## I SEE PROBLEM-SOLVING - KSI TASK BUILD-UP

Spot the Mistakes:

| 0 |  | 0 |  | 2 |
| :--- | :--- | :--- | :--- | :--- |
|  | 0 | 0 |  | 2 |
|  |  | 0 | 0 | 2 |
| 0 |  | 0 | 0 | 2 |
| 2 | 1 | 4 | 2 |  |

Odd one ouł:



Answer using four of the digits:


3

$\bigcirc+\nabla=6$
$0+\bar{V}+\sqrt{V}=7 \quad \bar{V}=$

Find 9 squares:


## GARETH METCALFE

## I SEE PROBLEM-SOLVING - Y2 WORKED EXAMPLES

## Building 2-Digit Numbers

10 and 1 Counters
Number Line Intervals
Reading Number Lines
Patterns in Counting
Dots in a Grid
Digits in a Grid
Addition Bordering Tens

Subtraction Bordering Tens
Three Numbers
Shapes for Numbers
Dice Patterns
Different Arrays
Camping Trip
Combinations
Estimating Fractions

## I SEE PROBLEM-SOLVING - Y2 WORKED EXAMPLES

Fractions of a Set
Fraction Picłures
Choosing Measures
Groups of Coins
Adding Coins
Change
Reading Clocks
Shape Properties

## Combining Shapes

Shape Patterns
Asking Questions
The Morning Routine

## Building 2-Digit Numbers

## Is it 25? <br> $\checkmark$ or $x$



## $5+20$

## 5 tens 2 ones



## Building 2-Digit Numbers

## Is it 25? $\sqrt{ }$ or $x$



$$
5+20
$$

## 5 tens 2 ones



## Building 2-Digit Numbers

## Is it 28? $\sqrt{ }$ or $x$



## $20+8$

20 tens 8 ones


## Building 2-Digit Numbers

## Is it 28 ? $\quad$ or $x$



## 20 tens ${ }^{x}$ 8 ones

| (1) | (1) $\square^{1}$ |  |
| :---: | :---: | :---: |
| ® 『 | [10 |  |
| [1] | (1) 0 | [1] |
| [1] | [1] | (1) |
| ® $\square^{1}$ | (10) | (1) |

## Building 2-Digit Numbers

## Is it $32 \boldsymbol{V}$ or $x$


$3+2$

## 3 tens 2 ones



## Building 2-Digit Numbers

## Is it 32? $\sqrt{ }$ or $x$



## 3 tens 2 ones



## Building 2-Digit Numbers

## Part 2

## Explain the Mistakes

$$
3+6=36
$$

## This is 41



## 29 is made with

 20 tens and 9 ones
## 10 and 1 Counters

## 10 and 1 Counters

## Which is

 more?
## 10 and 1 Counters



## 10 and 1 Counters



## 10 and 1 Counters



## 10 and 1 Counters

## This is

| tens |  | ones |
| :---: | :---: | :---: |
| 10 | 10 | 1 |
| 10 | 10 | 1 |
| 1 | 1 |  |

## Made with $\square$ counters

## 10 and 1 Counters

## This is 45

| tens |  | ones |
| :---: | :---: | :---: |
| 10 | 10 | 1 |
| 10 | 10 | 1 |

## Made with 9 counters

## 10 and 1 Counters

## This is



## Made with $\square$ counters

## 10 and 1 Counters

## This is 21

| tens | ones |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | 1 | 1 | 1 | 1 | 1 |
|  | 1 | 1 | 1 | 1 | 1 |

## Made with 12 counters

## Number Line Intervals

 Which numbers are at the arrows?

## Number Line Intervals

 Which numbers are at the arrows?

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 Which numbers are at the arrows?

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## Number Line Intervals

 Which numbers are at the arrows?

## Number Line Intervals

 Which numbers are at the arrows?

## Reading Number Lines

Put 9 on each number line:


## Reading Number Lines

Put 9 on each number line:


## Reading Number Lines

Put 9 on each number line:


## Reading Number Lines

Put 9 on each number line:


## Reading Number Lines

Put 9 on each number line:


## Reading Number Lines

## Part 2

Put 18 on each number line:


## Reading Number Lines

Put 18 on each number line:


## Reading Number Lines

Put 18 on each number line:


## Reading Number Lines

## Part 2

Put 18 on each number line:


## Reading Number Lines

Put 18 on each number line:


## Patterns in Counting

## What next?

\section*{| 0 | 0 | 1 | 1 | 2 | 2 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |}

$\square \Delta|\square| \square|\square|$

## ㅁㅁㅁㅁㅁㅇㅇㅇㅇ

\section*{| 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |}

## Patterns in Counting

## MดOH PEX?

$$
\begin{array}{|l|l|l|l|l|l|l|l|l|l|l|l|}
\hline 0 & 0 & 1 & 1 & 2 & 2 & 3 & 3 & 4 & 4 & 5 & 5 \\
\hline
\end{array}
$$

$\square \Delta \square \Delta \square \Delta \square$

## ㅁㅁㅁㅁㅁㅇㅇㅇㅇ

\section*{| 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |}

## Patterns in Counting

## What next?

$$
\begin{array}{l|l|l|l|l|l|l|l|l|l|l|l|}
\hline 0 & 0 & 1 & 1 & 2 & 2 & 3 & 3 & 4 & 4 & 5 & 5 \\
\hline
\end{array}
$$



## ㅁㅁㅁㅁㅁㅁㅇㅇㅇㅇ

\section*{| 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |}

## Patterns in Counting

## What next?

$$
\begin{array}{l|l|l|l|l|l|l|l|l|l|l|l|}
\hline 0 & 0 & 1 & 1 & 2 & 2 & 3 & 3 & 4 & 4 & 5 & 5 \\
\hline
\end{array}
$$

$\square \Delta|\square \Delta \square \Delta \square \Delta| \square|\square| \Delta$
$\square \square \square \square \square 0|0| 0|\diamond \diamond \diamond| \diamond$

\section*{| 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |}

## Patterns in Counting

## What next?

$$
\begin{array}{l|l|l|l|l|l|l|l|l|l|l|l|}
\hline 0 & 0 & 1 & 1 & 2 & 2 & 3 & 3 & 4 & 4 & 5 & 5 \\
\hline
\end{array}
$$

## $\square \Delta \square \Delta \square \Delta \square \Delta \square \Delta \square \Delta$

## $\square \square \square \square \square \bigcirc 0000 \diamond \diamond \diamond \diamond \diamond$

| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Patterns in Counting

## Match a number pattern to a shape pattern.

| 4 | 4 | 5 | 5 | 6 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- |

凸


$$
\text { 凸 } \triangle \Delta \triangle \hat{\imath}
$$

| 4 | 4 | 5 | 5 | 4 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |



## Patterns in Counting

## Match a number pattern to a shape pattern.



## Patterns in Counting

## Part 3

## $\begin{array}{lllll}0 & 2 & 4 & 6 & 8\end{array}$ $\begin{array}{lllll}10 & 12 & 14 & 16 & 18\end{array}$

## Patterns in Counting

## Part 3

## $\begin{array}{lllll}0 & 2 & 4 & 6 & 8\end{array}$ 10 12 <br> 14 <br> 16 <br> 18 $\begin{array}{lllll}20 & 22 & 24 & 26 & 28 \\ 30 & 32 & 34 & 36 & 38\end{array}$

