## Year 3 Australian Maths Number and Place Value Workbook

Name: $\qquad$

| Australian Curriculum | Worksheet | Page Number | Notes |
| :---: | :---: | :---: | :---: |
| Investigate the conditions required for a number to be odd or even and identify odd and even numbers (ACMNA051) | Odd and Even Numbers Rule Worksheet | Page 1 |  |
| Recognise, model, represent and order numbers to at least 10000 (ACMNAO52) | Place Value to 4 Digits Worksheet <br> Place Value Ordering 4-Digit Numbers Worksheet | Page 2-3 |  |
| Apply place value to partition, rearrange and regroup numbers to at least 10000 to assist calculations and solve problems (ACMNA053) | Place Value of Numbers up to 10000 Worksheet <br> Non-Standard <br> Partitioning Worksheet | Page 4-5 |  |
| Recognise and explain the connection between addition and subtraction (ACMNA054) | Matching Equivalent <br> Addition and Subtraction <br> Number Sentences | Page 6 |  |


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| :---: | :---: | :---: | :---: |
| Recall addition facts for singledigit numbers and related subtraction facts to develop increasingly efficient mental strategies for computation (ACMNA055) | Addition and Subtraction Facts Speed Test | Page 7-8 |  |
| Recall multiplication facts of two, three, five and ten and related division facts (ACMNAO | 2, 3, 5 and 10 Times Tables Missing Numbers Worksheet Mixed Times Table Multiplication Wheels Worksheets | Page 9-10 |  |
| Represent and solve problems involving multiplication using efficient mental and written strategies and appropriate digital technologies (ACMNA057) | Colour by Multiplication Worksheet | Page 11 |  |
| Model and represent unit fractions including $1 / 2$, $1 / 4,1 / 3,1 / 5$ and their multiples to a complete whole (ACMNA058) | Year 3 Stained Glass Fractions Differentiated Worksheets | Page 12 |  |


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| :--- | :--- | :---: | :--- |
| Represent money <br> values in multiple <br> ways and count the <br> change required for <br> simple transactions <br> to the nearest five <br> cents (ACMNA059) | Calculating Change <br> Worksheets: Australia | Page <br> $13-15$ |  |
| Describe, continue, <br> and create <br> number patterns <br> resulting from <br> performing addition <br> or subtraction <br> (ACMNA060) | Identify the Number <br> Pattern Rule Activity | Page 16 |  |

## Odd and Even Number Rules Activity

I can explain what odd and even numbers are.

Here is a collection of numbers. Decide whether they are odd or even and write them under the correct heading in the table.

| 4 | 9 | 7 | 12 | 33 | 54 | 16 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 28 | 15 | 41 | 36 | 20 | 11 | 21 |


| Odd | Even |
| :--- | :--- |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

Is there a rule that you can think of for making it easier to identify if a larger number is odd or even? Explain your rule.

## Place Value to 4 Digits

| Number | Words | Expanded Form | Picture |
| :---: | :---: | :---: | :---: |
|  | $\qquad$ thousands $\qquad$ hundreds $\qquad$ tens $\qquad$ ones | $\begin{gathered} 1000+500+90+7 \\ = \end{gathered}$ |  |
|  | 2 thousands <br> 5 hundreds <br> 7 tens <br> 3 ones | $\begin{aligned} & +\cdots+ \\ & + \\ & = \end{aligned}$ |  |
| 1574 | $\qquad$ thousands $\qquad$ hundreds $\qquad$ tens $\qquad$ ones | $\begin{aligned} & \prod^{+}+ \\ & =- \end{aligned}$ |  |
| 2635 | $\qquad$ thousands $\qquad$ hundreds $\qquad$ tens $\qquad$ ones | $\begin{aligned} & \prod^{+}+{ }^{+}+ \\ & = \end{aligned}$ |  |
| 7354 | $\qquad$ thousands $\qquad$ hundreds $\qquad$ tens $\qquad$ ones | $\begin{aligned} & ]^{+}\right]^{+} \\ & =- \end{aligned}$ |  |
|  | $\qquad$ thousands $\qquad$ hundreds $\qquad$ tens $\qquad$ ones | $\begin{gathered} 2000+600+40+3 \\ = \end{gathered}$ |  |
|  | 5 thousands <br> 5 hundreds <br> 5 tens <br> 5 ones | $\begin{aligned} & ]^{+}\right]^{+} \\ & =- \end{aligned}$ |  |

