition and Subtraction
Multiplication and Division
Fractions
Measurement
Properties of Shapes

More Year 2 Maths resources.

Did you like this resource? Don't forget to review it on our website.

Reasoning and Problem Solving – Mixed Problems

1. Put these numbers in order from smallest to largest.

A. two tens and seven ones

B. four tens and five ones

C. three tens and nine ones

D. eight tens and four ones

E. six tens and two ones

F. two tens and eight ones

G. zero tens and nine ones

H. seven tens and one one

I. six tens and six ones

J. eight tens and zero ones

Choose numbers from above to complete this statement:

	>		=	45	<		<		>			

2. Find the gold, silver and bronze medal winners of sports day by adding up the points each class got for each event. The class with the most points at the end of the day wins!

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Relay race	18	29	25	24	29	22
Capture the flag	28	21	21	23	24	19
Dance-off	29	19	24	21	17	25
Egg and spoon race	16	28	25	20	26	23
Total Points:						

Which class won the gold medal?

Which classes won silver and bronze?

How many more points did Year 2 get than Year 4?

Reasoning and Problem Solving – Mixed Problems

3. Complete the calculations to decipher the riddle.

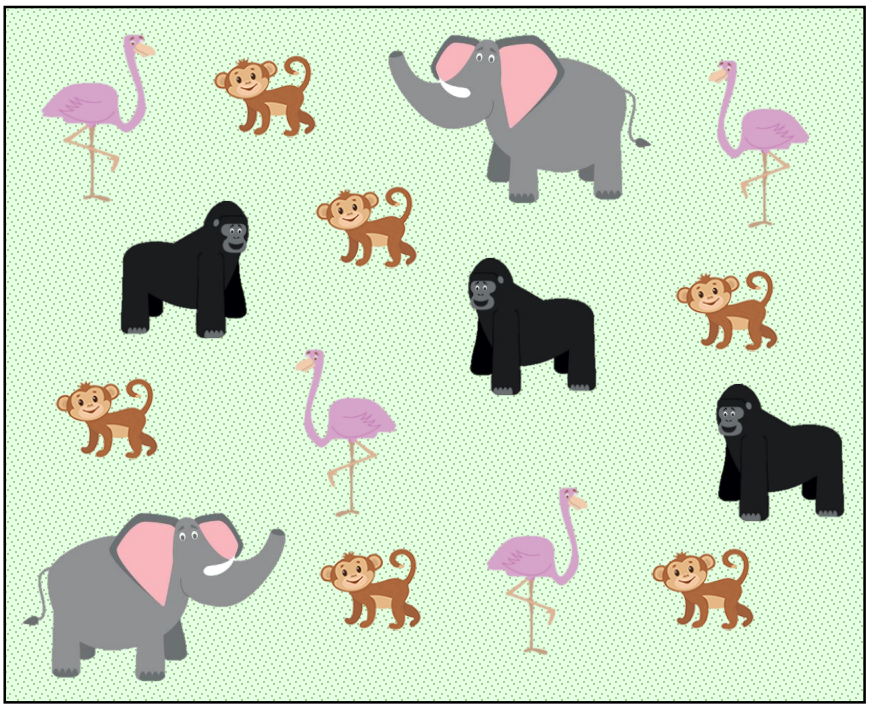
What has hands but cannot clap?

A	B	C	D	E	F	G	H
5 x 9	2 x 10	2 x 3	2 x 5	5 x 10	2 x 8	5 x 5	7 x 10

I	J	K	L	M	N	O	P
5 x 6	2 x 11	10 x 4	5 x 7	10 x 7	9 x 10	2 x 12	5 x 0

45	6	35	24	6	40

4. Indie took a photo of some animals as they wandered about at the zoo. She managed to capture one quarter of each type of animal in her picture. How many of each animal is there at the zoo in total?