## Patterns in Counting

## Part 3

$$
\begin{array}{rrrrr}
0 & 2 & 4 & 6 & 8 \\
10 & 12 & 14 & 16 & 18 \\
20 & 22 & 24 & 26 & 28 \\
30 & 32 & 34 & 36 & 38
\end{array}
$$

## Pattern in ones value:

## Patterns in Counting

Part 3

$$
\begin{array}{rrrrr}
0 & 2 & 4 & 6 & 8 \\
10 & 12 & 14 & 16 & 18 \\
20 & 22 & 24 & 26 & 28 \\
30 & 32 & 34 & 36 & 38
\end{array}
$$

## Pattern in ones value: 0, 2, 4, 6, 8 repeats.

## Patterns in Counting

## Part 3

$$
\begin{array}{rrrrr}
0 & 2 & 4 & 6 & 8 \\
10 & 12 & 14 & 16 & 18 \\
20 & 22 & 24 & 26 & 28 \\
30 & 32 & 34 & 36 & 38
\end{array}
$$

## Pattern in ones value: $0,2,4,6,8$ repeats.

## Pattern in tens value:

## Patterns in Counting

$$
\begin{array}{rrrrr}
0 & 2 & 4 & 6 & 8 \\
10 & 12 & 14 & 16 & 18 \\
20 & 22 & 24 & 26 & 28 \\
30 & 32 & 34 & 36 & 38
\end{array}
$$

## Pattern in ones value: $0,2,4,6,8$ repeats.

## Pattern in tens value: one more ten every five numbers.

## Dots in a Grid



## Dots in a Grid <br> - - - -



2 circles in this column

## Dots in a Grid



2 circles in this column

## Dots in a Grid

## Part 2



## Dots in a Grid



## Dots in a Grid



## Dots in a Grid

Which square has a missing dice?


## Dots in a Grid

Which square has a missing dice?


## Dots in a Grid Spot the Mistake



## Part 3

One of the dice is in the wrong place. <br> \section*{\section*{Dots in a Grid <br> \section*{\section*{Dots in a Grid <br> <br> Spot the Mistake} <br> <br> Spot the Mistake}


## Part 3

One of the dice is in the wrong place.

## Dots in a Grid



## Digits in a Grid



## Digits in a Grid



## Digits in a Grid



## Digits in a Grid

## Spot the Mistake



One of the digits is in the wrong place.

## Digits in a Grid

## Spot the Mistake



One of the digits is in the wrong place.

## Digits in a Grid

## Part 2



## Addition Bordering Tens

I know... so...

$9+7=\square$
$19+7=\square$

## Addition Bordering Tens

I know... so...

$9+7=\square$
$19+7=\square$

## Addition Bordering Tens

I know... so...

$9+7=\square$
$19+7=\square$

## Addition Bordering Tens

I know... so...


$19+7=\square$

## Addition Bordering Tens

I know... so...


$19+7=\square$

## Addition Bordering Tens

I know... so...


$19+7=\square$

## Addition Bordering Tens

I know... so...




## Addition Bordering Tens

I know... so...




## Addition Bordering Tens

I know... so...




## Addition Bordering Tens

## Part 2

Answer using 4 of the digits:


## Addition Bordering Tens

## Part 2

Answer using 4 of the digits:

## Explain the Mistake




## Addition Bordering Tens

## Part 2

Answer using 4 of the digits:

## Explain the Mistake



## 5

## Addition Bordering Tens

## Part 2

Answer using 4 of the digits:

## Explain the Mistake



## Addition Bordering Tens

## Part 2

Answer using 4 of the digits:

## Example Answer



## Addition Bordering Tens

## Part 2

Answer using 5 of the digits:


## Addition Bordering Tens

## Part 2

Answer using 5 of the digits: Explain the Mistake

## 1

## 3



## 8

## 9

## Addition Bordering Tens

## Part 2

Answer using 5 of the digits:

## Explain the Mistake

## 回 $+5=\square$

## Addition Bordering Tens

## Part 2

Answer using 5 of the digits:

## Explain the Mistake



## 9

## Addition Bordering Tens

## Part 2

Answer using 5 of the digits:

## Example Answer



## Subtraction Bordering Tens

## Which number sentence is correct?

## Subtraction Bordering Tens

## Which number sentence is correct?

$$
9-4=5
$$

$$
5-4=9
$$



$$
9-4=6
$$

## Subtraction Bordering Tens

## Which number sentence is correct?

$$
9-4=5
$$

$$
5-4=9
$$



$$
9-4=6
$$

## Subtraction Bordering Tens

## Which number sentence is correct?

$$
9-4=5 \checkmark
$$

$$
5-4=9 x
$$



$$
9-4=6 x
$$

## Subtraction Bordering Tens

## Which number sentence is correct?

## Subtraction Bordering Tens

## Which number sentence is correct?

$12-5=8$
$12-5=7$

$5-12=7$

## Subtraction Bordering Tens

## Which number sentence is correct?

$12-5=8$
$12-5=7$

$5-12=7$

## Subtraction Bordering Tens

## Which number sentence is correct?

$12-5=8 x$
$12-5=7 \checkmark$

$5-12=7 x$

## Subtraction Bordering Tens

## Part 2

 Answer using three of the digits:

## Subtraction Bordering Tens

## Part 2

Answer using three of the digits:

## Explain the Mistake:

ㅁ.ロ・ロ
8

## Subtraction Bordering Tens

## Part 2

Answer using three of the digits:

## Explain the Mistake:



## Subtraction Bordering Tens

## Part 2

Answer using three of the digits:

## Explain the Mistake:



## Subtraction Bordering Tens

## Part 2

Answer using three of the digits:
Correct Answer:


## 4



## Subtraction Bordering Tens

## Part 2

Answer using three of the digits:
Correct Answer:


## 4



## Subtraction Bordering Tens

## Part 2

 Answer using four of the digits:

## Subtraction Bordering Tens

## Part 2

Answer using four of the digits: Explain the Mistake: वप-प


## Subtraction Bordering Tens

## Part 2

Answer using four of the digits:

## Explain the Mistake:

四-回

## Subtraction Bordering Tens

## Part 2

Answer using four of the digits:

## Explain the Mistake:



## Subtraction Bordering Tens

## Part 2

Answer using four of the digits:
Explain the Mistake:



## Subtraction Bordering Tens

Answer using four of the digits：

## Correct Answer：

## 四－回－回



## Three Numbers

## Part 1

## I think of 3 numbers. They are all different. They have a sum of 20.

## Three Numbers

## I think of 3 numbers. They are all different.

 They have a sum of 20.
## Explain the Mistake:

## $12+4+3$

## Three Numbers

I think of 3 numbers. They are all different. They have a sum of 20.

## Explain the Mistake:

$$
12+4+3
$$



## Three Numbers

## I think of 3 numbers. They are all different.

 They have a sum of $\mathbf{2 0}$.
## Explain the Mistake:

$12+4+4$

## Three Numbers

## Part 1

I think of 3 numbers. They are all different. They have a sum of 20.

## Explain the Mistake:

## $12+4+4$



## Three Numbers

## Part 2

I think of 3 different numbers.
They have a sum of 16.
Each number is less than 10.