## Ordering 4-Digit Numbers

| 2156 | 1211 | 5369 | 1456 | 5786 | 2191 | 6819 | 1126 | 9105 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 8888 |  |  |  |  |  |  |  |
| 2415 | 2399 | 1365 | 9499 | 5876 | 9091 | 5010 | 6151 | 8527 |

Compare and order the numbers above, from smallest to largest.


## Place Value of Numbers up to 10000

I can use partitioning to show my understanding of place value of three, four and five-digit numbers. (ACMNAO53)

Did you know that 3000 is made up of:

- 3 Thousands
- 30 Hundreds
- 300 Tens
- 3000 Ones

Write these numbers to show your understanding of place value.

1. $900=$ $\qquad$ Thousands or $\qquad$ Hundreds or $\qquad$ Tens or $\qquad$ Ones
2. $1000=$ $\qquad$ Thousands or $\qquad$ Hundreds or $\qquad$ Tens or $\qquad$ Ones
3. $6000=$ $\qquad$ Thousands or $\qquad$ Hundreds or $\qquad$ Tens or $\qquad$ Ones
4. $400=$ $\qquad$ Thousands or $\qquad$ Hundreds or $\qquad$ Tens or $\qquad$ Ones
5. $8000=$ $\qquad$ Thousands or $\qquad$ Hundreds or $\qquad$ Tens or $\qquad$ Ones
6. $2000=$ $\qquad$ Thousands or $\qquad$ Hundreds or $\qquad$ Tens or $\qquad$ Ones
7. $7000=$ $\qquad$ Thousands or $\qquad$ Hundreds or $\qquad$ Tens or $\qquad$ Ones
8. $9000=$ $\qquad$ Thousands or $\qquad$ Hundreds or $\qquad$ Tens or $\qquad$ Ones
9. $10000=$ $\qquad$ Thousands or $\qquad$ Hundreds or $\qquad$ Tens or $\qquad$ Ones
10. $3000=$ $\qquad$ Thousands or $\qquad$ Hundreds or $\qquad$ Tens or $\qquad$ Ones
11. $5000=$ $\qquad$ Thousands or $\qquad$ Hundreds or $\qquad$ Tens or $\qquad$ Ones

## Non-Standard Partitioning

When we partition numbers, we separate them into hundreds, tens and ones. Using the numbers below, partition them in a standard and a non-standard form. The first one has been done for you.

| 127 |  |
| :---: | :---: |
| Standard | Non-Standard |
| $100+20+7$ | $90+37$ |
| $120+7$ |  |


| 291 |  |
| :---: | :---: |
| Standard | Non-Standard |
|  |  |
|  |  |


| 562 |  |
| :---: | :---: |
| Standard | Non-Standard |
|  |  |
|  |  |


| 462 |  |
| :---: | :---: |
| Standard | Non-Standard |
|  |  |
|  |  |


| 711 |  |
| :---: | :---: |
| Standard | Non-Standard |
|  |  |
|  |  |


| 923 |  |
| :---: | :---: |
| Standard | Non-Standard |
|  |  |

# Matching Equivalent Addition and Subtraction Number Sentences 

## I can correctly match equivalent addition and

 subtraction number sentences. (ACMNA054)

Draw a line to correctly connect the equivalent addition and subtraction number sentences.

| 341-92 | $237+221$ |
| :---: | :---: |
| 845-77 | $282+351$ |
| 989-356 | $73+176$ |
| 824-169 | $250+118$ |
| 800-342 | $550+782$ |
| 675-307 | $287+261$ |
| 835-90 | $350+418$ |
| 918-157 | $436+219$ |
| 1000-452 | $428+317$ |
| 1438-106 | $624+137$ |

## Addition and Subtraction Facts to 50

See how long it takes you to complete all of these or give yourself a set amount of time (say 5 mins) and see how many you can do.