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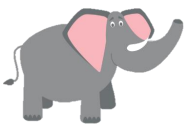 =

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Reasoning and Problem Solving – Mixed Problems

5. Combine coins to make the amount shown on each piggy bank. You may use each coin only once, but you must use all the coins. Draw lines to show which piggy bank each coin should go in.

6. Lionel is painting a shape picture by using 3D shapes as stamps. List all the 3D shapes he could have used to stamp each of the following 2D shapes:

Reasoning and Problem Solving – Mixed Problems

1. Put these numbers in order from smallest to largest.

A. two tens and seven ones

B. four tens and five ones

C. three tens and nine ones

D. eight tens and four ones

E. six tens and two ones

F. two tens and eight ones

G. zero tens and nine ones

H. seven tens and one one

I. six tens and six ones

J. eight tens and zero ones

G	A	F	C	B	E	I	H	J	D

Choose numbers from above to complete this statement:

D (84)	>	B (45)	=	45	<	H (71)	<	J (80)	>	I (66)

2. Find the gold, silver and bronze medal winners of sports day by adding up the points each class got for each event. The class with the most points at the end of the day wins!

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Relay race	18	29	25	24	29	22
Capture the flag	28	21	21	23	24	19
Dance-off	29	19	24	21	17	25
Egg and spoon race	16	28	25	20	26	23
Total Points:	91	97	95	88	96	89

Which class won the gold medal? Year 2

Which classes won silver and bronze? Silver: Year 5, Bronze: Year 3

How many more points did Year 2 get than Year 4? 9

Reasoning and Problem Solving – Mixed Problems

3. Complete the calculations to decipher the riddle.

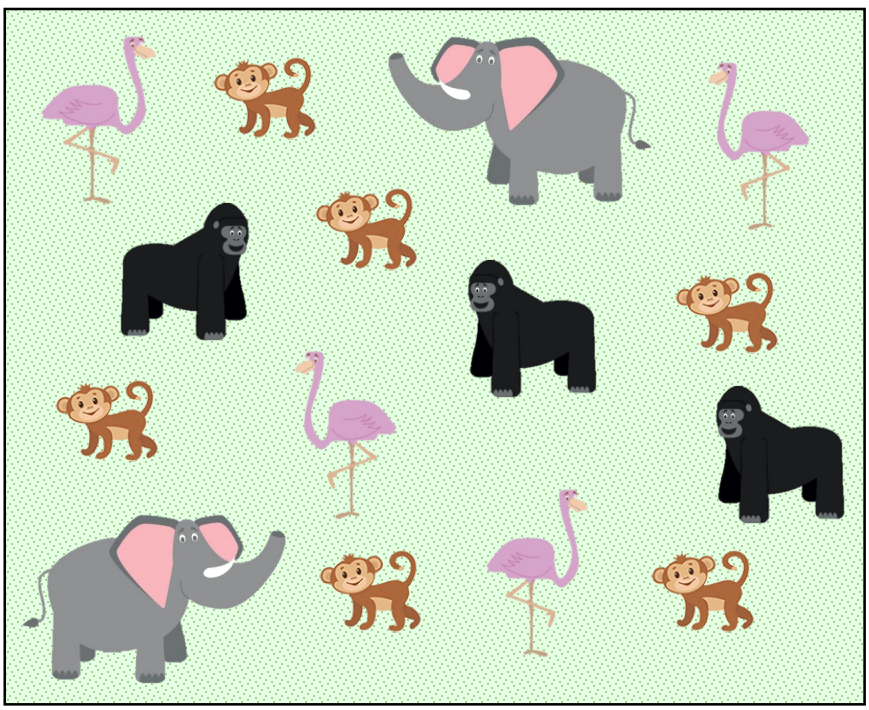
What has hands but cannot clap?

A	B	C	D	E	F	G	H
5 x 9	2 x 10	2 x 3	2 x 5	5 x 10	2 x 8	5 x 5	7 x 10

I	J	K	L	M	N	O	P
5 x 6	2 x 11	10 x 4	5 x 7	10 x 7	9 x 10	2 x 12	5 x 0

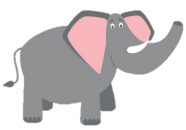
A	C	L	O	C	K
45	6	35	24	6	40

4. Indie took a photo of some animals as they wandered about at the zoo. She managed to capture one quarter of each type of animal in her picture. How many of each animal is there at the zoo in total?



