I SEE PROBLEM-SOLVING – LKS2

WORKED EXAMPLES

GARETH METCALFE
Available as PowerPoint and PDF from www.iseemaths.com
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| Task 7: Count back through 0 | Task 17: Positioning digits to subtract |
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Task 40: Balancing scales
I SEE PROBLEM-SOLVING – LKS2

WORKED EXAMPLES

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Task 1: Making 3-digit numbers

340  100  100  100  10  10  10
Task 1: Making 3-digit numbers

340

100 100 100
10 10

340

100 100
10 10

10 10 10 10 10
10 10 10 10 10
10 10 10 10 10
10 10 10 10 10
10 10 10 10 10

NUMBER AND PLACE VALUE
Task 1: Making 3-digit numbers

340 100 100 100
     10  10

340 100 100
     10  10
     10  10

340 100
     10  10
     10  10
     10  10
     10  10

NUMBER AND PLACE VALUE
Task 1: Making 3-digit numbers

340
100  100  100
   10   10

340
100  100
10 10 10 10 10 10 10 10

340
100
10 10 10 10 10 10 10 10

340
10 10 10 10 10 10 10 10
10 10 10 10 10 10 10 10

340
10 10 10 10 10 10 10 10
10 10 10 10 10 10 10 10
10 10 10 10 10 10 10 10
10 10 10 10 10 10 10 10
Task 2: Making 4-digit numbers

Example Answers

2150

2 × 1000

1 × 100

5 × 10

NUMBER AND PLACE VALUE
<table>
<thead>
<tr>
<th>Task 2: Making 4-digit numbers</th>
<th>Example Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2150 2 × 1000 1 × 100 5 × 10</td>
<td>2150 1 × 1000 11 × 100 5 × 10</td>
</tr>
</tbody>
</table>
Task 2: Making 4-digit numbers

Example Answers

2150

2 \times 1000

1 \times 100

5 \times 10

2150

1 \times 1000

11 \times 100

5 \times 10

2150

21 \times 100

5 \times 10

NUMBER AND PLACE VALUE

I SEE PROBLEM-SOLVING – LKS2
### Task 2: Making 4-digit numbers

#### Example Answers

<table>
<thead>
<tr>
<th>Number</th>
<th>2150</th>
<th>2150</th>
<th>2150</th>
<th>2150</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$2 \times 1000$</td>
<td>$1 \times 100$</td>
<td>$5 \times 10$</td>
<td>$1 \times 1000$</td>
</tr>
<tr>
<td></td>
<td>$11 \times 100$</td>
<td>$5 \times 10$</td>
<td></td>
<td>$5 \times 10$</td>
</tr>
<tr>
<td></td>
<td>$21 \times 100$</td>
<td></td>
<td></td>
<td>$215 \times 10$</td>
</tr>
</tbody>
</table>

#### NUMBER AND PLACE VALUE

- **Task 2:** Making 4-digit numbers
- Example Answers
- **I SEE PROBLEM-SOLVING – LKS2**
Task 3: Numbers in columns

H       T       O
Task 3: Numbers in columns

103
Task 3: Numbers in columns

H

T

O

103  112
Task 3: Numbers in columns

H

T

O

103  112  121
Task 3: Numbers in columns

H

T

O

103  112  121

130
Task 3: Numbers in columns

H                 T                 O

103  112  121  202  301  310  400

130
Task 3: Numbers in columns

H                 T                 O

103               112               121               130               202

211
Task 3: Numbers in columns

<table>
<thead>
<tr>
<th>H</th>
<th>T</th>
<th>O</th>
</tr>
</thead>
<tbody>
<tr>
<td>103</td>
<td>112</td>
<td>121</td>
</tr>
<tr>
<td>211</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NUMBER AND PLACE VALUE
### Task 3: Numbers in columns

<table>
<thead>
<tr>
<th>H</th>
<th>T</th>
<th>O</th>
</tr>
</thead>
<tbody>
<tr>
<td>103</td>
<td>112</td>
<td>121</td>
</tr>
<tr>
<td>211</td>
<td>220</td>
<td>301</td>
</tr>
<tr>
<td>130</td>
<td>202</td>
<td></td>
</tr>
</tbody>
</table>

**NUMBER AND PLACE VALUE**
Task 3: Numbers in columns

<table>
<thead>
<tr>
<th>H</th>
<th>T</th>
<th>O</th>
</tr>
</thead>
<tbody>
<tr>
<td>103</td>
<td>112</td>
<td>121</td>
</tr>
<tr>
<td>211</td>
<td>220</td>
<td>301</td>
</tr>
<tr>
<td></td>
<td></td>
<td>310</td>
</tr>
<tr>
<td></td>
<td></td>
<td>130</td>
</tr>
<tr>
<td></td>
<td></td>
<td>202</td>
</tr>
</tbody>
</table>
Task 3: Numbers in columns

H | T | O
---|---|---
103 | 112 | 121
211 | 220 | 202

NUMBER AND PLACE VALUE
Task 4: 0-100 number line
Task 4: 0-100 number line

50 is half-way.
Task 4: 0-100 number line

40 is less than half-way, 59 is more than half-way.
Task 4: 0-100 number line
Task 4: 0-100 number line
The red arrow \((0\rightarrow 32)\) is double the length of the purple arrow \((84\rightarrow 100)\).
The green arrow (40→59) is slightly longer than the purple arrow (84→100).
Task 4: 0-100 number line

The red arrow (0→32) is four times longer than the blue arrow (32→40).
Smallest to largest: blue (32→40), purple (84→100), green (40→59), orange (59→84), red (0→32).
Task 5: 0-1000 number line
Task 5: 0-1000 number line

500 is half-way.
Task 5: 0-1000 number line

0  82  325  790  931  1000

NUMBER AND PLACE VALUE

I SEE PROBLEM-SOLVING – LKS2
Task 5: 0-1000 number line
Task 5: 0-1000 number line

The purple arrow (931→1000) is approximately half the length of the orange arrow (790→931).
The blue arrow (82→325) is approximately three times longer than the red arrow (0→82).
Task 5: 0-1000 number line

Smallest to largest: **purple** (931→1000), **red** (0→82), **orange** (790→931), **blue** (82→325), **green** (325→790).
### Task 6: Patterns in sequences

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>
Task 6: Patterns in sequences

1 × □ = □
2 × □ = □
3 × □ = □
4 × □ = □
5 × □ = □
6 × □ = □
7 × □ = □
8 × □ = □
9 × □ = □
10 × □ = □

Must be even number: when multiplied by 5 even numbers end in 0.
### Task 6: Patterns in sequences

<table>
<thead>
<tr>
<th>Number</th>
<th>Table</th>
<th>Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1×</td>
<td>Even numbers end in 0.</td>
</tr>
<tr>
<td>2</td>
<td>2×</td>
<td>Even numbers end in 0.</td>
</tr>
<tr>
<td>3</td>
<td>3×</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>4×</td>
<td>4× table</td>
</tr>
<tr>
<td>5</td>
<td>5×</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>6×</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>7×</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>8×</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>9×</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>10×</td>
<td>0</td>
</tr>
</tbody>
</table>

First 2-digit number here: only times table that has this is 4× table.

Must be even number: when multiplied by 5 even numbers end in 0.
### Task 6: Patterns in sequences

<table>
<thead>
<tr>
<th>Multiplied by</th>
<th>Product</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ( \times 4 )</td>
<td>4</td>
<td>First 2-digit number here: only times table that has this is ( 4 \times ) table.</td>
</tr>
<tr>
<td>2 ( \times 4 )</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>3 ( \times 4 )</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>4 ( \times 4 )</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>5 ( \times 4 )</td>
<td>20</td>
<td>Must be even number: when multiplied by 5 even numbers end in 0.</td>
</tr>
<tr>
<td>6 ( \times 4 )</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>7 ( \times 4 )</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>8 ( \times 4 )</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>9 ( \times 4 )</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>10 ( \times 4 )</td>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>
Task 6: Patterns in sequences

1 × □ = □
2 × □ = □
3 × □ = □
4 × □ = □
5 × □ = □
6 × □ = □
7 × □ = □
8 × □ = □
9 × □ = □
10 × □ = □
Task 6: Patterns in sequences

1 × □ = □
2 × □ = 1 □
3 × □ = □ 8
4 × □ = □ □
5 × □ = □ 0
6 × □ = □ □
7 × □ = □ 2
8 × □ = □ □
9 × □ = □ 4
10 × □ = □ □

Must be even number: when multiplied by 5 even numbers end in 0.
### Task 6: Patterns in sequences

<table>
<thead>
<tr>
<th>×</th>
<th>=</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **First 2-digit number here:** true for 5→9 times tables.
- **Must be even number:** when multiplied by 5 even numbers end in 0.

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**NUMBER AND PLACE VALUE**

I SEE PROBLEM-SOLVING – LKS2
Task 6: Patterns in sequences

First 2-digit number here: true for 5→9 times tables.

Must be even number: when multiplied by 5 even numbers end in 0.

To have these ones values, this must be the 6× table.
Task 6: Patterns in sequences

1 × 6 = 6
2 × 6 = 12
3 × 6 = 18
4 × 6 = 24
5 × 6 = 30
6 × 6 = 36
7 × 6 = 42
8 × 6 = 48
9 × 6 = 54
10 × 6 = 60

First 2-digit number here: true for 5→9 times tables.

Must be even number: when multiplied by 5 even numbers end in 0.

To have these ones values, this must be the 6 × table.
Task 7: Count back through 0

Example A

Start counting from

Count back in steps of

The first negative number is
Task 7: Count back through 0

Example A

Start counting from 9

Count back in steps of 3

The first negative number is
Example A

Start counting from \[9\]

Count back in steps of \[3\]

The first negative number is \[-3\]
Task 7: Count back through 0

Example B

Start counting from 11

Count back in steps of 3

The first negative number is ___
Task 7: Count back through 0

Example B

Start counting from 11

Count back in steps of 3

The first negative number is -1
Task 7: Count back through 0

Example C

Start counting from 8

Count back in steps of

The first negative number is -4
Task 7: Count back through 0

Example C

Start counting from 8

Count back in steps of 4

The first negative number is -4

Answer 1
Task 7: Count back through 0

Example C

Start counting from \(8\)

Count back in steps of \(6\)

The first negative number is \(-4\)

Answer 2
Task 8: Rounding to 10 and 100
Task 8: Rounding to 10 and 100

Numbers in this space, to the nearest 10, round to 350.