## Three Numbers

## Part 2

I think of 3 different numbers.
They have a sum of $\mathbf{1 6}$.
Each number is less than 10.
Correct or Incorrect? $\sqrt{ }$ or $\boldsymbol{x}$

$$
10+5+1
$$

$8+2+6$

$$
7+6+3
$$

$8+4$ + 4

## Three Numbers

## Part 2

I think of 3 different numbers.
They have a sum of $\mathbf{1 6}$.
Each number is less than 10.
Correct or Incorrect? $\sqrt{ }$ or $\boldsymbol{x}$


## Shapes for Numbers

## Part 1

$=4$
$=2$

## Shapes for Numbers

## Part 1



## Shapes for Numbers

## Part 1



## Shapes for Numbers

## Part 1



## Shapes for Numbers

## Part 1



## Shapes for Numbers

## Part 2

## Each shape stands for a number.



## Shapes for Numbers

## Part 2

## Each shape stands for a number.



## Shapes for Numbers

## Part 2

## Each shape stands for a number.



## Shapes for Numbers

## Part 2

## Each shape stands for a number.



## Shapes for Numbers

## Part 2

## Each shape stands for a number.



## Shapes for Numbers

## Part 2

## Each shape stands for a number.


$=8$

## Shapes for Numbers

## Part 2

## Each shape stands for a number.



## Shapes for Numbers

## Part 2

## Each shape stands for a number.



## Shapes for Numbers

## Part 2

## Each shape stands for a number.



## Shapes for Numbers

## Part 2

Each shape stands for a number.


## Shapes for Numbers

## Part 3

Each shape stands for a number.


## Shapes for Numbers

## Part 3

Each shape stands for a number.


## Shapes for Numbers

## Part 3

Each shape stands for a number.


## Shapes for Numbers

## Part 3

Each shape stands for a number.


## Shapes for Numbers

## Part 3

Each shape stands for a number.


## Dice Patterns

## Part 1

This is 3 lots of 4.


## Dice Patterns

## Part 1

# This is 3 lots of 4. There are 12 dots in total. 



## Dice Patterns

## Part 1

# This is 3 lots of 4. There are 12 dots in total. 

$$
\begin{aligned}
& \because \because \quad \because: \quad \because \\
& 4+4+4=12
\end{aligned}
$$

## Dice Patterns

## Part 1

# This is 3 lots of 4. There are 12 dots in total. 



$$
\begin{aligned}
& 4+4+4=12 \\
& 3 \times 4=12
\end{aligned}
$$

## Dice Patterns

This is 4 lots of 5 .


## Dice Patterns

# This is 4 lots of 5 . There are 20 dots in total. 



## Dice Patterns

# This is 4 lots of 5 . There are 20 dots in total. 



$$
5+5+5+5=20
$$

## Dice Patterns

# This is 4 lots of 5 . There are 20 dots in total. 



$$
\begin{aligned}
& 5+5+5+5=20 \\
& 4 \times 5=20
\end{aligned}
$$

## Dice Patterns

## Part 2

## Which Number Sentences?



## Dice Patterns

## Part 2

## Which Number Sentences?


$5+5+5+5$
$4 \times 5$

$15+5$
$3 \times 5$

## Dice Patterns

## Part 2

## Which Number Sentences?



$$
5+5+5+5
$$

$15+5$

$$
4 \times 5
$$



## Dice Patterns

## Part 2

## Which Number Sentences?



## Dice Patterns

## Part 2

## Which Number Sentences?



$$
2+2+2+2+2+2 \quad 2+8+2
$$

$6 \times 2$
$5 \times 2$

## Dice Patterns

## Part 2

## Which Number Sentences?



$$
2+2+2+2+2+2
$$

## $2+8+2$

$$
6 \times 2
$$

$5 \times 2$

## Dice Patterns

## Part 2

## Which Number Sentences?



## Dice Patterns

## Part 2

## Which Number Sentences?


$5+5+5+5+5+5$
$20+10$
$6 \times 5$
$3 \times 10$

## Dice Patterns

## Part 2

## Which Number Sentences?


$5+5+5+5+5+5$
$20+10$
$6 \times 5$
$3 \times 10$

## Different Arrays

## Part 1



## Different Arrays

## Part 1



## $5 \times 2$

## Different Arrays

## Part 1


$5 \times 2$ or $2 \times 5$

## Different Arrays

## Part 1



$5 \times 2$ or $2 \times 5$
10 dots in total

## Different Arrays

## Part 2

Make an array using 14 counters.

## Different Arrays

Make an array using 14 counters.
Explain the mistake:

|  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  | $O$ |  |  |
|  |  |  |  | 0 |  |  |  |  |
|  |  |  |  |  |  | 0 |  |  |

## Different Arrays

Make an array using 14 counters.
Example answer:


## Different Arrays

## Part 2

Make an array using 14 counters.
Example answer:

$\times$ number sentences:

## $7 \times 2$ <br> or <br> $2 \times 7$

## Different Arrays

## Part 3

Make two arrays using 14 counters in total.

## Different Arrays

Make two arrays using 14 counters in total. Example answer:


## Different Arrays

## Part 3

Make two arrays using 14 counters in total.
Example answer:

$4 \times 2$ and
$3 \times 2$

## Camping Trip

## Part 1

14 people camping.
They use
$\square$ tents that fit 2 people.


## Camping Trip

## Part 1

14 people camping.
They use
$\square$ tents that fit 2 people.


## Camping Trip

## Part 1

14 people camping.
They use $\mathbf{7}$ tents that fit 2 people.


## Camping Trip

## Part 1

12 people camping.
They use $\square$ tents that fit $\mathbf{4}$ people.


## Camping Trip

## Part 1

12 people camping.
They use $\square$ tents that fit $\mathbf{4}$ people.


## Camping Trip

## Part 1

12 people camping.
They use 3 tents that fit $\mathbf{4}$ people.


## Camping Trip

## Part 1

11 people camping.
They use $\square$ tents that fit $\mathbf{4}$ people.


## Camping Trip

## Part 1

11 people camping.
They use $\square$ tents that fit $\mathbf{4}$ people.


## Camping Trip

## Part 1

11 people camping.
They use $\mathbf{3}$ tents that fit $\mathbf{4}$ people.


## Camping Trip

## Part 2

10 people camping.
They use 5 tents.
They use tents of the same size.

## Camping Trip

## Part 2

10 people camping.
They use 5 tents.
They use tents of the same size.


## Camping Trip

## Part 2

10 people camping.
They use $\mathbf{2}$ tents.
They use tents of the same size.

## Camping Trip

## Part 2

10 people camping.
They use $\mathbf{2}$ tents.
They use tents of the same size.


## Camping Trip

## Part 2

14 people camping.
They use 4 tents.
Some tents are different sizes.

## Camping Trip

## Part 2

14 people camping.
They use 4 tents.
Some tents are different sizes.


## Combinations

## Part 1

Tim has 3 t-shirts:


Tim has 3 pairs of trousers: How many outfits can he make?

## Combinations

## Part 1

Tim has 3 t-shirts:


Tim has 3 pairs of trousers: How many outfits can he make?


## Combinations

## Part 1

Tim has 3 t-shirts:


Tim has 3 pairs of trousers: How many outfits can he make?


## Combinations

## Part 1

Tim has 3 t-shirts:


Tim has 3 pairs of trousers: How many outfits can he make?


## Combinations

## Part 1

Tim has 3 t-shirts:


Tim has 3 pairs of trousers: How many outfits can he make?