 = 16

 = 12

 = 8

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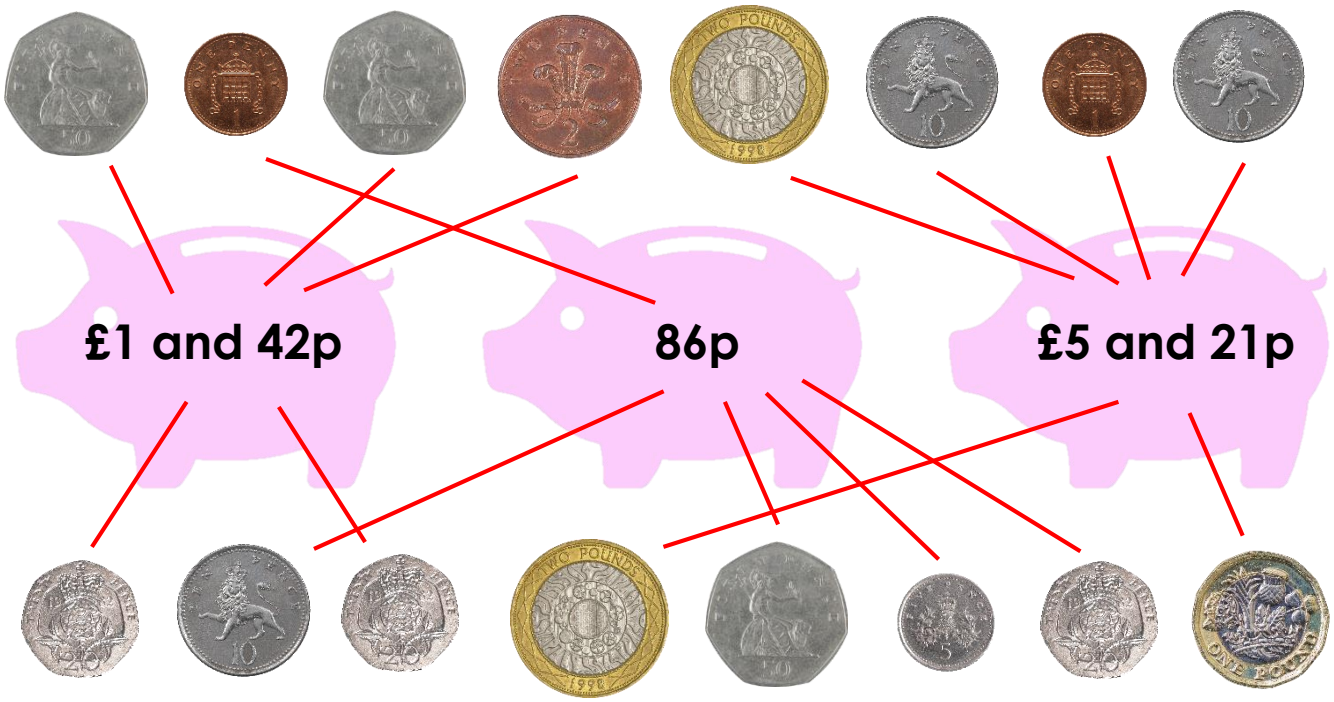
Reasoning and Problem Solving – Mixed Problems

5. Combine coins to make the amount shown on each piggy bank. You may use each coin only once, but you must use all the coins. Draw lines to show which piggy bank each coin should go in.



6. Lionel is painting a shape picture by using 3D shapes as stamps. List all the 3D shapes he could have used to stamp each of the following 2D shapes:

triangular prism, square-based pyramid, triangular-based pyramid	cylinder, cone	cube, cuboid, square-based pyramid	cuboid, triangular prism