345 → 354
Task 8: Rounding to 10 and 100

Numbers in this space, to the nearest 10, round to 350.

345→354

Numbers in this space, to the nearest 100, round to 400.

350→449
Task 8: Rounding to 10 and 100

Numbers in this space, to the nearest 10, round to 350.

345→354

Numbers in this space, to the nearest 100, round to 400.

350→449

Numbers in both sections: 350, 351, 352, 353, 354
Task 9: Rounding money

40p  50p  60p  70p  80p  90p
Task 9: Rounding money

- Max
- Ben

40p  50p  60p  70p  80p  90p
Task 9: Rounding money

Max has 45p → 54p
Task 9: Rounding money

Max has 45p→54p

Ben has 75p→84p
Task 9: Rounding money

Max has 45p → 54p

Ben has 75p → 84p

Smallest possible difference: 75p – 54p = 21p
Task 9: Rounding money

Max has 45p → 54p
Ben has 75p → 84p

Smallest possible difference: 75p – 54p = 21p
Largest possible difference: 84p – 45p = 39p
# Task 10: Roman Numerals

## Roman Numerals less than 20:

<table>
<thead>
<tr>
<th>I</th>
<th>VI</th>
<th>XI</th>
<th>XVI</th>
</tr>
</thead>
<tbody>
<tr>
<td>II</td>
<td>VII</td>
<td>XII</td>
<td>XVII</td>
</tr>
<tr>
<td>III</td>
<td>VIII</td>
<td>XIII</td>
<td>XVIII</td>
</tr>
<tr>
<td>IV</td>
<td>IX</td>
<td>XIV</td>
<td>XIX</td>
</tr>
<tr>
<td>V</td>
<td>X</td>
<td>XV</td>
<td></td>
</tr>
</tbody>
</table>
# Task 10: Roman Numerals

## Roman Numerals with 4 symbols:

<table>
<thead>
<tr>
<th>I</th>
<th>VI</th>
<th>XI</th>
<th>XVI</th>
</tr>
</thead>
<tbody>
<tr>
<td>II</td>
<td>VII</td>
<td>XII</td>
<td>XVII</td>
</tr>
<tr>
<td>III</td>
<td>VIII</td>
<td>XIII</td>
<td>XVIII</td>
</tr>
<tr>
<td>IV</td>
<td>IX</td>
<td>XIV</td>
<td>XIX</td>
</tr>
<tr>
<td>V</td>
<td>X</td>
<td>XV</td>
<td></td>
</tr>
</tbody>
</table>
### Task 10: Roman Numerals

**Roman Numerals with 3 different symbols:**

<table>
<thead>
<tr>
<th>I</th>
<th>VI</th>
<th>XI</th>
<th>XVI</th>
</tr>
</thead>
<tbody>
<tr>
<td>II</td>
<td>VII</td>
<td>XII</td>
<td>XVII</td>
</tr>
<tr>
<td>III</td>
<td>VIII</td>
<td>XIII</td>
<td>XVIII</td>
</tr>
<tr>
<td>IV</td>
<td>IX</td>
<td>XIV</td>
<td>XIX</td>
</tr>
<tr>
<td>V</td>
<td>X</td>
<td>XV</td>
<td></td>
</tr>
</tbody>
</table>
Task 11: Consecutive numbers

Three consecutive numbers: 6, 7, 8
Task 11: Consecutive numbers

Three consecutive numbers: 6, 7, 8

\[6 + 7 + 8 = 21\]
Task 11: Consecutive numbers

Three consecutive numbers: 6, 7, 8

6 + 7 + 8 = 21

3 × 7 = 21
Task 12: Make 24

Total 24

smallest number

largest number
Task 12: Make 24

Total 24

smallest number

All more than 5

largest number

All more than 5

smallest number

largest number
Task 12: Make 24

Total 24

All more than 5

All different

smallest number

largest number

6, 7, 11
Task 12: Make 24

Total 24

All more than 5

All different

smallest number

largest number

6, 7, 11

6, 8, 10
Task 12: Make 24

Total 24

All more than 5

All different

6, 7, 11

6, 8, 10

7, 8, 9
Task 13: Number sentences

7 + 4 = 11
Task 13: Number sentences

Number sentences using:

7 + 4 = 11  11 = 7 + 4
4 + 7 = 11  11 = 4 + 7
Task 13: Number sentences

Number sentences using: $+ = \text{7} \quad \text{4} \quad \text{11}$

$7 + 4 = 11 \quad 11 = 7 + 4$
$4 + 7 = 11 \quad 11 = 4 + 7$

Number sentences using: $- = \text{7} \quad \text{4} \quad \text{11}$

$11 - 7 = 4 \quad 7 = 11 - 4$
$11 - 4 = 7 \quad 4 = 11 - 7$
Task 13: Number sentences

Number sentences using: $+ \quad = \quad 7 \quad 4 \quad 11$

- $7 + 4 = 11 \quad 11 = 7 + 4$
- $4 + 7 = 11 \quad 11 = 4 + 7$

Number sentences using: $- \quad = \quad 7 \quad 4 \quad 11$

- $11 - 7 = 4 \quad 7 = 11 - 4$
- $11 - 4 = 7 \quad 4 = 11 - 7$

Number sentences using: $+ \quad = \quad 7 \quad 4 \quad 3$

- $4 + 3 = 7 \quad 7 = 4 + 3$
- $3 + 4 = 7 \quad 7 = 3 + 4$
Task 13: Number sentences

Number sentences using:

\[ + = \begin{array}{ccc} 7 \end{array} 4 \begin{array}{ccc} 11 \end{array} \]

\[ 7 + 4 = 11 \quad 11 = 7 + 4 \]
\[ 4 + 7 = 11 \quad 11 = 4 + 7 \]

Number sentences using:

\[ - = \begin{array}{ccc} 7 \end{array} 4 \begin{array}{ccc} 11 \end{array} \]

\[ 11 - 7 = 4 \quad 7 = 11 - 4 \]
\[ 11 - 4 = 7 \quad 4 = 11 - 7 \]

Number sentences using:

\[ + = \begin{array}{ccc} 7 \end{array} 4 \begin{array}{ccc} 3 \end{array} \]

\[ 4 + 3 = 7 \quad 7 = 4 + 3 \]
\[ 3 + 4 = 7 \quad 7 = 3 + 4 \]

Number sentences using:

\[ - = \begin{array}{ccc} 7 \end{array} 4 \begin{array}{ccc} 3 \end{array} \]

\[ 7 - 4 = 3 \quad 4 = 7 - 3 \]
\[ 7 - 3 = 4 \quad 3 = 7 - 4 \]
Task 14: = and > signs

\[ 20 - \square = 8 + \square \]

\[ \square - \square = 6 \]

\[ 3 + \square > 10 \]

\[ 3 \quad 5 \quad 7 \quad 8 \quad 9 \]
Task 14: = and > signs

\[ 20 - \square = 8 + \square \]

\[ \square - \square = 6 \] Only one way to complete this line

\[ 3 + \square > 10 \]

Choices:

\[ 3 \quad 5 \quad 7 \quad 8 \quad 9 \]
Task 14: = and > signs

$20 - \square = 8 + \square$

$9 - 3 = 6$

$3 + \square > 10$

5 7 8
Task 14: = and > signs

20 - □ = 8 + □

9 - 3 = 6

3 + □ > 10

Only one way to complete this line with numbers left

5 7 8
Task 14: = and > signs

\[ 20 - \square = 8 + \square \]

\[ 9 - 3 = 6 \]

\[ 3 + 8 > 10 \]

5 7
Task 14: = and > signs

\[ 20 - 7 = 8 + 5 \]

\[ 9 - 3 = 6 \]

\[ 3 + 8 > 10 \]
Task 15: Bordering 10

\[
\begin{array}{cc}
\square & \square \\
+ & = \\
\square & \square
\end{array}
\]

Number cards: 1, 2, 3, 6, 7, 9
Task 15: Bordering 10

\[ \boxed{1} + \boxed{} = \boxed{2} \]

\[ \begin{array}{cccc}
    & & 3 & 6 \\
\hline
1 & 2 & 7 & 9 \\
\end{array} \]
Task 15: Bordering 10

1 6 + 7 = 2 3

16 + 7 = 23
Task 15: Bordering 10

17 + 6 = 23

16 + 7 = 23

17 + 6 = 23
Task 15: Bordering 10

\begin{align*}
17 + 9 &= 26 \\
16 + 7 &= 23 \\
17 + 6 &= 23 \\
17 + 9 &= 26
\end{align*}
Task 15: Bordering 10

1 9 + 7 = 2 6

16 + 7 = 23  
17 + 6 = 23  
17 + 9 = 26  
19 + 7 = 26
Task 15: Bordering 10

2 □ + □ = 3 □

16 + 7 = 23  17 + 6 = 23  17 + 9 = 26  19 + 7 = 26
Task 15: Bordering 10

2 + 7 + 9 = 3 + 6

16 + 7 = 23
17 + 6 = 23
17 + 9 = 26
19 + 7 = 26

27 + 9 = 36
Task 15: Bordering 10

29 + 7 = 36

16 + 7 = 23  17 + 6 = 23  17 + 9 = 26  19 + 7 = 26

27 + 9 = 36  29 + 7 = 36
Task 15: Bordering 10

6 □ + □ = 7 □

16 + 7 = 23  17 + 6 = 23  17 + 9 = 26  19 + 7 = 26
27 + 9 = 36  29 + 7 = 36
Task 15: Bordering 10

\[
\begin{array}{ccc}
6 & 3 & + \\
\hline
9 & = & 72 \\
\hline
& 1 \\
\end{array}
\]

- \(16 + 7 = 23\)
- \(17 + 6 = 23\)
- \(17 + 9 = 26\)
- \(19 + 7 = 26\)
- \(27 + 9 = 36\)
- \(29 + 7 = 36\)
- \(63 + 9 = 72\)
Task 15: Bordering 10

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>+</th>
<th></th>
<th>=</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>9</td>
<td>3</td>
<td></td>
<td></td>
<td>7</td>
<td>2</td>
</tr>
</tbody>
</table>

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>16 + 7 = 23</td>
<td>17 + 6 = 23</td>
<td>17 + 9 = 26</td>
<td>19 + 7 = 26</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27 + 9 = 36</td>
<td>29 + 7 = 36</td>
<td>63 + 9 = 72</td>
<td>69 + 3 = 72</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Task 16: Position digits to add