## Combinations

## Part 1

Tim has 3 t-shirts:


Tim has 3 pairs of trousers: How many outfits can he make?


## Combinations

## Part 1

Tim has 3 t-shirts:


Tim has 3 pairs of trousers: How many outfits can he make?


## Combinations

## Part 1

Tim has 3 t-shirts:


Tim has 3 pairs of trousers: How many outfits can he make?


## Combinations

## Part 1

Tim has 3 t-shirts:


Tim has 3 pairs of trousers: How many outfits can he make?


## Combinations

## Part 1

Tim has 3 t-shirts:


Tim has 3 pairs of trousers: How many outfits can he make?


## Combinations

Beth is given $£ \mathbf{5}$ per day for doing the gardening.
She does the gardening for $\mathbf{3}$ days.
How much money does she earn in total?

## Which Picture?



## Combinations

Beth is given $£ \mathbf{5}$ per day for doing the gardening.
She does the gardening for $\mathbf{3}$ days.
How much money does she earn in total?

## Which Picture?



## Combinations

Your sandwich can be white bread or brown bread. Your sandwich can be cheese, ham, tuna or jam. How many different sandwiches can be made?

## Which Picture?



## Combinations

Your sandwich can be white bread or brown bread. Your sandwich can be cheese, ham, tuna or jam. How many different sandwiches can be made?

Which Picture?


## Estimating Fractions

## Part 1

## What do you notice?



## Estimating Fractions

Which coloured part is the largest in size? Which coloured part is the largest as a fraction?


## Estimating Fractions

Which coloured part is the largest in size?
Which coloured part is the largest as a fraction?


## Estimating Fractions

Which coloured part is the largest in size? Which coloured part is the largest as a fraction?


## Estimating Fractions

## What do you notice?



## Estimating Fractions

Which coloured part is the largest in size?
Which coloured part is the largest as a fraction?


## Estimating Fractions

Which coloured part is the largest in size? Which coloured part is the largest as a fraction?


## Estimating Fractions

Which coloured part is the largest in size? Which coloured part is the largest as a fraction?



Largest part in size

## Estimating Fractions

## Part 2

As a fraction of the shape, is the coloured part...
Less than $\frac{1}{4}$
$\frac{1}{4}$
More than $\frac{1}{4}$

## Estimating Fractions

As a fraction of the shape, is the coloured part...
Less than $\frac{1}{4} \quad \frac{1}{4} \quad$ More than $\frac{1}{4}$


## Estimating Fractions

As a fraction of the shape, is the coloured part...
Less than $\frac{1}{4}$
$\frac{1}{4}$ More than $\frac{1}{4}$


## Estimating Fractions

As a fraction of the shape, is the coloured part...
Less than $\frac{1}{4}$
$\frac{1}{4}$
More than $\frac{1}{4}$


## Estimating Fractions

As a fraction of the shape, is the coloured part...

## Less than $\frac{1}{4}$



## Estimating Fractions

## Part 2

As a fraction of the shape, is the coloured part...
Less than $\frac{1}{4}$
$\frac{1}{4}$
More than $\frac{1}{4}$


## Estimating Fractions

As a fraction of the shape, is the coloured part...
Less than $\frac{1}{4}$
$\frac{1}{4}$
More than $\frac{1}{4}$


## Estimating Fractions

## Part 2

As a fraction of the shape, is the coloured part...


## Estimating Fractions

## Part 2

As a fraction of the shape, is the coloured part...
Less than $\frac{1}{4}$
$\frac{1}{4}$
More than $\frac{1}{4}$


## Estimating Fractions

As a fraction of the shape, is the coloured part...
Less than $\frac{1}{4}$
$\frac{1}{4}$ More than $\frac{1}{4}$


## Estimating Fractions

As a fraction of the shape, is the coloured part...
Less than $\frac{1}{4}$
$\frac{1}{4}$ More than $\frac{1}{4}$


## Estimating Fractions

## Part 3

Sort the fraction into:
Less than $\frac{1}{4}$

More than $\frac{1}{4}$ less than $\frac{1}{2}$

More than $\frac{1}{2}$

## Estimating Fractions

## Part 3

Sort the fraction into:
Less than $\frac{1}{4}$
The fraction of the bike that is the seat.

More than $\frac{1}{4}$ less than $\frac{1}{2}$

More than $\frac{1}{2}$


## Estimating Fractions

## Part 3

Sort the fraction into:

More than $\frac{1}{4}$ less than $\frac{1}{2}$

More than $\frac{1}{2}$

Less than $\frac{1}{4}$

## The fraction of the bike that is metal.



## Estimating Fractions

## Part 3

Sort the fraction into:

The fraction of the bike that is green.

Less than $\frac{1}{4}$

More than $\frac{1}{4}$ less than $\frac{1}{2}$

More than $\frac{1}{2}$

## Fractions of a Set

## Part 1

## Which picture shows $\frac{1}{2}$ of 8 ?

## Fractions of a Set

## Part 1

Which picture shows $\frac{1}{2}$ of 8 ?


## Fractions of a Set

## Part 1

Which picture shows $\frac{1}{2}$ of 8 ?

## $x$



## Fractions of a Set

## Part 1

## Which picture shows $\frac{1}{4}$ of 8 ?

## Fractions of a Set

## Part 1

Which picture shows $\frac{1}{4}$ of 8 ?


## Fractions of a Set

## Part 1

Which picture shows $\frac{1}{4}$ of 8 ?


$$
x
$$



## Fractions of a Set

## Part 2

Can 8 be split into $\frac{1}{2}$ ?


## Fractions of a Set

## Part 2

## Can 8 be split into $\frac{1}{2}$ ?


$\sqrt{ }$

## Fractions of a Set

Can 8 be split into $\frac{1}{2}$ ?



Can 8 be split into $\frac{1}{3}$ ?


## Fractions of a Set

Can 8 be split into $\frac{1}{2}$ ?


Can 8 be split into $\frac{1}{3}$ ?


## Fractions of a Set

## Part 2

Can 8 be split into $\frac{1}{2}$ ?


Can 8 be split into $\frac{1}{3}$ ?


Can 8 be split into $\frac{1}{4}$ ?


## Fractions of a Set

## Part 2

Can 8 be split into $\frac{1}{2}$ ?


Can 8 be split into $\frac{1}{3}$ ?


Can 8 be split into $\frac{1}{4}$ ?


## Fractions of a Set

My number can be split into equal groups of $\frac{1}{3}$ My number cannot be split into equal groups of $\frac{1}{2}$ My number is less than 10.

## Fractions of a Set

My number can be split into equal groups of $\frac{1}{3}$ My number cannot be split into equal groups of $\frac{1}{2}$ My number is less than 10.


## Fractions of a Set

My number can be split into equal groups of $\frac{1}{3} \boldsymbol{V}$ My number cannot be split into equal groups of $\frac{1}{2}$ My number is less than 10. $\downarrow$

## Could it be 6?



6 can be split into equal groups of $\frac{1}{3}$

## Fractions of a Set

My number can be split into equal groups of $\frac{1}{3} \sqrt{ }$ My number cannot be split into equal groups of $\frac{1}{2} \boldsymbol{x}$ My number is less than 10. $\downarrow$

Could it be 6?


