## Yr 5 Multiplication and Division Unit 2 (5381)

Additional teacher instructions for practice sheets
These notes indicate which practice sheets are most appropriate for which groups.

## Day 1 Carroll diagrams Sheet 1

Working towards ARE
Day 1 Carroll diagrams Sheet 2
Working at ARE / Greater Depth
Day 2 Finding prime numbers Sheet 1
Working at ARE
Day 3 Mental division Sheet 1
Working towards ARE
Day 3 Mental division Sheet 2
Working at ARE / Greater Depth

## Carroll Diagrams

## Sheet 1

Work in pairs to write three 3-digit numbers in each section.

|  | Divisible by 2 | Not divisible by 2 |
| :---: | :---: | :---: |
| Divisible by 5 |  |  |
| Not divisible by 5 |  |  |


|  | Divisible by 4 | Not divisible by 4 |
| :---: | :---: | :---: |
| Divisible by 5 |  |  |
| Not divisible by 5 |  |  |

## Carroll Diagrams

## Sheet 2

Work in pairs. Write four 3-digit numbers in each section unless it is impossible to do so. If it is impossible, explain why.

|  | Divisible by 4 | Not divisible by 4 |
| :---: | :---: | :---: |
| Divisible by 5 |  |  |
| Not divisible by 5 |  |  |


|  | Divisible by 3 | Not divisible by 3 |
| :---: | :---: | :---: |
| Divisible by 9 |  |  |
| Not divisible by 9 |  |  |

## Finding prime numbers

Sheet 1
Find the two prime numbers in each set of numbers.


$$
\begin{array}{lllll}
11 & 14 & 15 & 17 & 18
\end{array}
$$

## 2123252729

## 3133363738

4243464749

## Mental division

## Sheet 1

| Division | Answer with <br> remainder | Answer with <br> fraction | Answer as a <br> decimal | Answer as <br> money |
| :---: | :---: | :---: | :---: | :---: |
| Example $42 \div 4$ | 10 r 2 | $10 \frac{1}{2}$ | 10.5 | $£ 10.50$ |
| $1.25 \div 2$ |  |  |  |  |
| $2.31 \div 2$ |  |  |  |  |
| $3.14 \div 4$ |  |  |  |  |
| $4.22 \div 4$ |  |  |  |  |
| $5.13 \div 4$ |  |  |  |  |
| $6.45 \div 10$ |  |  |  |  |

## Mental division

## Sheet 2

| Division | Answer with remainder | Answer with fraction | Answer as a decimal | Answer as money |
| :---: | :---: | :---: | :---: | :---: |
| Example 68 $\div 8$ | 8 r 4 | $8 \frac{1}{2}$ | 8.5 | £8.50 |
| 1. $30 \div 4$ |  |  |  |  |
| 2. $19 \div 4$ |  |  |  |  |
| 3. $33 \div 6$ |  |  |  |  |
| 4. $42 \div 8$ |  |  |  |  |
| 5. $38 \div 8$ |  |  |  |  |
| 6. $78 \div 10$ |  |  |  |  |
| $7.46 \div 5$ |  |  |  |  |
| 8. $33 \div 5$ |  |  |  |  |

## 5381 Answers

## Day 1 Sheet 1 Carroll diagrams

|  | Divisible by 2 | Not divisible by 2 |
| :---: | :---: | :---: |
| Divisible by 5 Any numbers ending in 0 | Any numbers ending in 5 |  |
| Not divisible by 5 | Any numbers ending in 2, 4,6 <br> or 8 | Any numbers ending in 1, 3, 7 or 9 |


|  | Divisible by 4 | Not divisible by 4 |
| :---: | :---: | :---: |
| Divisible by 5 | Any numbers ending in 0 and <br> where the last 2 digits form a <br> number divisible by 4 eg 520, <br> 340 | Any numbers ending in 5 or 0 but <br> where the last 2 digits do not <br> form a number divisible by 4 eg <br> 230,115 |
| Not divisible by 5 | Any numbers where the last 2 <br> digits form a number divisible by <br> 4 but do not end in 0 <br> eg 324,516 | Any numbers not ending in 5 or 0 <br> and where the last 2 digits do not <br> form a number divisible by 4 <br> eg 333, 118 |

## Day 1 Sheet 2 Carroll diagrams

|  | Divisible by 4 | Not divisible by 4 |
| :---: | :---: | :---: |
| Divisible by 5 | Any numbers ending in 0 and where the last 2 digits form a number divisible by 4 eg 520 . $340$ | Any numbers ending in 5 or 0 but where the last 2 digits do not form a number divisible by 4 eg 230, 115 |
| Not divisible by 5 | Any numbers where the last 2 digits form a number divisible by 4 but do not end in 0 eg 324, 516 | Any numbers not ending in 5 or 0 and where the last 2 digits do not form a number divisible by 4 eg 333, 118 |
|  | Divisible by 3 | Not divisible by 3 |
| Divisible by 9 | Any numbers where the sum of the digits is divisible by 3 and by 9 eg 612, 918 | None because any number divisible by 9 is also divisible by 3 |
| Not divisible by 9 | Any numbers where the sum of the digits is divisible by 3 but not by 9 eg $111,123,115$ | Any numbers where the sum of the digits is not divisible by 3 or 9 eg 241, 652, 268 |

## 5381 Answers

## Day 2 Finding prime numbers

3, 4, 7, 9, 10
11, 14, 15, 17, 18
21, 23, 25, 27, 29
31, 33, 36, 37, 38
42, 43, 46, 47, 49

Day 3 Mental division - Sheet 1

| Division | Answer with remainder | Answer with fraction | Answer as a decimal | Answer as money |
| :---: | :---: | :---: | :---: | :---: |
| $25 \div 2$ | 12 r 1 | $12 \frac{1}{2}$ | 12.5 | £12.50 |
| $31 \div 2$ | 15 r 1 | $15 \frac{1}{2}$ | 15.5 | $£ 15.50$ |
| $14 \div 4$ | 3 r 2 | $3 \frac{1}{2}$ | 3.5 | £3.50 |
| $22 \div 4$ | 5 r 2 | $5 \frac{1}{2}$ | 5.5 | $£ 5.50$ |
| $13 \div 4$ | 3 r 1 | $3 \frac{1}{4}$ | 3.25 | £3.25 |
| $45 \div 10$ | 4 r 5 | $4 \frac{1}{2}$ | 4.5 | £4.50 |

## 5381 Answers

Day 3 Mental division - Sheet 2

| Division | Answer with remainder | Answer with fraction | Answer as a decimal | Answer as money |
| :---: | :---: | :---: | :---: | :---: |
| $30 \div 4$ | 7 r 2 | $7 \frac{1}{2}$ | 7.5 | £7.50 |
| $19 \div 4$ | 4 r 3 | $4 \frac{3}{4}$ | 4.75 | £4.75 |
| $33 \div 6$ | 5 r 3 | $5 \frac{1}{2}$ | 5.5 | £5.50 |
| $42 \div 8$ | 5 r 2 | $5 \frac{1}{4}$ | 5.25 | £5.25 |
| $38 \div 8$ | 4 r 6 | $4 \frac{3}{4}$ | 4.75 | £4.75 |
| $78 \div 10$ | 7 r 8 | $7 \frac{4}{5}$ | 7.8 | £7.80 |
| $46 \div 5$ | 9 r 1 | $9 \frac{1}{5}$ | 9.2 | £9.20 |
| $33 \div 5$ | 6 r 3 | $6 \frac{3}{5}$ | 6.6 | £6.60 |