Example 1

\[
\begin{array}{c}
\phantom{0}76489 \\
+ \\
\phantom{0}53210 \\
\hline
\phantom{0}22767 \\
\end{array}
\]
Task 16: Position digits to add

Example 1

```
+ 3 2
  5
```

```
+ 4 7 6 8
  2 5
```
Task 16: Position digits to add

Example 1

\[
\begin{array}{ccc}
\phantom{1} & 1 & 3 \\
\phantom{0} & 9 & 2 \\
\hline
\phantom{0} & 0 & 5 \\
\end{array}
\]

\[
\begin{array}{ccc}
4 & 7 & 6 \\
\hline
8 \\
\end{array}
\]
Task 16: Position digits to add

Example 1

\[
\begin{array}{ccc}
6 & 1 & 3 \\
+ & 9 & 2 \\
\hline
7 & 0 & 5 \\
\end{array}
\]
Task 16: Position digits to add

Example 2

\[
\begin{array}{cccc}
0 & 2 & 4 & 9 \\
1 & 3 & 7 & 6 \\
5 & 8 & & \\
\end{array}
\]

\[+\]

\[
\begin{array}{cccc}
& & & \\
& & & \\
& & & \\
\end{array}
\]
Task 16: Position digits to add

Example 2

\[
\begin{array}{ccc}
\phantom{0} & \phantom{0} & 8 \\
+ & 1 & \\
\hline
\phantom{0} & \phantom{0} & 9 \\
\end{array}
\]

\[
\begin{array}{cccc}
0 & 2 & 4 & \\
\phantom{0} & \phantom{0} & \phantom{0} & \\
3 & 7 & 6 & \\
\end{array}
\]
Task 16: Position digits to add

Example 2

\[
\begin{array}{c}
  \text{+} \\
  \hline \\
  \text{3} & \text{9} \\
\end{array}
\]
Task 16: Position digits to add

Example 2

```
4  6  8
+  7  1
---
  5  3  9
```
Task 17: Position digits to subtract

Example 1

\[ \square \square \square \square - \square = \square \square \square \square \]

0 2 4 5 7 9
1 3 6 8

ADDITION AND SUBTRACTION  I SEE PROBLEM-SOLVING – LKS2
Task 17: Position digits to subtract

Example 1

10 _ _ = 9 _

2 4 5 7

3 6 8

ADDITION AND SUBTRACTION

I SEE PROBLEM-SOLVING – LKS2
Task 17: Position digits to subtract

Example 1

10_ - 8 = 9_

2 4 5 7
3 6
Task 17: Position digits to subtract

Example 1

\[105 - 8 = 97\]
Task 17: Position digits to subtract

Example 2

\[
\begin{array}{c}
10 \\
\hline
\end{array}
\quad -
\begin{array}{c}
\quad \\
\end{array}
\quad =
\begin{array}{c}
9 \\
\end{array}
\]

Digits:

\[
\begin{array}{c}
2 \\
3 \\
4 \\
5 \\
6 \\
7 \\
8 \\
\end{array}
\]

ADDITION AND SUBTRACTION
Task 17: Position digits to subtract

Example 2

\[ 10 \square - 4 = 9 \square \]

2 5 6 7 8
Task 17: Position digits to subtract

Example 2

\[ \begin{array}{c}
1 & 0 & 2 \\
\hline
& 4 \\
\hline
\end{array} \]

\[ 9 \quad 8 \]

Adding 5 and 7 gives 12, so we write 2 and carry 1.

Adding 3 (including the 1 carried) gives 4.
The sum of my numbers is 10.
The difference between my numbers is 4.
Task 18: Sum and difference

The sum of my numbers is 10.
The difference between my numbers is 4.

Which one is correct?

- 6 and 4
- 10 and 6
- 7 and 3
The sum of my numbers is 10.
The difference between my numbers is 4.

Which one is correct?

- 6 and 4
- 10 and 6
- 7 and 3
Task 18: Sum and difference

The sum of my numbers is 30.
The difference between my numbers is 4.
Task 18: Sum and difference

The sum of my numbers is 30.
The difference between my numbers is 4.

Which one is correct?

18 and 14

18

14

17 and 13

17

13

19 and 11

19

11
Task 18: Sum and difference

The sum of my numbers is 30.
The difference between my numbers is 4.

Which one is correct?

18 and 14
18
14

17 and 13
17
13

19 and 11
19
11
Task 19: More boys or girls?  

There are 8 children at the park. There are 2 more boys than girls at the park.
Task 19: More boys or girls?

Example A

There are 8 children at the park. There are 2 more boys than girls at the park.

Spot the mistake:

6 boys
4 girls
Task 19: More boys or girls?

There are 8 children at the park.
There are 2 more boys than girls at the park.

Spot the mistake:

6 boys
2 girls
Task 19: More boys or girls?

There are 8 children at the park.
There are 2 more boys than girls at the park.

**Answer:**

5 boys  
3 girls
Task 19: More boys or girls?  

Example B

There are 14 children at the party.  
There are 4 more girls than boys at the party.
Task 19: More boys or girls?

There are 14 children at the party.
There are 4 more girls than boys at the party.

Example B

4 more girls
Task 19: More boys or girls?

There are 14 children at the party.
There are 4 more girls than boys at the party.

Example B

10 children

4 more girls
Task 19: More boys or girls?

Example B

There are 14 children at the party.
There are 4 more girls than boys at the party.

9 girls
5 boys
Task 20: Part/whole word questions

Dan has 14 stickers. Joy has □ stickers.
Adam has □ stickers. They have 27 stickers in total.
Joy has one more sticker than Adam.
Dan has 14 stickers. Joy has \_

Adam has \_

stickers. They have 27 stickers in total.

Joy has one more sticker than Adam.
Dan has 14 stickers. Joy has 7 stickers. Adam has 6 stickers. They have 27 stickers in total. Joy has one more sticker than Adam.
Task 20: Part/whole word questions

Mo has □ stickers. Vicky has □ stickers.
Matt has □ stickers. They have 30 stickers in total.

Mo has twice as many stickers as Matt.
Vicky has more stickers than Matt but less than Mo.
Task 20: Part/whole word questions

Mo has □ stickers. Vicky has □ stickers.
Matt has □ stickers. They have 30 stickers in total.

Mo has twice as many stickers as Matt.
Vicky has more stickers than Matt but less than Mo.

Mo: 10
Vicky: □
Matt: 5
Mo has [ ] stickers. Vicky has [ ] stickers.
Matt has [ ] stickers. They have 30 stickers in total.

Mo has twice as many stickers as Matt.
Vicky has more stickers than Matt but less than Mo.

Mo: 10
Vicky: 15
Matt: 5

Incorrect: Vicky has less than Mo
Task 20: Part/whole word questions

Mo has 12 stickers. Vicky has 12 stickers.
Matt has 6 stickers. They have 30 stickers in total.

Mo has twice as many stickers as Matt.
Vicky has more stickers than Matt but less than Mo.

Yellow Task
Task 20: Part/whole word questions

Mo has ______ stickers. Vicky has ______ stickers.
Matt has ______ stickers. They have 30 stickers in total.

Mo has twice as many stickers as Matt.
Vicky has more stickers than Matt but less than Mo.

Mo: 12
Vicky: 12
Matt: 6

Incorrect: Vicky has less than Mo
Task 20: Part/whole word questions

Mo has [ ] stickers. Vicky has [ ] stickers.
Matt has [ ] stickers. They have 30 stickers in total.

Mo has twice as many stickers as Matt.
Vicky has more stickers than Matt but less than Mo.

Mo: 14
Vicky: [ ]
Matt: 7
Task 20: Part/whole word questions

Mo has □ stickers. Vicky has □ stickers.
Matt has □ stickers. They have 30 stickers in total.

Mo has twice as many stickers as Matt.
Vicky has more stickers than Matt but less than Mo.

Mo: 14
Vicky: 9
Matt: 7

Correct: Vicky has less than Mo and more than Matt.
Mo has \_

stickers. Vicky has \_

stickers.

Matt has \_

stickers. They have 30 stickers in total.

Mo has twice as many stickers as Matt.

Vicky has more stickers than Matt but less than Mo.

Mo: 16

Vicky:

Matt: 8
Task 20: Part/whole word questions

Mo has □ stickers. Vicky has □ stickers.
Matt has □ stickers. They have 30 stickers in total.

Mo has twice as many stickers as Matt.
Vicky has more stickers than Matt but less than Mo.

Mo: 16
Vicky: 6
Matt: 8

Incorrect: Vicky has more than Matt
Task 21: Change at the shop

Example answer 1

I buy [ ] sandwich(es) and [ ] drink(s).

I pay with a £5 note.

I get [ ] change.

£5
Task 21: Change at the shop

I buy \[ \boxed{1} \] sandwich(es) and \[ \boxed{5} \] drink(s).
I pay with a £5 note.
I get \[ \boxed{\phantom{1}} \] change.

Example answer 1

£5

£1.50

£1.80
Task 21: Change at the shop

Example answer 1

I buy 1 sandwich(es) and 5 drink(s).
I pay with a £5 note.
I get _ change.

£5
£1.50
£1.80
£3.30
Task 21: Change at the shop

I buy \(1\) sandwich(es) and \(5\) drink(s).
I pay with a £5 note.
I get £1.70 change.
Task 21: Change at the shop

Example answer 2

I buy □ sandwich(es) and □ drink(s).
I pay with a £5 note.
I get □ change.

£5
Task 21: Change at the shop

Example answer 2

I buy 2 sandwich(es) and 3 drink(s).
I pay with a £5 note.
I get □□ change.

£5

£3.60

90p
Task 21: Change at the shop

I buy **2** sandwich(es) and **3** drink(s).
I pay with a £5 note.
I get **[]** change.