6 can be split into equal groups of $\frac{1}{3}$


6 can be split into equal groups of $\frac{1}{2}$

## Fractions of a Set

My number can be split into equal groups of $\frac{1}{3}$ My number cannot be split into equal groups of $\frac{1}{2}$ My number is less than 10.


## Fractions of a Set

My number can be split into equal groups of $\frac{1}{3} \sqrt{ }$ My number cannot be split into equal groups of $\frac{1}{2}$ My number is less than 10. $\sqrt{ }$

Could it be 9 ?


9 can be split into equal groups of $\frac{1}{3}$

## Fractions of a Set

My number can be split into equal groups of $\frac{1}{3} \sqrt{ }$ My number cannot be split into equal groups of $\frac{1}{2} \boldsymbol{V}$ My number is less than 10. $\sqrt{ }$

Could it be 9?


9 can be split into equal groups of $\frac{1}{3}$


9 cannot be split into
equal groups of $\frac{1}{2}$

## Fraction Pictures

## Part 1

## This picture shows $\frac{1}{3}$



## Fraction Pictures

## This picture shows $\frac{1}{3}$




## Fraction Pictures

This picture shows $\frac{1}{3}$

## Does this picture show $\frac{1}{3}$ ? <br> $\checkmark$ or $x$



Part 1


## Fraction Pictures

Part 1

## This picture shows $\frac{1}{4}$



## Fraction Pictures

## This picture shows $\frac{1}{4}$



## Does this <br> picture show $\frac{1}{4}$ ?


$\sqrt{ }$ or $x$

## Fraction Pictures

## This picture shows $\frac{1}{4}$



## Does this <br> picture show $\frac{1}{4}$ ?


$\sqrt{ }$ or $x$

## Fraction Pictures

## Part 1

## This picture <br> shows $\frac{1}{2}$



## Fraction Pictures

Part 1

This picture shows $\frac{1}{2}$



## Does this <br> picture show $\frac{1}{2}$ ?


$\sqrt{ }$ or $x$

## Fraction Pictures

## Part 1

## This picture shows $\frac{1}{2}$



## Does this <br> picture show $\frac{1}{2}$ ?


$\sqrt{ }$ or $x$

## Fraction Pictures

## Part 2

## $\frac{1}{4}$ or $\frac{1}{2}$ or trash? 血



| $\frac{1}{4}$ | $\frac{1}{2}$ | trash 茼 |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |

## Fraction Pictures

## Part 2

## $\frac{1}{4}$ or $\frac{1}{2}$ or trash? 血



| $\frac{1}{4}$ |  |  | $\frac{1}{2}$ |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |

## Fraction Pictures

## Part 2

## $\frac{1}{4}$ or $\frac{1}{2}$ or trash? 血



| $\frac{1}{4}$ |  |  | $\frac{1}{2}$ |
| :---: | :---: | :---: | :---: |

## Fraction Pictures

## Part 2

$\frac{1}{4}$ or $\frac{1}{2}$ or trash? 血

| $\frac{1}{4}$ |  | $\frac{1}{2}$ | trash 自 |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |

## Fraction Pictures

## Part 3

## Are $\frac{3}{4}$ of the dots blue?



○


## Fraction Pictures

## Part 3

## Are $\frac{3}{4}$ of the dots blue?



## O

○


## Fraction Pictures

Part 3

## Does the picture show $\frac{3}{4}$ ?



## Fraction Pictures

Part 3

## Does the picture show $\frac{3}{4}$ ?



## Fraction Pictures

## Does the picture show $\frac{3}{4}$ ?



## Fraction Pictures

Part 3

## Does the picture show $\frac{3}{4}$ ?



## Choosing Measures

 than a marble.


## Choosing Measures

 than a marble.

## Choosing Measures

## Part 1



## Choosing Measures

## The earth is smaller and colder

 than the sun.

## Choosing Measures

Part 2 Measure the height of a tree in...


Centimetres (cm)

Metres (m)

## Kilograms (kg)

## Choosing Measures

Measure the capacity of a water bottle in...


## Centimetres (cm)

## Grams (g)

Litres (I)

## Choosing Measures

## Kilograms (kg)

## Grams (g)

## Centimetres (cm)

## Choosing Measures



## Centimetres (cm)

## Grams (g)

Millimetres (mm)

## Groups of Coins

## Part 1

## Same or Different?



## Groups of Coins

## Same or Different?



## Groups of Coins

## Same or Different?



15p


15p

Same

## Groups of Coins

## Same or Different?



## Groups of Coins

## Part 1

## Same or Different?



11p


12p

Different

## Groups of Coins

## Part 1

## Same or Different?



## Groups of Coins

## Part 1

## Same or Different?



14p


13p

## Different

## Groups of Coins

## Same or Different?



## Groups of Coins

## Same or Different?



## Groups of Coins

## Part 2

## Make 14p. Use 4 coins.

$\checkmark$ or $\boldsymbol{x}$

## Groups of Coins

## Part 2

## Make 14p. Use 4 coins.

$\checkmark$ or $\mathbf{x}$


## Groups of Coins

Part 2

## Make 14p. Use 4 coins. <br> $\checkmark$ or $\times$



## Groups of Coins

## Part 2

## Make 14p. Use 4 coins.

$\checkmark$ or $\boldsymbol{x}$


## Groups of Coins

## Part 2

## Make 14p. Use 4 coins.

$\checkmark$ or $\mathbf{x}$


## Groups of Coins

## Part 2

## Make 14p. Use 4 coins.

$\checkmark$ or $\mathbf{x}$


2p

## Groups of Coins

## Part 2

## Make 14p. Use 4 coins.

$\checkmark$ or $\mathbf{x}$


## Groups of Coins

## Part 2

## Make 14p. Use 4 coins.

$\checkmark$ or $\boldsymbol{x}$


## Groups of Coins

## Part 2

## Make 14p. Use 4 coins.

$\checkmark$ or $\mathbf{x}$


## Adding Coins

## Odd One Out


(5p 5p

## Adding Coins

## Odd One Out

## 35p

30p


## 30p



## Adding Coins

## Part 1

## Odd One Out



## Odd One Out

50p
50p


45p


## Adding Coins

## Part 1

## Odd One Out



## Adding Coins

## Odd One Out

## 30p

25p


25p


## Adding Coins

## Part 2

## Make 50p. Use 4 coins.

$\checkmark$ or $\boldsymbol{x}$

## Adding Coins

## Part 2

## Make 50p. Use 4 coins.

$\checkmark$ or $\mathbf{x}$


## Adding Coins

## Part 2

## Make 50p. Use 4 coins.

$\checkmark$ or $\mathbf{x}$


## Adding Coins

## Part 2

## Make 50p. Use 4 coins.

$\checkmark$ or $\mathbf{x}$


10p

## Adding Coins

## Part 2

## Make 50p. Use 4 coins. <br> $\checkmark$ or $\times$



## Adding Coins

## Part 2

## Make 50p. Use 4 coins.

## $\checkmark$ or $\boldsymbol{x}$

20p

## Adding Coins

## Part 2

## Make 50p. Use 4 coins.

## $\checkmark$ or $\mathbf{x}$



## Adding Coins

## Part 2

## Make 50p. Use 4 coins.

$\checkmark$ or $\mathbf{x}$


## Adding Coins

## Part 2

## Make 50p. Use 4 coins.

$\checkmark$ or $\mathbf{x}$


## Change

## Part 1

## Kam's money:

## 45p



Kam needs more money.
Kam can buy. No change.
Kam can buy. He gets change.