| $17+2=$ | 24-5 = | $10+20=$ | $15+3=$ | 21-9 = |
| :---: | :---: | :---: | :---: | :---: |
| 19-5 = | $16-12=$ | $10+26=$ | $1+13=$ | $23-3=$ |
| 15-15 = | 19-5 = | $11+31=$ | $17+3=$ | $12+22=$ |
| $1+44=$ | 29-11 = | $22+18=$ | $36-6=$ | 31-14 = |
| $20+30=$ | $21+16=$ | $20+16=$ | $36-4=$ | 42-6= |
| 25-7 = | $22+9=$ | $35-9=$ | $11+31=$ | $32+16=$ |
| $32-12=$ | $36+11=$ | 38-2 = | $33+1=$ | $37-5=$ |
| 40-5 = | $28+9=$ | $1+49=$ | $35+8=$ | 23-15 = |
| 34-11 = | $17+19=$ | 30-19 = | $38+4=$ | $32-16=$ |
| $42-7=$ | $44+5=$ | 48-9 = | 50-0 = | $3+38=$ |



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## Addition and Subtraction Facts to 100

See how long it takes you to complete all of these or give yourself a set amount of time (say 5 mins) and see how many you can do.

| $18+26=$ | 47-22 = | $79-23=$ | $81-11=$ | $56+31=$ |
| :---: | :---: | :---: | :---: | :---: |
| $91+8=$ | $93-7=$ | $89-10=$ | $12+67=$ | 98-1 = |
| $27+72=$ | 47-21 = | $88-12=$ | $80+19=$ | $73+9=$ |
| $37+59=$ | 64-11 = | 92-4 = | $59-44=$ | $80+11=$ |
| $76+22=$ | $73+18=$ | $59+35=$ | 45-17 = | $77-23=$ |
| $85-3=$ | 90-22 = | $62-45=$ | $57-43=$ | $72+3=$ |
| $0+100=$ | $88-10=$ | $81-60=$ | $41+26=$ | 97-3 = |
| $94-57=$ | $75-16=$ | $41+54=$ | $62-32=$ | $61-29=$ |
| 87-12 = | $84-6=$ | $89+5=$ | 86-47= | $62+16=$ |
| $33+28=$ | $74-21=$ | $93-7=$ | $96-52=$ | $32+30=$ |



# Times Table Hunt: 2x, 3x, $5 x$ and 10x Table 

The detective is on the hunt for some missing numbers from the $2 x, 3 x, 5 x$ and $10 x$ tables. Can you help him find them?

1. $2 \times 3=$
2. $7 \times 3=$
3. $7 \times=35$

4. $4 \times 5=$

10


5. 


12. $0 \times 5=$


## Multiplication Wheels



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## Colour by Multiplication

Do the multiplication calculation and colour the shape in the correct colour REGENT STUDIES F Focused education on if iss walk e
$0-10 \quad 11-20 \quad 21-30 \quad 31-40 \quad 41-50 \quad 51-60 \quad 61-70$
light blue purple yellow green orange dark blue


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## Stained Glass Fractions

Colour the windows to match the fractions listed.

$\frac{3}{4}$ : blue
$\frac{1}{4}$ : yellow
$\frac{1}{4}$ : yellow

$\frac{1}{6}$ : green
$\frac{2}{6}$ : yellow
$\frac{3}{6}$ : blue

$\frac{1}{10}$ : blue
$\frac{2}{10}$ : yellow
$\frac{3}{10}$ : red
$\frac{4}{10}$ : green

## Calculating Change

1. Draw the coins that you would receive as change if you bought these items with the money shown.

\$2

\$2.50

\$5
Change:

\$2.70


Change:

Change:

\$2


Change:
\$5


Change:
\$9

\$10
Change:

## Calculating Change

1. Draw the coins and write the amount that you would receive as change if you bought these items with the money shown.


60c
\$2.20


\$4


Change:

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## Identifying Number Pattern Rules

Work out what the number pattern rule is for each of these patterns. The pattern might be increasing (addition +) or decreasing (subtraction -).

Use the rule to help you complete the number patterns.