Example answer 2

```
£5
£3.60

90p

£4.50
```
Task 21: Change at the shop

Example answer 2

I buy **2** sandwich(es) and **3** drink(s).
I pay with a £5 note.
I get **50p** change.
Task 22: $\times$ + number sentences

$6 \times 3$
Task 22: \( \times + \) number sentences

\[
6 \times 3
\]

\[
\begin{array}{cccc}
\bullet & \bullet & \bullet & \\
\bullet & \bullet & \bullet & \\
\bullet & \bullet & \bullet & \\
\end{array}
\]
Task 22: $\times +$ number sentences

$6 \times 3$

Double $3 \times 3$
Task 22: \( \times \) + number sentences

\[ 6 \times 6 \]
Task 22: $\times +$ number sentences

$6 \times 6$

$6 + 6 + 6 + 6 + 6 + 6 + 6$
Task 22: $\times +$ number sentences

$6 \times 6$

$5 \times 6 + 6$
Task 22: $\times +$ number sentences

$6 \times 5$
Task 22: $\times +$ number sentences

$6 \times 5$

\[
\begin{array}{ccc}
\begin{array}{c}
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\end{array} & \\
\begin{array}{c}
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\end{array} & \\
\begin{array}{c}
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\end{array} & \\
\begin{array}{c}
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\cdot \\
\end{array}
\end{array}
\]
Task 22: \( \times + \) number sentences

\[
6 \times 5
\]

\[
4 \times 5 + 10
\]
Task 22: \( \times + \) number sentences

\[ 7 \times 5 \]

\[ \begin{array}{cccccc}
5 & 5 & 5 & 5 & 5 & 5 \\
\end{array} \]
Task 22: \( \times + \) number sentences

\[ 7 \times 5 \]

\[ 5 \quad 5 \quad 5 \quad 5 \quad 5 \quad 5 \quad 5 \quad 5 \]

\[ 6 \times 5 + 5 \]
Task 23: Area models

Green Task Example Answers

MULTIPLICATION AND DIVISION

I SEE PROBLEM-SOLVING – LKS2
Task 23: Area models

Green Task Example Answers

Multplication and Division

6 × 3 = 18
Task 23: Area models

Green Task Example Answers

6 × 6 = 36

3 × 6 = 18

36 + 18 = 54
Task 23: Area models

Green Task Example Answers

MULTIPLICATION AND DIVISION
Task 23: Area models

Green Task Example Answers

Multiply 3 by 3 to get 9.
Task 23: Area models

Green Task Example Answers

9 × 3 = 27
9 × 3 = 27

27 + 27 = 54

MULTIPLICATION AND DIVISION

I SEE PROBLEM-SOLVING – LKS2
Task 23: Area models

Green Task Example Answers

MULTIPLICATION AND DIVISION

I SEE PROBLEM-SOLVING – LKS2
Task 23: Area models

Green Task Example Answers

6

3 3 3

6
Task 23: Area models

Green Task Example Answers

Task: Multiply 3 by 6 using an area model.

- 3 rows by 6 columns
- Each row has 6 sections
- Total: 3 sections of 6 each

3 \times 6 = 18

18 + 18 + 18 = 54
Task 23: Area models

Yellow Task Example Answers

MULTIPLICATION AND DIVISION

I SEE PROBLEM-SOLVING – LKS2
Task 23: Area models

Yellow Task Example Answers

10 × 5 = 50

8 × 5 = 40

MULTIPLICATION AND DIVISION

I SEE PROBLEM-SOLVING – LKS2
Task 23: Area models

Yellow Task Example Answers

10 × 8 = 80
5 × 8 = 40
80 + 40 = 120
Task 23: Area models

Yellow Task Example Answers

MULTIPLICATION AND DIVISION

I SEE PROBLEM-SOLVING – LKS2
Task 23: Area models

Yellow Task Example Answers

15

4

4
15 × 4 = 60

15 × 4 = 60

60 + 60 = 120
Task 23: Area models

Yellow Task Example Answers

Multiplication and Division

I SEE PROBLEM-SOLVING – LKS2
Task 23: Area models

Yellow Task Example Answers

MULTIPLICATION AND DIVISION

I SEE PROBLEM-SOLVING – LKS2
Task 23: Area models

Yellow Task Example Answers

5 × 8 = 40  5 × 8 = 40  5 × 8 = 40

40 + 40 + 40 = 120
Task 24: Largest product

\[
\square \square \times \square =
\]

3 4 5
Task 24: Largest product

\[ 3 \times 5 \times 4 = 140 \]

\[ 35 \times 4 = 140 \]
Task 24: Largest product

5 \times 3 \times 4 = 212

50 \times 4 = 212

35 \times 4 = 140

120 \times 4 = 480
Task 24: Largest product

\[
\begin{array}{c}
\begin{array}{c}
5 \\
3
\end{array} \\
\times \\
\begin{array}{c}
4
\end{array}
\end{array} = 212
\]

Larger as 53 is more than 35

\[
\begin{array}{c}
\begin{array}{c}
35 \\
\times \\
4
\end{array} = 140
\end{array}
\]

\[
\begin{array}{c}
\begin{array}{c}
50 \\
3
\end{array} \\
\times \\
\begin{array}{c}
4
\end{array}
\end{array} = 212
\]
Task 24: Largest product

\[ 4 \times 3 \times 5 = 215 \]

\[ 30 \times 5 = 150 \]

\[ 120 \times 20 = 2400 \]

\[ 35 \times 4 = 140 \]

\[ 53 \times 4 = 212 \]

\[ 43 \times 5 = 215 \]
Task 24: Largest product

\[ \begin{align*}
4 \times 3 &= 120 \\
5 \times 3 &= 15
\end{align*} \]

\[ 35 \times 4 = 140 \]

\[ 53 \times 4 = 212 \]

\[ 43 \times 5 = 215 \]

Larger as the 3 is multiplied by more
Task 25: 2-digit product

\[ \square \times \square = \square \square \]

1 2 4 5 6 7 8 9
Task 25: 2-digit product

Answers when multiplying by 2:

\[
\begin{array}{c}
\begin{array}{c}
\times \\
3 \\
\end{array}
\end{array}
\begin{array}{c}
2 \\
\end{array}
= 
\begin{array}{c}
\ \ \\
\end{array}
\begin{array}{c}
\ \ \\
\end{array}
\]

1 4 5 6 7 8 9
Task 25: 2-digit product

Answers when multiplying by 2:

\[13 \times 2 = \square \square\]

\[4 \quad 5 \quad 6 \quad 7 \quad 8 \quad 9\]
Task 25: 2-digit product

Answers when multiplying by 2:

13  x  2  =  

Not an answer: 13 × 2 = 26
Uses 2 twice

4  5  6  7  8  9
Task 25: 2-digit product

Answers when multiplying by 2:

\[43 \times 2 = \underline{56} \underline{9}\]

1 5 6 7 8 9
Task 25: 2-digit product

Answers when multiplying by 2:

\[ 43 \times 2 = 86 \]
Task 25: 2-digit product

Answers when multiplying by 2:

\[ \begin{array}{c c}
5 & 3 \\
\times & 2
\end{array} = \boxed{} \boxed{} \]

\[ \begin{array}{c c c c}
1 & 4 & 6 & 7 \\
\end{array} \]

\[ 43 \times 2 = 86 \]
Task 25: 2-digit product

Answers when multiplying by 2:

53 \times 2 = \square \square

143 \times 2 = 86

Not an answer: 53 \times 2 = 106

3-digit number

43 \times 2 = 86
Task 25: 2-digit product

Answers when multiplying by 4:

\[ \square 3 \times 4 = \square \square \]

\[ 1 \quad 2 \quad 5 \quad 6 \quad 7 \quad 8 \quad 9 \]

\[ 43 \times 2 = 86 \]
Task 25: 2-digit product

Answers when multiplying by 4:

13 × 4 = __ __

2 5 6 7 8 9

43 × 2 = 86
Task 25: 2-digit product

Answers when multiplying by 4:

\[ 13 \times 4 = 52 \]

\[ 43 \times 2 = 86 \]
\[ 13 \times 4 = 52 \]
Task 25: 2-digit product

Answers when multiplying by 4:

\[ \begin{array}{c}
23 \\ \times \\ 4
\end{array} = \begin{array}{c}
\square \\
\square
\end{array} \]

\[ \begin{array}{c}
43 \times 2 = 86 \\
13 \times 4 = 52
\end{array} \]
Task 25: 2-digit product

Answers when multiplying by 4:

\[ \begin{array}{c}
2 & 3 \\
\times & 4 \\
\hline
\end{array} = \begin{array}{c}
\square \\
\square \\
\end{array} \]

Not an answer:
\[ 23 \times 4 = 92 \quad \text{Uses 2 twice} \]

\[ 43 \times 2 = 86 \quad 13 \times 4 = 52 \]
Task 25: 2-digit product

Answers when multiplying by 4:

\[ 53 \times 4 = \square \square \]

43 × 2 = 86

13 × 4 = 52
Task 25: 2-digit product

Answers when multiplying by 4:

\[ \begin{array}{cc}
5 & 3 \\
\times & 4 \\
\hline
\end{array} = \boxed{ } \boxed{ } \]

Not an answer:
\[ 53 \times 4 = 212 \]

3-digit number

43 \times 2 = 86 \quad 13 \times 4 = 52
Task 25: 2-digit product

Answers when multiplying by 5:

\[ \square 3 \times \square 5 = \square \square \]

\[ 1 \ 2 \ 4 \ 6 \ 7 \ 8 \ 9 \]

\[ 43 \times 2 = 86 \]
\[ 13 \times 4 = 52 \]
Task 25: 2-digit product

Answers when multiplying by 5:

\[
\boxed{3} \times \boxed{5} = \boxed{\phantom{0}} \boxed{\phantom{0}}
\]

Not possible:
Will always use 5 twice

\[
\begin{align*}
12 & \times 2 = 86 \\
13 & \times 4 = 52
\end{align*}
\]
Task 25: 2-digit product

Answers when multiplying by 6:

\[ \square 3 \times 6 = \square \square \]

\[ 1 \ 2 \ 4 \ 5 \]
\[ 7 \ 8 \ 9 \]

\[ 43 \times 2 = 86 \]
\[ 13 \times 4 = 52 \]
Task 25: 2-digit product

Answers when multiplying by 6:

\[
13 \times 6 = \square \square
\]

\[
245 \quad 789
\]

43 \times 2 = 86 \quad 13 \times 4 = 52
Task 25: 2-digit product

Answers when multiplying by 6:

\[13 \times 6 = 78\]

\[43 \times 2 = 86\]

\[13 \times 4 = 52\]

\[13 \times 6 = 78\]
Task 25: 2-digit product

Answers when multiplying by 6:

\[ \begin{array}{c}
23 \\
\times \\
6 \\
\end{array} = \begin{array}{c}
\text{？} \\
\text{？} \\
\end{array} \]

\[ \begin{array}{c}
43 \\
\times \\
2 \\
\end{array} = 86 \]
\[ \begin{array}{c}
13 \\
\times \\
4 \\
\end{array} = 52 \]
\[ \begin{array}{c}
13 \\
\times \\
6 \\
\end{array} = 78 \]