## Change

## Part 1

## Kam's money:

## 45p


$5 p$

Kam needs more money.

## Kam can buy. No change.

Kam can buy. He gets change.

## Change

## Part 1

## Jenny's money:



Jenny needs more money.
Jenny can buy. No change.
Jenny can buy. She gets change.

## Change

Jenny's money:
$45 p$


## Jenny needs more money.

Jenny can buy. No change.
Jenny can buy. She gets change.

## Change

## Helen's money:

## 45p



20p

Helen needs more money.
Helen can buy. No change.
Helen can buy. She gets change.

## Change

## Helen's money:

20p

Helen needs more money. Helen can buy. No change.

## Helen can buy. She gets change.

## Change

## Part 2

## Zack's money:



## 55p

## Zack needs $\square$ more. OR Zack gets change.

## Change

## Part 2

## Zack's money:



## 55p

## Zack needs $\square$ more. OR <br> Zack gets <br> 

## Change

## Part 2

## Zack's money:



## 55p

## Zack needs 10p more. <br> OR <br> Zack gets <br> 

## Change

## Part 2

## Beth's money:



## 55p

Beth needs $\square$ more.
OR
Beth gets $\square$ change.

## Change

## Part 2

## Beth's money:



## 55p

## Beth needs <br> 

OR
Beth gets $\square$ change.

## Change

## Part 2

## Beth's money:



## 55p

Beth needs $>$ more.
OR
Beth gets 5 p change.

## Change

## I pay with 2 coins:

## 17p

## I get 2 coins change:

## Change

## I pay with 2 coins:



10p

17p

## I get 2 coins change:

## Change

## I pay with 2 coins:


$10 p$

## 17p

## I get 2 coins change:



## Change

## I pay with 1 coin:

## $17 p$

## I get 3 coins change:

## Change

## I pay with 1 coin:

17p

## I get 3 coins change:

## Change

## Part 3

## I pay with 1 coin:

17p

## I get 3 coins change:



## Change

## I pay with 3 coins:

## 17p

## I get 2 coins change:

## Change



## I pay with 3 coins:



## I get 2 coins change:

## Change

## I pay with 3 coins:



## 17p

## I get 2 coins change:



## Reading Clocks

## Part 1

Which clock shows 2:00?


## Reading Clocks

## Part 1

Which clock shows 2:00?


## Reading Clocks

## Part 1

Which clock shows 9:05?


## Reading Clocks

## Part 1

Which clock shows 9:05?


## Reading Clocks

## Which clock shows 7:50?



## Reading Clocks

Which clock shows 7:50?


## Reading Clocks

## Part 2

## The time is



## Reading Clocks

## Part 2

## The time is



## Reading Clocks

## Part 2

The time is


## Reading Clocks

## Part 2

The time is $\mathbf{7 : 0 0}$


## Reading Clocks

## Part 2

The time is


## Reading Clocks

## Part 2

## The time is



## Reading Clocks

## Part 2

The time is


## Reading Clocks

## Part 2

The time is $\mathbf{9 : 3 0}$


## Reading Clocks

## Part 2

The time is


## Reading Clocks

## Part 2

The time is


## Reading Clocks

## Part 2

The time is


## Reading Clocks

## Part 2

The time is $\mathbf{3 : 4 5}$


## Reading Clocks

## Part 3

The time is $\mathbf{4 : 3 0}$
The missing hand will be...


## Reading Clocks

## Part 3

The time is $\mathbf{4 : 3 0}$


## Reading Clocks

## Part 3

The time is $\mathbf{3 : 0 2}$
The missing hand will be...

## Reading Clocks

## Part 3

The time is $\mathbf{3 : 0 2}$


## Reading Clocks

## Part 3

The time is $\mathbf{2 : 4 5}$
The missing hand will be...


## Reading Clocks

## Part 3

The time is $\mathbf{2 : 4 5}$


## Shape Properties

 Describe the shape:

4 sides: Quadrilateral
5 sides: Pentagon
6 sides: Hexagon
Lines of symmetry:


All sides equal length?
Straight sides?

I notice...

## Shape Properties

 Describe the shape:

4 sides: Quadrilateral
5 sides: Pentagon
6 sides: Hexagon
Lines of symmetry:


All sides equal length?
Straight sides?
I notice...

## Shape Properties

Describe the shape:


## Part 1

4 sides: Quadrilateral
5 sides: Pentagon
6 sides: Hexagon
Lines of symmetry: 2
All sides equal length?
Straight sides?
I notice...

## Shape Properties

 Describe the shape:

4 sides: Quadrilateral
5 sides: Pentagon
6 sides: Hexagon
Lines of symmetry: 2
All sides equal length? $\mathbf{x}$
Straight sides?
I notice...

## Shape Properties

 Describe the shape:

4 sides: Quadrilateral
5 sides: Pentagon
6 sides: Hexagon
Lines of symmetry: 2
All sides equal length? $\mathbf{x}$
Straight sides? $\sqrt{ }$
I notice...

## Shape Properties

## Part 1



4 sides: Quadrilateral
5 sides: Pentagon
6 sides: Hexagon
Lines of symmetry:


All sides equal length?
Straight sides?
I notice...

## Shape Properties

## Part 1

4 sides: Quadrilateral
5 sides: Pentagon
6 sides: Hexagon
Lines of symmetry:


All sides equal length?
Straight sides?
I notice...

## Shape Properties

 Describe the shape:

4 sides: Quadrilateral
5 sides: Pentagon
6 sides: Hexagon
Lines of symmetry:

## 1

All sides equal length?
Straight sides?
I notice...

## Shape Properties

## Part 1

4 sides: Quadrilateral
5 sides: Pentagon
6 sides: Hexagon
Lines of symmetry:

All sides equal length? $\mathbf{x}$
Straight sides?
I notice...

## Shape Properties

## Part 1

4 sides: Quadrilateral
5 sides: Pentagon
6 sides: Hexagon
Lines of symmetry: 1

All sides equal length? $\mathbf{x}$
Straight sides? $\sqrt{ }$
I notice...

## Shape Properties

Describe the shape:


## Part 1

4 sides: Quadrilateral
5 sides: Pentagon
6 sides: Hexagon
Lines of symmetry:


All sides equal length?
Straight sides?
I notice...

## Shape Properties

Describe the shape:


## Part 1

## Shape Properties

 Describe the shape:

## Part 1

4 sides: Quadrilateral
5 sides: Pentagon
6 sides: Hexagon
Lines of symmetry: 1

All sides equal length? $\mathbf{x}$
Straight sides?

I notice...

