Year 2 Maths Number and Place Value Workbook


## Year 2 Maths Number and Place Value Workbook

Year 2 Programme of Study - Number and Place Value

| Statutory Requirements | Worksheet | Page <br> Number | Notes |
| :--- | :--- | :---: | :---: |
| Count in steps of 2, 3, and <br> 5 from 0, and in tens from <br> any number, forward and <br> backward | Counting in 2s, 3s, 5s and <br> 10s Worksheet | 3 |  |
| Recognise the place value <br> of each digit in a two-digit <br> number (tens, ones) | Place Value Worksheet 1, 2 <br> and 3 | $4-6$ |  |
| Identify, represent and <br> estimate numbers using <br> different representations, <br> including the number line | Representing Numbers <br> Worksheet 1, 2, 3 and 4 | $7-10$ |  |
| Compare and order numbers <br> from 0 up to 100; use <, > <br> and = signs | Greater Than and Less Than <br> Worksheets | 11 |  |
| Read and write numbers to <br> at least 100 in numerals and <br> in words | Reading and Writing <br> Numbers to 100 | 12 |  |
| Use place value and number <br> facts to solve problems | Place Value Challenge | 13 |  |

Counting on in $2 \mathrm{~s}, 3 \mathrm{~s}, 5 \mathrm{~s}$ and 10 s

Complete the following sequences:
a) $\underline{2} \begin{array}{lllllllllll}4 & 6 & 8 & 10 & \underline{12} & f & \underline{27} & 24 & 21 & \underline{18} & 15\end{array} 12$
b) $50 \quad 45 \quad 40 \quad 35 \quad \underline{30} \quad 25$
g) $35 \quad 40 \quad 45 \quad 50 \quad \underline{55} \quad 60$
c) $\begin{array}{llllll}3 & 6 & 9 & 12 & 15 & 18\end{array}$
h) $111 \quad 101 \quad 91 \quad 81 \quad 71 \quad 61$
d) $90 \quad 80 \quad 70 \quad 60 \quad 50 \quad 40$
i) $\begin{array}{llllll}36 & 34 & 32 & 30 & 28 & 26\end{array}$
e) $16 \underline{26} \quad 36 \quad 46 \quad \underline{56} \quad 66$
j) $10 \quad 20 \quad \underline{30} \quad \underline{40} \quad 5060$

## Continue the following sequences:

k) $5 \quad 10 \quad 15 \quad \underline{20} \quad \underline{25} \quad \underline{30} \quad \underline{35} \quad \underline{40} \quad \underline{45} \quad \underline{50} \quad \underline{55} \quad \underline{60} \quad \underline{65} \quad \underline{70}$

1) $3 \quad 6 \quad 9 \quad 12 \quad \underline{15} \quad \underline{18} \quad \underline{21} \quad \underline{24} \quad \underline{27} \quad \underline{30} \quad \underline{33} \quad \underline{36} \quad \underline{39} \quad \underline{42}$

n) $14 \quad 24 \quad 34 \quad \underline{44} \quad \underline{54} \quad \underline{64} \quad \underline{74} \quad \underline{26} \quad \underline{26} \quad \underline{26} \quad \underline{26} \quad \underline{26} \quad \underline{26} \quad \underline{26}$
o) $2 \quad 4 \quad 6 \quad \underline{8} \quad \underline{10} \quad \underline{12} \quad 14 \quad \underline{16} \quad \underline{18} \quad \underline{20} \quad \underline{22} \quad \underline{24} \quad \underline{26} \quad \underline{28}$
p) $50 \quad 55 \quad 60 \quad 65 \quad \underline{70} \quad \underline{75} \quad \underline{80} \quad 85 \quad 90 \quad 95 \quad 100 \quad 105 \quad 110 \quad 115$
q) $45 \quad 42 \quad 39 \quad 36 \quad 33 \quad 30 \quad 27 \quad 24 \quad 21 \quad 18 \quad 15 \quad 12 \quad 9 \quad 6$
r) $70 \quad 68 \quad 66 \quad 64 \quad 62 \quad 60 \quad 58 \quad 56 \quad 54 \quad 52 \quad 50 \quad 48 \quad 46 \quad 44$


| 77 | 67 | 57 | 47 | 37 | 27 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Challenge: Choose a starting number and count in $2 \mathrm{~s}, 5 \mathrm{~s}$ or 10 s from that number. Can you think of a way in which counting in 5 s is different from counting in 2 s or 10 s ?

Place Value Worksheet 1

| Number | Words | Expanded Form | Picture |
| :---: | :---: | :---: | :---: |
| 12 | $\begin{aligned} & 1 \text { tens } \\ & 2 \text { ones } \end{aligned}$ | $\underline{10}+\underline{2}=\underline{12}$ | 00 |
| 18 | $\qquad$ 1 tens <br> 8 ones | $\underline{10}+\underline{8}=\underline{18}$ |  WWMTM |
|  | $\begin{gathered} 2 \text { tens } \\ 2 \text { ones } \end{gathered}$ | $20+\underline{2}=\underline{22}$ |  |
| $23$ | $\begin{gathered} 2 \\ \\ 3 \end{gathered} \text { tens }$ | $20+3=23$ |  |
| $35$ | $\begin{aligned} & 3 \text { tens } \\ & 5 \text { ones } \end{aligned}$ | $30+5=35$ |  |
| $46$ | 4 tens 6 ones | $40+\underline{6}=\underline{46}$ |  |
| $56$ | 5 tenc <br> 6 Or | $50 \quad 6 \quad 56$ |  |