MULTIPLICATION AND DIVISION

I SEE PROBLEM-SOLVING – LKS2
Task 25: 2-digit product

Answers when multiplying by 6:

\[
\begin{array}{cc}
2 & 3 \\
\times & 6 \\
\end{array}
= \begin{array}{c}
\phantom{0} \\
\phantom{0} \\
\end{array}
\]

Not an answer:

\[
23 \times 6 = 138
\]

3-digit number

\[
\begin{array}{cccc}
1 & 4 & 5 \\
7 & 8 & 9 \\
\end{array}
\]

\[
43 \times 2 = 86 \\
13 \times 4 = 52 \\
13 \times 6 = 78
\]
Task 25: 2-digit product

Answers when multiplying by 7:

$$\square \ 3 \times \ 7 \ = \ \square \ \square$$

$$1 \ 2 \ 4 \ 5 \ 6 \ \ 8 \ 9$$

$$43 \times 2 = 86 \quad 13 \times 4 = 52 \quad 13 \times 6 = 78$$
Task 25: 2-digit product

Answers when multiplying by 7:

\[13 \times 7 = \square \square\]

\[2 \times 4 = 86\]
\[13 \times 4 = 52\]
\[13 \times 6 = 78\]
Task 25: 2-digit product

Answers when multiplying by 7:

13 \times 7 = \square \square

Not an answer:
13 \times 7 = 91
Uses 1 twice

2 4 5 6
8 9

43 \times 2 = 86
13 \times 4 = 52
13 \times 6 = 78
Task 25: 2-digit product

Answers when multiplying by 7:

\[ 23 \times 7 = \square \square \]

\[
\begin{align*}
1 & \quad 4 & \quad 5 & \quad 6 & \quad 8 & \quad 9
\end{align*}
\]

\[ 43 \times 2 = 86 \quad 13 \times 4 = 52 \quad 13 \times 6 = 78 \]
Task 25: 2-digit product

Answers when multiplying by 7:

\[23 \times 7 = \square \square\]

- Not an answer: \[23 \times 7 = 161\]
- 3-digit number: \[145689\]

\[43 \times 2 = 86\] \[13 \times 4 = 52\] \[13 \times 6 = 78\]
Task 25: 2-digit product

Answers when multiplying by 8:

\[
\begin{array}{c}
3 \times 8 =
\end{array}
\]

\[
\begin{array}{c}
1 \quad 2 \quad 4 \quad 5 \quad 6 \quad 7 \quad 9
\end{array}
\]

\[
\begin{array}{c}
43 \times 2 = 86 \\
13 \times 4 = 52 \\
13 \times 6 = 78
\end{array}
\]
Task 25: 2-digit product

Answers when multiplying by 8:

\[13 \times 8 = \square \square\]

Not an answer: \[13 \times 8 = 104\]

3-digit number

\[43 \times 2 = 86\]
\[13 \times 4 = 52\]
\[13 \times 6 = 78\]
Task 25: 2-digit product

Answers when multiplying by 8:

\[
\begin{align*}
13 \times 8 &= \boxed{2} \boxed{4} \\
245679
\end{align*}
\]

43 \times 2 = 86 \quad 13 \times 4 = 52 \quad 13 \times 6 = 78

These are the three ways it can be done
Task 26: Shapes with matchsticks
Task 26: Shapes with matchsticks
Task 26: Shapes with matchsticks
Task 26: Shapes with matchsticks
Task 26: Shapes with matchsticks
Task 27: Division in context

\[
\begin{array}{cccc}
14 \\
4 & 4 & 4 & 4
\end{array}
\]
Task 27: Division in context

14 people
4 tents
Task 27: Division in context

14
4  4  4  4

28
4  4  4  4  4  4  4  4
Task 27: Division in context

28 people
7 tents

28
4 4 4 4 4

14
4 4 4 4
Task 27: Division in context

\[ \begin{array}{c}
14 \\
4 \quad 4 \quad 4 \quad 4
\end{array} \]

\[ \begin{array}{c}
28 \\
4 \quad 4 \quad 4 \quad 4 \quad 4 \quad 4 \quad 4 \quad 4
\end{array} \]

\[ \begin{array}{c}
25 \\
4 \quad 4 \quad 4 \quad 4 \quad 4 \quad 4 \quad 4 \quad 4 \quad 4
\end{array} \]
Task 27: Division in context

25 people
7 tents

14
4 4 4 4

28
4 4 4 4 4 4 4 4

25
4 4 4 4 4 4 4 4 4
Task 28: Different quotients

\[ \square \square \div 4 = \square \]

Choose a number from the options provided (0, 1, 2, 3, 5, 6, 7, 8, 9) to fill in the gaps.
Task 28: Different quotients

12 ÷ 4 = 3

Green Task

12 ÷ 4 = 3
Task 28: Different quotients

16 ÷ 4 = 4

Green Task

Not an answer: Uses 4 twice

12 ÷ 4 = 3

0 1 2 3 9
5 6 7 8

1 6 4
Task 28: Different quotients

Green Task

20 ÷ 4 = 5

12 ÷ 4 = 3          20 ÷ 4 = 5
Task 28: Different quotients

Green Task

Not an answer: Uses 4 twice

12 ÷ 4 = 3
20 ÷ 4 = 5
Task 28: Different quotients

28 \div 4 = 7

Green Task

12 \div 4 = 3 \quad 20 \div 4 = 5 \quad 28 \div 4 = 7
Task 28: Different quotients

Green Task

\[32 \div 4 = 8\]

Green Task

\[12 \div 4 = 3\]
\[20 \div 4 = 5\]
\[28 \div 4 = 7\]
\[32 \div 4 = 8\]
Task 28: Different quotients

Green Task

\[ \frac{36}{4} = 9 \]

12 ÷ 4 = 3
20 ÷ 4 = 5
28 ÷ 4 = 7
32 ÷ 4 = 8
36 ÷ 4 = 9
Task 28: Different quotients

Must be less than 40 to give a single-digit answer.

12 ÷ 4 = 3
32 ÷ 4 = 8
20 ÷ 4 = 5
36 ÷ 4 = 9
28 ÷ 4 = 7
Task 28: Different quotients

\[ \square \square \div 4 = \square \square \]

Choose the correct quotient from the options below:

0, 1, 2, 3, 4, 5, 6, 7, 8, 9
Task 28: Different quotients

Yellow Task

Must be 40 or more to give a 2-digit answer.
The digit 4 has been used: start with 5 tens.
Task 28: Different quotients

52 ÷ 4 = 13
Task 28: Different quotients

56 ÷ 4 = 14

52 ÷ 4 = 13

Not an answer: Uses 4 twice
Task 28: Different quotients

60 ÷ 4 = 15

52 ÷ 4 = 13  60 ÷ 4 = 15
Task 28: Different quotients

64 ÷ 4 = 16

Not an answer: Uses 4 and 6 twice

52 ÷ 4 = 13
60 ÷ 4 = 15

MULTIPLICATION AND DIVISION

I SEE PROBLEM-SOLVING – LKS2
Task 28: Different quotients

\[
\begin{align*}
68 \div 4 &= 17 \\
52 \div 4 &= 13 \\
60 \div 4 &= 15 \\
68 \div 4 &= 17
\end{align*}
\]
Task 28: Different quotients

Yellow Task

72 ÷ 4 = 18

52 ÷ 4 = 13
60 ÷ 4 = 15
68 ÷ 4 = 17
72 ÷ 4 = 18
Task 28: Different quotients

\[ \frac{76}{4} = 19 \]

52 \div 4 = 13
60 \div 4 = 15
68 \div 4 = 17
72 \div 4 = 18
76 \div 4 = 19
Task 28: Different quotients

\[ 80 \div 4 = 20 \]

Not an answer: Uses 0 twice

52 \div 4 = 13 \hspace{1cm} 60 \div 4 = 15 \hspace{1cm} 68 \div 4 = 17

72 \div 4 = 18 \hspace{1cm} 76 \div 4 = 19

MULTIPLICATION AND DIVISION

I SEE PROBLEM-SOLVING – LKS2
Task 28: Different quotients

Yellow Task

<table>
<thead>
<tr>
<th>Example</th>
<th>Quotient</th>
</tr>
</thead>
<tbody>
<tr>
<td>52 ÷ 4</td>
<td>13</td>
</tr>
<tr>
<td>60 ÷ 4</td>
<td>15</td>
</tr>
<tr>
<td>68 ÷ 4</td>
<td>17</td>
</tr>
<tr>
<td>72 ÷ 4</td>
<td>18</td>
</tr>
<tr>
<td>76 ÷ 4</td>
<td>19</td>
</tr>
</tbody>
</table>

Not an answer: Uses 4 twice
Task 28: Different quotients

黄色任务

88 ÷ 4 = 22

Not an answer:
Uses 8 and 2 twice

0 1 3
5 6 7

52 ÷ 4 = 13
60 ÷ 4 = 15
68 ÷ 4 = 17
72 ÷ 4 = 18
76 ÷ 4 = 19

MULTIPLICATION AND DIVISION

I SEE PROBLEM-SOLVING – LKS2
Task 28: Different quotients

Yellow Task

92 ÷ 4 = 23

Not an answer: Uses 2 twice

0 1

5 6 7 8

52 ÷ 4 = 13 60 ÷ 4 = 15 68 ÷ 4 = 17
72 ÷ 4 = 18 76 ÷ 4 = 19

MULTIPLICATION AND DIVISION
Task 28: Different quotients

Not an answer: Uses 4 twice

\[ 96 \div 4 = 24 \]

\[ 52 \div 4 = 13 \]
\[ 60 \div 4 = 15 \]
\[ 68 \div 4 = 17 \]
\[ 72 \div 4 = 18 \]
\[ 76 \div 4 = 19 \]
Task 29: Finding factors

84

1  2  3  4  5  6  7  8  9
Task 29: Finding factors

84

1 and 2 are factors of every even number.
All factors of 5 have a ones value of 5 or 0.
Task 29: Finding factors

84

1 2 3 4 5 6 7 8 9

20 × 3 = 60  8 × 3 = 24

60 + 24 = 84

3 is a factor of 84
Task 29: Finding factors

84

\[ 1 \times 4 = 80 \quad 1 \times 4 = 4 \]

\[ 80 + 4 = 84 \]