## Shape Properties

 Describe the shape:

## Part 1

## Shape Properties

## Part 2

Sort the shapes:


## Shape Properties

## Part 2

Sort the shapes:


Hexagons


Not Hexagons

## Shape Properties

## Part 2

Sort the shapes:


Hexagons



## Shape Properties

Sort the shapes:

## Part 2



Hexagons
Not Hexagons


## Shape Properties

Sort the shapes:

## Part 2



Hexagons


## Shape Properties

## Part 2

Sort the shapes:

Hexagons


Not Hexagons


## Shape Properties

## Part 2

Sort the shapes:


|  | All sides equal length | Not all sides equal length |
| :--- | :--- | :--- |
| Hexagon |  |  |
| Not hexagon |  |  |

## Shape Properties

## Part 2

Sort the shapes:


|  | All sides equal length | Not all sides equal length |
| :---: | :---: | :---: |
| Hexagon |  |  |
| Not hexagon |  |  |

## Shape Properties

## Sort the shapes:



|  | All sides equal length | Not all sides equal length |
| :---: | :---: | :---: |
| Hexagon | $\square$ |  |
| Not hexagon |  |  |

## Shape Properties

## Part 2

Sort the shapes:


|  | All sides equal length | Not all sides equal length |
| :---: | :---: | :---: |
| Hexagon | P |  |
| Not hexagon |  | $\square$ |

## Shape Properties

## Part 2

## Sort the shapes:

|  | All sides equal length | Not all sides equal length |
| :---: | :---: | :---: |
| Hexagon | P |  |
| Not hexagon |  |  |

## Shape Properties

## Part 2

Sort the shapes:


Hexagons
Symmetrical


## Shape Properties

## Part 2

Sort the shapes:


## Shape Properties

## Part 2

Sort the shapes:


Hexagons
Symmetrical


## Shape Properties

## Part 2

Sort the shapes:


## Shape Properties

## Part 2

Sort the shapes:

Hexagons
Symmetrical


## Combining Shapes

Task A Answers


## Combining Shapes

Task A Answers



## Combining Shapes

Task A Answers


## Combining Shapes

## Task A Answers



## Combining Shapes



## Combining Shapes



4 small squares

## Combining Shapes

## Task A Answers



## 4 medium squares

## Combining Shapes

## Task A Answers



## 1 large square

## Combining Shapes

## Task B Answers



## Combining Shapes

## Task B Answers



## 4 small triangles

## Total: <br> 4

## Combining Shapes

## Task B Answers



## 2 medium triangles Total: 4 + 2

## Combining Shapes

## Task B Answers



## 1 big triangle <br> Total: <br> $4+2+1=7$

## Combining Shapes

## Task B Answers



## Task B Answers

## Combining Shapes

4 small squares


## Total:

4

## Combining Shapes

## Task B Answers

## Total: $4+1$

## 1 medium square

## Combining Shapes



1 large square

## Task B Answers

Total:
$4+1+1=6$

## Combining Shapes

## Task C Answers



## Combining Shapes

## Task C Answers

## Task 1: 3 shapes to make a rectangle



## Combining Shapes

## Task C Answers

## Task 2: 4 shapes to make a square



## Combining Shapes

## Task C Answers

## Task 3: 3 shapes to make a triangle



## Combining Shapes

## Task C Answers

## Task 4: 4 shapes to make a triangle



## Combining Shapes

## Task D Answers



## Combining Shapes

## Task D Answers



## Triangles: <br> 4

## Combining Shapes

## Task D Answers



## Triangles: $4+1=5$

## Combining Shapes

## Task D Answers



## Triangles: $4+1=5$

## Squares:

2

## Combining Shapes

## Task D Answers



## Triangles: $4+1=5$

Squares:
$2+1=3$

## Combining Shapes



# Triangles: $4+1=5$ 

## Squares:

## $2+1=3$

## Rectangles:

2

## Combining Shapes

## Task D Answers

## Combining Shapes



## Task D Answers

## Triangles:

2

## Combining Shapes



## Task D Answers

## Triangles: <br> $2+2$

## Task D Answers

## Combining Shapes



## Triangles: <br> $2+2+2=6$

## Combining Shapes

## Task D Answers

## Triangles: <br> $2+2+2=6$

## Squares:

1

## Combining Shapes

## Task D Answers

## Triangles: <br> $2+2+2=6$

## Squares:

$$
1+1=2
$$

## Shape Patterns

## Continue the pattern:



## Shape Patterns

## Continue the pattern:



## Shape Patterns

## Continue the pattern:



## Shape Patterns

## Continue the pattern:



## Shape Patterns

## Continue the pattern:



## Shape Patterns

Continue the pattern:



## Shape Patterns

Continue the pattern:



## Shape Patterns

Continue the pattern:


## Shape Patterns

Continue the pattern:


## Shape Patterns

Continue the pattern:



## Shape Patterns

Continue the pattern:



## Shape Patterns

Continue the pattern:


| $\uparrow$ |
| :---: |

## Shape Patterns

Continue the pattern:



## Shape Patterns

Continue the pattern:

| V미V밈ㅁㅁ |
| :---: |




## Shape Patterns

Fill in the white gaps to continue the pattern:


## Shape Patterns

## Part 2

Fill in the white gaps to continue the pattern:


## Shape Patterns

Fill in the white gaps to continue the pattern:


## Shape Patterns

Fill in the white gaps to continue the pattern:


## Shape Patterns

Fill in the white gaps to continue the pattern:


## Shape Patterns

Fill in the white gaps to continue the pattern:


## Shape Patterns

Fill in the white gaps to continue the pattern:


## Shape Patterns

Fill in the white gaps to continue the pattern:


## Shape Patterns

Fill in the white gaps to continue the pattern:


## Shape Patterns

Fill in the white gaps to continue the pattern:


## Shape Patterns

Fill in the white gaps to continue the pattern:


## Shape Patterns

Fill in the white gaps to continue the pattern:


## Shape Patterns

Fill in the white gaps to continue the pattern:


## Shape Patterns

Fill in the white gaps to continue the pattern:


## Shape Patterns

Fill in the white gaps to continue the pattern:


## Shape Patterns

 Here is a pattern:

## Shape Patterns

Here is a pattern:


What is the $10^{\text {th }}$ shape in the pattern?
What is the $17^{\text {th }}$ shape in the pattern?

## Shape Patterns

 Here is a pattern:| $\triangle$ | さ | $\triangle$ | N | $\triangle$ | N | $\triangle$ | T | $\triangle$ | $\Sigma$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2 |  |  |  |  |  |  |  |  |



What is the $10^{\text {th }}$ shape in the pattern?
What is the $17^{\text {th }}$ shape in the pattern?

## Shape Patterns

 Here is a pattern:| $\triangle$ | N | $\triangle$ | N | $\triangle$ | N | $\triangle$ | K | $\triangle$ | K |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| $\triangle$ | 去 | $\triangle$ | N | $\triangle$ | N | $\triangle$ | N | $\triangle$ | $\pm$ |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |

What is the $10^{\text {th }}$ shape in the pattern?
What is the $17^{\text {th }}$ shape in the pattern?

## Shape Patterns

Here is a pattern:


## Shape Patterns

Here is a pattern:

| $\square$ | $\bigcirc$ | $\bigcirc$ | N | $\square$ | $\bigcirc$ | $\bigcirc$ | N |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  | 10 |



What is the $10^{\text {th }}$ shape in the pattern?
What is the $16^{\text {th }}$ shape in the pattern?

## Shape Patterns

Here is a pattern:

|  | $\bigcirc$ | $\bigcirc$ | 号 | $\square$ | $\bigcirc$ | $\bigcirc$ | N |  | $\bigcirc$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 |  | 8 | 9 |  |



What is the $10^{\text {th }}$ shape in the pattern?
What is the $16^{\text {th }}$ shape in the pattern?

## Shape Patterns

Here is a pattern:


What is the $10^{\text {th }}$ shape in the pattern?
What is the $16^{\text {th }}$ shape in the pattern?