Place Value Worksheet 2

| Number | Words | Expanded Form | Picture |
| :---: | :---: | :---: | :---: |
| 52 | $\begin{aligned} & 5 \text { tens } \\ & 2 \text { ones } \end{aligned}$ | $50+2=52$ |  |
| 39 | 3 tens 9 ones | $30+9=39$ |  |
| $27$ | $\begin{aligned} & 2 \text { tens } \\ & 7 \text { ones } \end{aligned}$ | $20+7=\underline{27}$ |  |
| $44$ | $\begin{aligned} & 4 \text { tens } \\ & 4 \text { ones } \end{aligned}$ | $40+4=44$ |  |
| $75$ | $\begin{aligned} & 7 \text { tens } \\ & 5 \text { ones } \end{aligned}$ | $70+5=42$ |  |
| $15$ | $\begin{aligned} & 1 \text { tens } \\ & 5 \text { ones } \end{aligned}$ | $10+5=15$ |  |
| $78$ | $\begin{aligned} & 7 \text { tens } \\ & 8 \text { ones } \end{aligned}$ | $70+8=78$ |  |

Place Value Worksheet 3

| Number | Words | Expanded Form | Picture |
| :---: | :---: | :---: | :---: |
| $33$ | 3 tens 3 ones | $30+3=33$ |  |
| $56$ | $\begin{aligned} & 5 \text { tens } \\ & 6 \text { ones } \end{aligned}$ | $50+6=56$ |  |
| $44$ | $\qquad$ tens $4 \text { ones }$ | $\underline{4}+\underline{4}=\underline{44}$ |  |
|  | $\qquad$ tens <br> 7 ones | $50+\underline{7}=\underline{57}$ |  |
| $64$ | 6 tens <br> 4 ones | $\underline{60}+\underline{4}=\underline{64}$ |  |
|  | $\qquad$ tens 6 ones | $80+6=86$ |  |
| $92$ | 9 tens 2 ones | $\underline{90}+\underline{2}=\underline{92}$ |  |

## Representing Numbers Worksheet 1

Draw an arrow to show the following numbers on the 0-100 number lines:


## Representing Numbers Worksheet 2

Draw an arrow to show the following numbers on the following number lines:


## Representing Numbers Worksheet 3

Draw an arrow to show the following numbers on the 0-100 number lines:

h) 87


## Representing Numbers Worksheet 4

Draw an arrow to show the following numbers on the following number lines:


## Greater Than and Less Than

Add $<$ or $>$ to the below number pairs to make them correct.

1) $12<15$
2) $30>22$
3) $100>91$
4) $46>41$
5) $22>18$
6) $64>46$
7) $92>20$
8) $22>20$
9) $70>67$
10) $25<30$
11) $30>24$
12) $21>11$

Great! Now try with pictures.


Can you give the below problems a number to make them right?

1) $22<30$
2) $14>10$
3) $82<90$
4) $97>80$
5) $17<20$
6) $28>1$
7) $99<100$
8) $33>29$
9) $50>\underline{20}$ 10) $66<\underline{75}$
10) $76>60$
11) $52<65$
12) $60>10$
13) $72<99$
14) $4>\quad 1$
15) $81<82$

Example answers give.

## Reading and Writing Numbers to 100 Worksheet - ANSWERS

Can you fill out any missing boxes for each of the numbers below? The first one has been done for you to show you what to do.

| Numerals | Number in Words | Tens | Ones | Illustration |
| :---: | :---: | :---: | :---: | :---: |
| 23 | twenty three | 2 | 3 |  |
| 17 | seventeen | 1 | 7 | $\text { 柬 } \theta \theta \theta \theta \theta \theta \theta \theta$ |
| 34 | thirty four | 3 | 4 |  |
| 56 | fifty six | 5 | 6 |  |
| 51 | fifty one | 5 | 1 |  |
| 49 | forty nine | 4 | 9 |  |
| 83 | eighty three | 8 | 3 |  |
| 42 | forty two | 4 | 2 |  |
| 77 | seventy seven | 7 | 7 |  |

## Challenge

| Numerals | Number in Words | Hundreds | Tens | Ones | Illustration |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 111 | one hundred and eleven | 1 | 1 | 1 |  |

## Place Value Challenge

To take part in this challenge, you will need a ten sided die. If you don't have one use a virtual dice site online.

Each time you roll a number, you must decide where to put it in the grid. The aim of the challenge is to make the value of the numbers increase each time, going on as long as you can. Follow this example through to help you think about the tactics of the game and how you can give yourself more chance to succeed.

| Tens | Ones | Action |
| :--- | :--- | :--- |
| 1 | 9 | First roll $=0-$ Placed in ones column in row 2 <br> Second Roll $=9$ - Placed in tens column in sixth row <br> Third Roll $=4$ - Placed in tens column in third row <br> Fourth Roll $=7$ - Placed in ones column fourth row <br> Fifth Roll $=6$ - Placed in tens column fourth row <br> Sixth Roll $=2-$ Placed in tens column second row <br> Seventh Roll $=3$ - Placed in ones column sixth row |
| 4 | 6 | 7 |
| 6 | 3 | Eighth Roll $=6$ - Placed in ones column third row <br> Ninth Roll $=3-$ Placed in ones column fifth row |
| 9 | Tenth Roll $=6-$ Placed in ones column seventh row <br> Eleventh Roll $=6$ FAIL - CAN'T MAKE A BIGGER NUMBER |  |
| Three bigger numbers made - points scored $=3$ |  |  |

Got it? You're ready to make a start. You could also print off another sheet to play against someone else.

| Tens | Ones | Points Scored |
| :---: | :---: | :---: |
| 0 | 9 |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |


| Tens | Ones | Points Scored |
| :---: | :---: | :---: |
| 1 | 3 |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |


| Tens | Ones | Points Scored |
| :---: | :---: | :---: |
| 1 | 9 |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