4 is a factor of 84
Task 29: Finding factors

84

1, 2, 3, 4, 5, 6, 7, 8, 9

10 × 6 = 60

4 × 6 = 24

60 + 24 = 84

6 is a factor of 84
Task 29: Finding factors

84

1 2 3 4 6 7 8 9

10 \times 7 = 70 \quad 2 \times 7 = 14

70 + 14 = 84

7 is a factor of 84
Task 29: Finding factors

84

1  2  3  4  5  6  7  8  9

10 \times 8 = 80  \quad 1 \times 8 = 8

8\text{ more than }80\text{ is not }84

8\text{ is not a factor of }84
Task 29: Finding factors

84

1 2 3 4 5 6 7 8 9

10 × 9 = 90  1 × 9 = 9

9 less than 90 is not 84

9 is not a factor of 84
Task 30: Venn diagrams

multiples of 4

multiples of 5
Task 30: Venn diagrams

multiples of 4

multiples of 5

15
Task 30: Venn diagrams

multiples of 4

multiples of 5

40

15

MULTIPLICATION AND DIVISION
Task 30: Venn diagrams

multiples of 4

multiples of 5

40

15

99
Task 30: Venn diagrams

multiples of 4

15

40 120

multiples of 5

15

99

MULTIPLICATION AND DIVISION

I SEE PROBLEM-SOLVING – LKS2
Task 30: Venn diagrams

multiples of 4

404

multiples of 5

40 120

15

99
Task 30: Venn diagrams

multiples of 4

multiples of 5

numbers less than 50

404

40 120

15

99

MULTIPLICATION AND DIVISION
Task 30: Venn diagrams

- Multiples of 4
- Multiples of 5
- Numbers less than 50

404, 40, 120, 15, 99
Task 30: Venn diagrams

- Multiples of 4
- Multiples of 5
- Numbers less than 50

404
40
120
40
15
99
Task 30: Venn diagrams

Multiples of 4

Multiples of 5

Numbers less than 50

404

120

40

15

99
Task 30: Venn diagrams

- Multiples of 4
  - 404

- Multiples of 5
  - 120
  - 40
  - 15

- Numbers less than 50
  - 99
Task 31: Different answers

\[
\begin{align*}
\square \div 2 &= 20 \\
20 - \square &= 5 \times \square \\
24 - \square &= 18 \\
\square - 11 &> 8 \\
11 - \square &> 8 \\
\square \times 5 &= 26 + \square
\end{align*}
\]
Task 31: Different answers

\[ \boxed{40} \div 2 = 20 \quad 24 - \boxed{6} = 18 \]

One answer: one blank box, has a $=$ sign
Task 31: Different answers

Two or three answers: one side limits the number of possible answers.
Task 31: Different answers

- \(\frac{40}{2} = 20\)
- \(24 - 6 = 18\)
- \(20 - 15 = 5 \times 1\)
- \(20 - 10 = 5 \times 2\)
- \(20 - 5 = 5 \times 3\)
- \(10 \times 5 = 26 + 24\)
- \(81 - 11 > 8\)

Infinite answers: values can keep increasing.
Task 32: Questions in context

jug

bottle  bottle
Task 32: Questions in context

[Mixed operations diagram]

jug

bottle
cup
cup
cup

bottle
cup
cup
cup

d6 cupds
Task 32: Questions in context

white bread  brown bread
Task 32: Questions in context

8 sandwiches
Task 32: Questions in context

£12

John  Friend 1  Friend 2
Task 32: Questions in context

John’s ticket costs £4
Task 32: Questions in context

They blow the balloons up at the same speed.

Dad

Mum
Task 32: Questions in context

They blow the balloons up at the same speed.

Dad

Mum
Task 32: Questions in context

Dad blows up 11 balloons

Mum

Dad blows up 11 balloons
Task 33: Combinations

30 outfits

- 15 outfits with black trousers
- 15 outfits with grey trousers
Task 33: Combinations

30 outfits

15 outfits with black trousers
- shirt 1
- shirt 2
- shirt 3

15 outfits with grey trousers
- shirt 1
- shirt 2
- shirt 3
Task 33: Combinations

30 outfits

15 outfits with black trousers

shirt 1

5 ties

down arrow

shirt 2

5 ties

down arrow

shirt 3

5 ties

down arrow

15 outfits with grey trousers

shirt 1

5 ties

down arrow

shirt 2

5 ties

down arrow

shirt 3

5 ties

down arrow
Task 33: Combinations

30 outfits

15 outfits with black trousers

15 outfits with grey trousers

5 ties 5 ties 5 ties

5 ties 5 ties 5 ties

2 pairs of trousers, 3 shirts and 5 ties = 30 outfits
Task 34: Estimating fractions

A fingernail is a tiny fraction of a human.
Task 34: Estimating fractions

A fingernail is a tiny fraction of a human.

The fin is a small fraction of a shark.
Task 34: Estimating fractions

A fingernail is a tiny fraction of a human.

The fin is a small fraction of a shark.

A trunk is a quite a large part of an elephant (but a lot less than a half).
Task 34: Estimating fractions

- A fingernail is a tiny fraction of a human.
- The fin is a small fraction of a shark.
- A trunk is a quite a large part of an elephant (but a lot less than a half).
- The wings are more than half of a butterfly.
Task 35: Fraction of a shape

\[ \frac{1}{2} \]
Task 35: Fraction of a shape

\[ \frac{1}{2} \]
Task 35: Fraction of a shape

\[ \frac{1}{3} \]

The diagram on the left shows a shape divided into three equal parts, with one part shaded. The diagram on the right shows a shape divided into three equal parts, with one part shaded.
Task 35: Fraction of a shape

\[ \frac{1}{3} \]
Task 35: Fraction of a shape

\[ \frac{1}{4} \]
Task 35: Fraction of a shape

\[
\frac{1}{4}
\]
Task 35: Fraction of a shape

\[
\frac{1}{4}
\]

same size parts
Task 36: Parts and the whole

Example 1
Task 36: Parts and the whole

Example 1
Task 36: Parts and the whole

Example 2
Task 36: Parts and the whole

Example 2

A rectangle is divided into two sections, each containing two triangles. The triangles are shaded in different colors. The rectangle is divided into four equal parts.
Task 36: Parts and the whole

Example 3
Task 36: Parts and the whole

Example 3
Task 36: Parts and the whole

Example 4
Task 36: Parts and the whole

Example 4
Task 37: Fractions on a line
Task 37: Fractions on a line

- $\frac{1}{4}$
- $\frac{1}{2}$
- $\frac{3}{4}$
Task 37: Fractions on a line

\[
\begin{align*}
0 & \quad \frac{1}{4} & \quad \frac{1}{2} & \quad 1 \\
0 & \quad \frac{1}{4} & \quad \frac{1}{2} & \quad 2 \\
0 & \quad \frac{1}{8} & \quad \frac{3}{4} & \quad 3
\end{align*}
\]
Task 37: Fractions on a line

- \( \frac{1}{4} \)
- \( \frac{1}{2} \)
- \( \frac{1}{4} \)
- \( \frac{1}{8} \)
Task 37: Fractions on a line

0 \[\frac{1}{4}\] \[\frac{1}{2}\] 1

0 \[\frac{1}{4}\] \[\frac{1}{2}\] 2

0 \[\frac{1}{4}\] \[\frac{1}{2}\] \[\frac{3}{4}\] 3

0 \[\frac{1}{8}\] \[\frac{1}{4}\] \[\frac{1}{2}\]
Task 38: Sharing contexts
Task 38: Sharing contexts

FRACTIONS

I SEE PROBLEM-SOLVING – LKS2
Task 38: Sharing contexts
Task 38: Sharing contexts

1 \frac{1}{4} pizzas each
Task 38: Sharing contexts

$1\frac{1}{4}$ pizzas each
Task 38: Sharing contexts

\[ \frac{11}{4} \text{ pizzas each} \]
Task 38: Sharing contexts

1 \frac{1}{4} pizzas each

1 \frac{1}{6} pizzas each
Task 39: Fraction of a number

\[ \frac{1}{\square} \text{ of } \boxed{\square} = 6 \]
Task 39: Fraction of a number

Example answer 1: \( \frac{1}{\square} \) of \( \square \) = 6

\[
\begin{array}{cc}
6 & 6
\end{array}
\]
Task 39: Fraction of a number

Example answer 1: \( \frac{1}{2} \) of \( 12 \) = 6
Task 39: Fraction of a number

Example answer 2: \( \frac{1}{6} \) of \( \square \) = 6
Task 39: Fraction of a number

Example answer 2: \( \frac{1}{3} \) of \( \frac{18}{18} \) = 6

\[ \frac{1}{3} \times 18 = 6 \]

\[
\begin{array}{c}
\hline
18 \\
\hline
6 & 6 & 6 \\
\hline
\end{array}
\]
Task 39: Fraction of a number

Example answer 3: \( \frac{1}{6} \) of \( \square \) = 6

\( \begin{array}{cccccccc} 6 & 6 & 6 & 6 & 6 & 6 & 6 & 6 & 6 & 6 & 6 & 6 \\ \end{array} \)
Task 39: Fraction of a number

Example answer 3: \( \frac{1}{9} \) of 54 = 6

\[
\begin{array}{cccccccccccc}
6 & 6 & 6 & 6 & 6 & 6 & 6 & 6 & 6 & 6 & 6 & 6 \\
\end{array}
\]
Task 40: Balancing scales

Part 1

[Image of balancing scales with different objects on each side]
Task 40: Balancing scales

Part 1

A pear is heavier than a lemon.
Task 40: Balancing scales

Part 1

A pear is heavier than a lemon.
An apple is heavier than a pear.
Task 40: Balancing scales

Part 2
Task 40: Balancing scales

Part 2

Orange

| Pear | Pear |

An orange is heavier than a pear.
An orange is heavier than a pear.