## Asking Questions

## For the question, would you show the answer as a graph?

I would use a graph because...
I would not use a graph because...

## Asking Questions

For the question, would you show the answer as a graph?

## What is the name of your school?

I would use a graph because...
I would not use a graph because...

## Asking Questions

For the question, would you show the answer as a graph?

## How many classrooms are there in your school?

I would use a graph because...
I would not use a graph because...

## Asking Questions

For the question, would you show the answer as a graph?

## How did the children in the class travel to school this morning?

I would use a graph because...
I would not use a graph because...

## Asking Questions

For the question, would you show the answer as a graph?

## What colour are the cars parked in the school car park?

I would use a graph because...
I would not use a graph because...

## Asking Questions

Sandwich Chosen for School Lunch


What do you notice?

## Asking Questions

# Sandwich Chosen for School Lunch <br>  

The sandwich that was chosen the most was... ... more children chose tuna than...

This pictogram is easy/hard to read because...

## Asking Questions

## Pudding Chosen for School Lunch <br>  <br> Cake <br>  <br> Apple ${ }^{\text {in }} \boldsymbol{i}$ <br> 而市示 1

## Asking Questions

Pudding Chosen for School Lunch

## Bscut $\mid$ 市 <br> Cake <br> Apple $\stackrel{\circ}{1}^{1}$

 $\stackrel{\circ}{\boldsymbol{q}}=5$ people

The pudding that was chosen the most was...
... more children chose cake than...
This pictogram is easy/hard to read because...

## The Morning Routine

This is what Zara does in the morning in order (first to last):

## The Morning Routine

This is what Zara does in the morning in order (first to last):


## The Morning Routine

This is what Zara does in the morning in order (first to last):


## True or false?

Zara brushes her teeth after she eats breakfast.
Zara walks the dog, then she brushes her teeth.
Zara brushes her teeth after she walks the dog.

## The Morning Routine

This is what Zara does in the morning in order (first to last):


## True or false?

Zara brushes her teeth after she eats breakfast. Zara walks the dog, then she brushes her teeth. $\boldsymbol{x}$ Zara brushes her teeth after she walks the dog. $\sqrt{ }$

## The Morning Routine

Raj has a shower, then he gets changed.
Raj brushes his teeth after breakfast.
Spot the Mistake:

Raj has a shower, then he gets changed.
Raj brushes his teeth after breakfast.

## Spot the Mistake:



Raj has a shower, then he gets changed.
Raj brushes his teeth after breakfast.
Spot the Mistake:


## The Morning Routine

Raj has a shower, then he gets changed.
Raj brushes his teeth after breakfast.
Answer 1:


Brushes his teeth

Answers: Shower, changed, breakfast, teeth

## The Morning Routine

Raj has a shower, then he gets changed.
Raj brushes his teeth after breakfast.
Answer 2:


Answers: Shower, changed, breakfast, teeth Breakfast, teeth, shower, changed

## The Morning Routine

Raj has a shower, then he gets changed.
Raj brushes his teeth after breakfast.
Answer 3:


Brushes his teeth

Answers: Shower, changed, breakfast, teeth Breakfast, teeth, shower, changed Breakfast, shower, changed, teeth

## The Morning Routine

## Task B Answers

Jen had a shower, then she got changed.
Jen combed her hair more than 40 minutes after her shower. Before 7:40am, Jen had walked the dog. Jen brushed her teeth, then she combed her hair.

## The Morning Routine

Jen had a shower, then she got changed.
Jen combed her hair more than 40 minutes after her shower.
Before 7:40am, Jen had walked the dog.
Jen brushed her teeth, then she combed her hair.

| Shower |
| :---: |
| 10 mins |$|$

Shower before breakfast and walking dog (more than 40 minute gap between shower and combing hair).

## The Morning Routine

## Task B Answers

Jen had a shower, then she got changed.
Jen combed her hair more than 40 minutes after her shower. Before 7:40am, Jen had walked the dog. Jen brushed her teeth, then she combed her hair.


## The Morning Routine

## Task B Answers

Jen had a shower, then she got changed.
Jen combed her hair more than 40 minutes after her shower.
Before 7:40am, Jen had walked the dog.
Jen brushed her teeth, then she combed her hair.


## The Morning Routine

## Task B Answers

Jen had a shower, then she got changed.
Jen combed her hair more than 40 minutes after her shower.
Before 7:40am, Jen had walked the dog.
Jen brushed her teeth, then she combed her hair.

$\frac{$|  Shower  |
| :---: |
| 10  mins  |}{$\frac{2}{6}$}



Jen has breakfast before combing her hair so there is at least 40 minutes between showering and combing hair.

## The Morning Routine

## Task B Answers

Jen had a shower, then she got changed.
Jen combed her hair more than 40 minutes after her shower. Before 7:40am, Jen had walked the dog. Jen brushed her teeth, then she combed her hair.

| Shower <br> 10 mins |
| :---: |



## The Morning Routine

## Task B Answers

Jen had a shower, then she got changed.
Jen combed her hair more than 40 minutes after her shower. Before 7:40am, Jen had walked the dog. Jen brushed her teeth, then she combed her hair.

| Shower <br> 10 mins |
| :---: |



## The Morning Routine

## Task C Answers

Dan woke up at 7:30am.
At 8:00am, Dan was eating breakfast.
Dan had a bath, then he got changed.
Dan read a book and fed the cat after breakfast.
Dan brushed his teeth 20 minutes after he had fed the cat.

## The Morning Routine

## Task C Answers

Dan woke up at 7:30am.
At 8:00am, Dan was eating breakfast.
Dan had a bath, then he got changed.
Dan read a book and fed the cat after breakfast.
Dan brushed his teeth 20 minutes after he had fed the cat.


There are jobs before and after breakfast.

## The Morning Routine

## Task C Answers

Dan woke up at 7:30am.
At 8:00am, Dan was eating breakfast.
Dan had a bath, then he got changed.
Dan read a book and fed the cat after breakfast.
Dan brushed his teeth 20 minutes after he had fed the cat.


Jobs after breakfast (not in order).


## The Morning Routine

## Task C Answers

Dan woke up at 7:30am.
At 8:00am, Dan was eating breakfast.
Dan had a bath, then he got changed.
Dan read a book and fed the cat after breakfast.
Dan brushed his teeth 20 minutes after he had fed the cat.


Jobs after breakfast (not in order).


## The Morning Routine

## Task C Answers

Dan woke up at 7:30am.
At 8:00am, Dan was eating breakfast.
Dan had a bath, then he got changed.
Dan read a book and fed the cat after breakfast.
Dan brushed his teeth 20 minutes after he had fed the cat.

| Bath |
| :---: |
| 10 mins |



Jobs before breakfast.


## The Morning Routine

## Task C Answers

Dan woke up at 7:30am.
At 8:00am, Dan was eating breakfast.
Dan had a bath, then he got changed.
Dan read a book and fed the cat after breakfast.
Dan brushed his teeth 20 minutes after he had fed the cat.

| Bath |
| :---: |
| 10 mins |



After breakfast jobs now in order.

## The Morning Routine

## Task C Answers

Dan woke up at 7:30am.
At 8:00am, Dan was eating breakfast.
Dan had a bath, then he got changed.
Dan read a book and fed the cat after breakfast.
Dan brushed his teeth 20 minutes after he had fed the cat.

| Bath |
| :---: |
| 10 mins |