A banana is lighter than an orange but heavier than a pear.
Task 40: Balancing scales

Part 3

MEASUREMENT

I SEE PROBLEM-SOLVING – LKS2
Task 40: Balancing scales

Part 3

1 cherry = 2 grapes

<table>
<thead>
<tr>
<th>Cherry</th>
<th>Grape</th>
<th>Grape</th>
</tr>
</thead>
</table>

1 cherry = 2 grapes
Task 40: Balancing scales

Part 3

1 cherry = 2 grapes
3 cherries = 6 grapes
Task 40: Balancing scales

Part 3

1 cherry = 2 grapes
3 cherries = 6 grapes

This is the same weight as 6 grapes
Task 40: Balancing scales

Part 3

1 cherry = 2 grapes
3 cherries = 6 grapes
Task 40: Balancing scales

Part 3

<table>
<thead>
<tr>
<th>Cherry</th>
<th>Grape</th>
<th>Grape</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G</td>
<td>G</td>
</tr>
</tbody>
</table>

1 cherry = 2 grapes
3 cherries = 6 grapes

<table>
<thead>
<tr>
<th>Strawberry</th>
<th>Strawberry</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>G</td>
</tr>
<tr>
<td>G</td>
<td>G</td>
</tr>
</tbody>
</table>

2 strawberries = 6 grapes
Task 40: Balancing scales

Part 3

<table>
<thead>
<tr>
<th>Cherry</th>
<th>Grape</th>
<th>Grape</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 cherry = 2 grapes
3 cherries = 6 grapes

<table>
<thead>
<tr>
<th>Strawberry</th>
<th>Strawberry</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>G</td>
</tr>
<tr>
<td>G</td>
<td>G</td>
</tr>
</tbody>
</table>

1 strawberry = 3 grapes
2 strawberries = 6 grapes
Task 41: Measures of time

MEASUREMENT

I SEE PROBLEM-SOLVING – LKS2
Task 41: Measures of time

- 600 seconds
- 0 to 30 minutes
- 10 minutes

---

MEASUREMENT

I SEE PROBLEM-SOLVING – LKS2
Task 41: Measures of time

600 seconds

0 mins 10 mins 20 mins 30 mins
Task 41: Measures of time

- 600 seconds
- 10 minutes
- 15 minutes
- 20 minutes
- 30 minutes

$\frac{1}{4}$ hour
Task 41: Measures of time
Task 41: Measures of time
Task 41: Measures of time

- 5 weeks
- 35 days
- 50 days
- 60 days
Task 41: Measures of time

- 5 weeks
- 35 days
- 50 days
- 2 months
- 60 days
Task 42: Reading clocks
Task 42: Reading clocks

20:05
Task 42: Reading clocks

- The image shows a clock with two hands pointing to the numbers 6 and 3 respectively.
- The task involves understanding the time displayed on the clock.
Task 42: Reading clocks

3:40
Task 42: Reading clocks
Task 42: Reading clocks

5:20
Task 42: Reading clocks
Task 42: Reading clocks

4:50
Task 42: Reading clocks

17:10
Task 42: Reading clocks

17:10
Task 43: Combinations of change

75p
Task 43: Combinations of change

- 75p
- 20p
- 10p
- 50p
- 80p
Task 43: Combinations of change

5p change

75p

10p

20p

50p

80p
Task 43: Combinations of change

- 2p change
- 2p change
- 1p change
- 5p change

Diagram:
- 75p
- 50p
- 20p
- 10p
- 80p
Task 43: Combinations of change

75p
Task 43: Combinations of change
Task 43: Combinations of change

15p change

75p
20p
20p
50p
90p
Task 43: Combinations of change

15p change

- 5p
- 5p
- 5p

- 20p
- 20p
- 50p

- 75p
- 90p

MEASUREMENT
Task 44: Comparing angles
Task 44: Comparing angles

By looking, the blue angle is the smallest
Task 44: Comparing angles

Test using right-angle:
Red angle only obtuse angle
Task 44: Comparing angles

Test using right-angle:
Purple angle larger than green angle
Task 44: Comparing angles

Smallest to largest: blue, green, purple, red.
Task 45: Area and perimeter
Task 45: Area and perimeter

Area = 24 squares
Perimeter = 22 units
Task 45: Area and perimeter

Area = 24 squares
Perimeter = 22 units
Task 45: Area and perimeter

Area = 24 squares
Perimeter = 22 units

Area = 24 squares
Perimeter = 20 units
Task 45: Area and perimeter

Area = 24 squares
Perimeter = 22 units

Area = 24 squares
Perimeter = 20 units
Task 45: Area and perimeter

Area = 24 squares
Perimeter = 22 units

Area = 24 squares
Perimeter = 20 units

Area = 24 squares
Perimeter = 28 units
Task 46: Shape properties

All of the shapes...

A  B  C  D  E
All of the shapes are quadrilaterals.
Task 46: Shape properties

Four of the shapes...

A  B  C  D  E
Task 46: Shape properties

Example answer

Four of the shapes have two pairs of parallel lines.

A

B

C

D

E
Task 46: Shape properties

Three of the shapes...

Example answer

A

B

C

D

E
Task 46: Shape properties

Example answer

Three of the shapes have two or more right-angles.

A

B

C

D

E
Task 46: Shape properties

Example answer

Two of the shapes...

A

B

C

D

E
Two of the shapes have two acute angles.
Task 46: Shape properties

Example answer

One of the shapes...
Task 46: Shape properties

Example answer

One of the shapes has four lines of symmetry.
Task 47: Building shapes

GEOMETRY
Task 47: Building shapes

Square:
Task 47: Building shapes

Rectangle:
Task 47: Building shapes

Trapezium:
Task 47: Building shapes

Parallelogram:
Task 47: Building shapes

Pentagon:
Hexagon:
Task 48: Lines of symmetry

Rectangle:

Hexagon:

Parallelogram:

Triangle:

Cross:
Task 48: Lines of symmetry

Rectangle: 2

Hexagon:

Parallelogram:

Triangle:

Cross:
Task 48: Lines of symmetry

Rectangle: 2

Hexagon:

Parallelogram:

Triangle: 1

Cross:
Task 48: Lines of symmetry

Rectangle: 2

Hexagon: 6

Parallelogram:

Triangle: 1

Cross:
Task 48: Lines of symmetry

Rectangle: 2

Hexagon: 6

Parallelogram:

Triangle: 1

Cross: 4
Task 48: Lines of symmetry

- **Rectangle:** 2
- **Hexagon:** 6
- **Parallelogram:** 0
- **Triangle:** 1
- **Cross:** 4
Task 49: Coordinate points

Graph showing points (4,1), (4,5), (7,5), and (7,1) connected to form a rectangle.
Task 49: Coordinate points
Task 49: Coordinate points

- (4,1)
- (4,4)
- (4,5)
- (6,4)
- (7,1)
- (7,5)
Task 49: Coordinate points

- (4, 1)
- (4, 4)
- (4, 5)
- (6, 4)
- (7, 1)
- (7, 5)
- (5, 7)
Task 49: Coordinate points
Task 49: Coordinate points

(1,6)  (4,5)  (7,5)
(4,4)  (6,4)  (7,1)
(4,1)  (6,1)  (7,1)

(5,7)
Task 50: After-school clubs

<table>
<thead>
<tr>
<th>Activity</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Football (KS1)</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>Running (KS1)</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Dance (KS1)</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Football (KS2)</td>
<td>19</td>
<td>12</td>
</tr>
<tr>
<td>Hockey (KS2)</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Netball (KS2)</td>
<td>5</td>
<td>14</td>
</tr>
</tbody>
</table>
**Task 50: After-school clubs**

In total 65 children at KS1 clubs. There are 56 children in KS1 (some children attend more than one club).

<table>
<thead>
<tr>
<th>Club</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Football (KS1)</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>Running (KS1)</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Dance (KS1)</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
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<td>19</td>
<td>12</td>
</tr>
<tr>
<td>Hockey (KS2)</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Netball (KS2)</td>
<td>5</td>
<td>14</td>
</tr>
</tbody>
</table>
Task 50: After-school clubs

In total 74 children at KS2 clubs. There are 119 children in KS2.
Task 50: After-school clubs

KS2 clubs: 32 boys, 42 girls.
Task 50: After-school clubs

KS2 clubs are all outdoor team sports.
Task 51: Different graph types

Graph to show favourite football teams for children in class
Task 51: Different graph types

Graph to show favourite football teams for children in class

No pattern to the size of the bars, seven different football teams supported by the children in the class.
Task 51: Different graph types

Graph to show the height of a child since birth
Task 51: Different graph types

Graph to show the height of a child since birth

Line graph as height changes gradually. Height increases steadily so line gets gradually higher.
Task 51: Different graph types

Graph to show number of brothers or sisters for each child in the class
Task 51: Different graph types

Graph to show number of brothers or sisters for each child in the class

Bar graph as there are no ‘in between’ values. Some children have no siblings. More children have 1 or 2 siblings than 3 or 4 siblings so the bars decrease in size.
Task 51: Different graph types

Graph to show whether children are having a packed lunch or school dinners

= 5 children
Task 51: Different graph types

Graph to show whether children are having a packed lunch or school dinners

Only graph with just two groups, answer is in correct form – number of children.

= 5 children
Task 51: Different graph types

Graph to show rainfall over a year
Task 51: Different graph types

Graph to show rainfall over a year

Line graph as rainfall measured over time. Height keeps changing and lower in the middle of the year when it is summer and higher at other times.
Task 52: Making judgements

Part 1

Children Reading 4+ Times Per Week

<table>
<thead>
<tr>
<th></th>
<th>Y3</th>
<th>Y4</th>
<th>Y5</th>
<th>Y6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>23</td>
<td>26</td>
<td>18</td>
<td>16</td>
</tr>
<tr>
<td>Girls</td>
<td>24</td>
<td>23</td>
<td>21</td>
<td>24</td>
</tr>
</tbody>
</table>
Task 52: Making judgements

Children Reading 4+ Times Per Week

- **Boys**
  - Y3: 23
  - Y4: 26
  - Y5: 18
  - Y6: 16

- **Girls**
  - Y3: 24
  - Y4: 23
  - Y5: 21
  - Y6: 24

24 girls in Y6 read 4 or more times per week.
Task 52: Making judgements

### Part 1

#### Children Reading 4+ Times Per Week

**Boys**
- Y3: 23
- Y4: 26
- Y5: 18
- Y6: 16

**Girls**
- Y3: 24
- Y4: 23
- Y5: 21
- Y6: 24

**49 children in Y4 read 4 or more times per week.**
Task 52: Making judgements

**Part 1**

Children Reading 4+ Times Per Week

<table>
<thead>
<tr>
<th></th>
<th>Y3</th>
<th>Y4</th>
<th>Y5</th>
<th>Y6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>23</td>
<td>26</td>
<td>18</td>
<td>16</td>
</tr>
<tr>
<td>Girls</td>
<td>24</td>
<td>23</td>
<td>21</td>
<td>24</td>
</tr>
</tbody>
</table>

Similar number of girls read in each year group.
Task 52: Making judgements

Part 1

Children Reading 4+ Times Per Week

<table>
<thead>
<tr>
<th></th>
<th>Y3</th>
<th>Y4</th>
<th>Y5</th>
<th>Y6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>23</td>
<td>26</td>
<td>18</td>
<td>16</td>
</tr>
<tr>
<td>Girls</td>
<td>24</td>
<td>23</td>
<td>21</td>
<td>24</td>
</tr>
</tbody>
</table>

Fewer boys read in Y5-6 than in Y3-4
Task 52: Making judgements

We don’t know how many children there are in total. It is possible that all the boys in Y6 read 4 or more times per week.
Task 52: Making judgements

Part 2

% of Trains Arriving Late

- Cardiff
- Bristol
- Swansea
- Newport

January
February
March

DATA HANDLING
Task 52: Making judgements

Part 2

Higher % trains late means least trains on time
Task 52: Making judgements

Part 2

Highest % of trains late in January. Can you suggest why?
Task 53: Train timetables

<table>
<thead>
<tr>
<th></th>
<th>Tinford</th>
<th>Denley</th>
<th>Garbury</th>
<th>Penfield</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>6:20</td>
<td>7:40</td>
<td>9:05</td>
<td>10:32</td>
</tr>
<tr>
<td>Time</td>
<td>6:42</td>
<td>8:03</td>
<td>9:27</td>
<td>10:54</td>
</tr>
<tr>
<td>Time</td>
<td>7:25</td>
<td>8:47</td>
<td>10:08</td>
<td>11:37</td>
</tr>
<tr>
<td>Time</td>
<td>7:54</td>
<td>9:15</td>
<td>10:36</td>
<td>12:04</td>
</tr>
</tbody>
</table>
### Task 53: Train timetables

#### Part 1

<table>
<thead>
<tr>
<th>Location</th>
<th>6:20</th>
<th>7:40</th>
<th>9:05</th>
<th>10:32</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tinford</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denley</td>
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<td>7:54</td>
<td>9:15</td>
<td>10:36</td>
<td>12:04</td>
</tr>
</tbody>
</table>

First train
## Task 53: Train timetables

### Part 1

<table>
<thead>
<tr>
<th></th>
<th>Tinford</th>
<th>Denley</th>
<th>Garbury</th>
<th>Penfield</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>6:20</td>
<td>6:42</td>
<td>7:25</td>
<td>7:54</td>
</tr>
<tr>
<td></td>
<td>7:40</td>
<td>8:03</td>
<td>8:47</td>
<td>9:15</td>
</tr>
<tr>
<td></td>
<td><strong>9:05</strong></td>
<td><strong>9:27</strong></td>
<td><strong>10:08</strong></td>
<td><strong>10:36</strong></td>
</tr>
<tr>
<td></td>
<td>10:32</td>
<td>10:54</td>
<td>11:37</td>
<td>12:04</td>
</tr>
</tbody>
</table>

*Third train*
## Task 53: Train timetables

### Part 1

<table>
<thead>
<tr>
<th>Location</th>
<th>6:20</th>
<th>7:40</th>
<th>9:05</th>
<th>10:32</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tinford</td>
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<td>10:36</td>
<td>12:04</td>
</tr>
</tbody>
</table>

7:40 to 9:15 = 1 hour 35 minutes
Task 53: Train timetables

<table>
<thead>
<tr>
<th></th>
<th>6:20</th>
<th>7:40</th>
<th>9:05</th>
<th>10:32</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tinford</td>
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<td></td>
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</tr>
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<td>Denley</td>
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<td>7:54</td>
<td>9:15</td>
<td>10:36</td>
<td>12:04</td>
</tr>
</tbody>
</table>

Train 1: 7:40 to 9:15 = 1 hour 35 minutes
Train 2: 9:05 to 10:36 = 1 hour 31 minutes
Task 53: Train timetables

<table>
<thead>
<tr>
<th>Location</th>
<th>6:20</th>
<th>7:40</th>
<th>9:05</th>
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<td>10:36</td>
<td>12:04</td>
</tr>
</tbody>
</table>

The longest journey from Tinford to Denley is 23 minutes.
## Task 53: Train timetables

### Part 2

<table>
<thead>
<tr>
<th></th>
<th>Tinford</th>
<th></th>
<th>Denley</th>
<th></th>
<th>Garbury</th>
<th></th>
<th>Penfield</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7:25</td>
<td>8:47</td>
<td>10:08</td>
<td>11:37</td>
<td>7:54</td>
<td>9:15</td>
<td>10:36</td>
<td>12:04</td>
</tr>
</tbody>
</table>

The longest journey from Tinford to Denley is 23 minutes.
The shortest journey from Denley to Garbury is 41 minutes.
Task 53: Train timetables

<table>
<thead>
<tr>
<th></th>
<th>Tinford</th>
<th>Denley</th>
<th>Garbury</th>
<th>Penfield</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6:20</td>
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<td>7:54</td>
</tr>
<tr>
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<tr>
<td></td>
<td>10:32</td>
<td>10:54</td>
<td>11:37</td>
<td>12:04</td>
</tr>
</tbody>
</table>

Part 2

The longest journey from Tinford to Denley is 23 minutes.
The shortest journey from Denley to Garbury is 41 minutes.
The shortest journey from Garbury to Penfield is 27 minutes.
### Task 53: Train timetables

#### Part 3

<table>
<thead>
<tr>
<th></th>
<th>Tinford</th>
<th>Denley</th>
<th>Garbury</th>
<th>Penfield</th>
</tr>
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<tbody>
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<td>6:20</td>
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<tr>
<td>7:54</td>
<td>9:15</td>
<td>10:36</td>
<td>12:04</td>
<td></td>
</tr>
</tbody>
</table>

The 8:03 from Denley arrives in Garbury at 8:47am.
### Task 53: Train timetables

#### Part 3

<table>
<thead>
<tr>
<th>Location</th>
<th>6:20</th>
<th>7:40</th>
<th>9:05</th>
<th>10:32</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tinford</td>
<td></td>
<td></td>
<td></td>
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<tr>
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<td>7:54</td>
<td>9:15</td>
<td>10:36</td>
<td>12:04</td>
</tr>
</tbody>
</table>

The 8:03 from Denley arrives in Garbury at 8:47am.

Mrs Patel has a 10-minute walk. She would arrive at 8:57am.
The 8:03 from Denley arrives in Garbury at 8:47am. Mrs Patel has a 10-minute walk. She would arrive at 8:57am.

Is this a good expected time of arrival for Mrs Patel’s 9:00am interview?
### Task 54: Comparing teams

#### League Table (top 4 teams):

<table>
<thead>
<tr>
<th>Team</th>
<th>Played</th>
<th>Points</th>
<th>Won</th>
<th>Drawn</th>
<th>Lost</th>
<th>Goals for</th>
<th>Goals against</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keyton Town</td>
<td>28</td>
<td>60</td>
<td>18</td>
<td>6</td>
<td>4</td>
<td>68</td>
<td>34</td>
</tr>
<tr>
<td>Tanbury Rovers</td>
<td>28</td>
<td>55</td>
<td>15</td>
<td>10</td>
<td>3</td>
<td>53</td>
<td>25</td>
</tr>
<tr>
<td>Denfield F.C.</td>
<td>28</td>
<td>49</td>
<td>14</td>
<td>7</td>
<td>7</td>
<td>59</td>
<td>41</td>
</tr>
<tr>
<td>Conley Athletic</td>
<td>28</td>
<td>48</td>
<td>15</td>
<td>3</td>
<td>10</td>
<td>60</td>
<td>49</td>
</tr>
</tbody>
</table>
Task 54: Comparing teams

League Table (top 4 teams):

<table>
<thead>
<tr>
<th>Team</th>
<th>Played</th>
<th>Points</th>
<th>Won</th>
<th>Drawn</th>
<th>Lost</th>
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</thead>
<tbody>
<tr>
<td>Keyton Town</td>
<td>28</td>
<td>60</td>
<td>18</td>
<td>6</td>
<td>4</td>
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<td>15</td>
<td>3</td>
<td>10</td>
<td>60</td>
<td>49</td>
</tr>
</tbody>
</table>

Tanbury had the fewest losses but too many draws compared to Keyton Town.
### Task 54: Comparing teams

#### League Table (top 4 teams):

<table>
<thead>
<tr>
<th>Team</th>
<th>Played</th>
<th>Points</th>
<th>Won</th>
<th>Drawn</th>
<th>Lost</th>
<th>Goals for</th>
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<tbody>
<tr>
<td>Keyton Town</td>
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<tr>
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<td>28</td>
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<td>15</td>
<td>3</td>
<td>10</td>
<td>60</td>
<td>49</td>
</tr>
</tbody>
</table>

Tanbury had by far the best defence.
Task 54: Comparing teams

League Table (top 4 teams):

<table>
<thead>
<tr>
<th>Team</th>
<th>Played</th>
<th>Points</th>
<th>Won</th>
<th>Drawn</th>
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<td>25</td>
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<td>Denfield F.C.</td>
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<td>15</td>
<td>3</td>
<td>10</td>
<td>60</td>
<td>49</td>
</tr>
</tbody>
</table>

Tanbury scored fewer goals than all the other top 4 teams. They need to score more goals.
Task 54: Comparing teams

Top scorers: Keyton Town

Names of scorers in bars

Top scorers: Tanbury Rovers

Names of scorers in bars
Task 54: Comparing teams

Top scorers: Keyton Town

Top scorers: Tanbury Rovers

Tanbury have the highest scorer – Garcia with 19 goals.
Keyton have 4 players scoring 10+ goals and 6 players scoring 6+ goals. Tanbury may need different players in their team to score more goals.
## Task 54: Comparing teams

### Match Statistics (top 4 teams):

<table>
<thead>
<tr>
<th>Team</th>
<th>Passes per match</th>
<th>Shots per match</th>
<th>Tackles per match</th>
<th>Total yellow/red cards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keyton Town</td>
<td>317</td>
<td>13</td>
<td>23</td>
<td>18 Y 2 R</td>
</tr>
<tr>
<td>Tanbury Rovers</td>
<td>251</td>
<td>10</td>
<td>29</td>
<td>21 Y 1 R</td>
</tr>
<tr>
<td>Denfield F.C.</td>
<td>247</td>
<td>11</td>
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Task 54: Comparing teams

Match Statistics (top 4 teams):

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<td>13</td>
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<td>18 Y 2 R</td>
</tr>
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<td>251</td>
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Tanbury had the fewest shots per game. They also had a relatively low number of passes. This could improve.
Task 54: Comparing teams

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Tanbury had the most tackles per match by far.