

Stage 3

Outcomes Based

Assessment

Tasks

**NUMBER**

## STAGE 3 OUTCOME ASSESSMENT MAPPING GRID

<b>Stage of Task</b>	<b>3 NUMBER</b>
<b>Outcome</b>	<b>1. Whole Numbers</b>
<b>Outcome Descriptor</b>	<b>Counts, compares and orders whole numbers up to 7 digits, and represents them in symbols and words.</b>
<b>Stage</b>	<b>Number of Indicator Questions</b>
1	1
2	2
3	5

Question	1	2	3	4	5	6	7	8				
<b>Stage</b>	1	2	2	3	3	3	3	3				
<b>Indicator Description</b>												
<ul style="list-style-type: none"> <li>• counts backwards from any number up to 100 eg by ones, tens, twos</li> </ul>	*											
<ul style="list-style-type: none"> <li>• reads and writes numerals up to 9999</li> <li>• counts on and back from any number within the range 0 to 9999</li> <li>• writes and says the names for numbers less than 10 000 in words</li> </ul>		*										
<ul style="list-style-type: none"> <li>• renames numbers as groupings of 10s and 100s, eg 4320 is 43 hundreds and 2 tens</li> </ul>			*									
<ul style="list-style-type: none"> <li>• states the place value of any digit in a number</li> </ul>				*								
<ul style="list-style-type: none"> <li>• reads and represents numbers, including on a calculator</li> </ul>					*							
<ul style="list-style-type: none"> <li>• places a group of numbers in ascending or descending order</li> <li>• compares the relative size of two numbers</li> <li>• orders groups of numbers</li> </ul>						*						
<ul style="list-style-type: none"> <li>• says the name and writes the numeral for a number that is one more or less than a given number</li> </ul>							*					
<ul style="list-style-type: none"> <li>• states whether a number of up to one million is closer to either of two boundary numbers , eg is 290 000 closer to 200 000 or 300 000</li> </ul>								*				

**ASSESSMENT TASK FOR STAGE 3  
NUMBER 1: WHOLE NUMBERS**

**STAGE 1: 1 QUESTION**

1. Fill in the missing numbers in these number patterns.
- a) 3, 6, 9, 12, 15, \_\_\_\_\_, 21
- b) 22, 20, \_\_\_\_\_, 16, 14

**STAGE 2: 2 QUESTIONS**

2. a) What is the number immediately before 9 897? \_\_\_\_\_
- b) Now write your answer to part a) in words.
- 
- 

3. Circle the answer which correctly renames the number 4350.
- 43 thousands and 5 tens
  - 4 hundreds, 3 tens and 5 ones
  - 43 hundreds and 5 tens
  - 43 hundreds and 5 ones

**STAGE 3: 5 QUESTIONS**

4. a) Circle the digit which represents the place value *ten thousands* in 7 645 235.
- b) Circle the correct answer for the place value of the 8 in this number 4 893 670.
- Millions
  - Ten thousands
  - Hundred thousands
5. Write this number using numerals.  
Five million six hundred and two thousand and thirty-five
-

6. Circle the group of numbers which goes from greatest down to smallest.

4 567 209, 82 097, 1 675 432, 6 432

6 432, 1 675 432, 82 097, 4 567 209

4 567 209, 1 675 432, 82 097, 6 432

7. Circle the number which is ten more than 86 990

96 990

87 000

86 999

87 990

8. Circle the number which is closest to this number. 480 000

400 000

300 000

500 000

## STAGE 3 OUTCOME ASSESSMENT MAPPING GRID

<b>Stage of Task</b>	<b>3 NUMBER</b>
<b>Outcome</b>	<b>2: Fractions</b>
<b>Outcome Descriptor</b>	<p>a) Recognises and represents common fractions, decimals and percentages.</p> <p>b) Recognises and represents the relationships among hundredths when represented as common fractions, decimals and percentages, eg <math>48/100 = 0.48 = 48\%</math></p>
<b>Stage</b>	<b>Number of Indicator Questions</b>
1	1
2	2
3	5

Question	1	2	3	4	5	6	7	8					
<b>Stage</b>	1	2	2	3	3	3	3	3					
<b>Indicator Description</b>													
<ul style="list-style-type: none"> <li>• names a part of a group, eg one out of five</li> <li>• understands the meaning of half and quarter as quantities</li> </ul>	*												
<ul style="list-style-type: none"> <li>• represents hundredths and tenths on a calculator and matches with concrete materials</li> <li>• represents numbers in tenths and hundredths using grids</li> </ul>		*											
<ul style="list-style-type: none"> <li>• records tenths and hundredths in words and numerals</li> </ul>			*										
<ul style="list-style-type: none"> <li>• represents a decimal fraction using materials</li> <li>• represents a percentage using materials</li> </ul>				*									
<ul style="list-style-type: none"> <li>• recognises instances of percentage, decimal and common fraction notation in the environment and media</li> </ul>					*								
<ul style="list-style-type: none"> <li>• records hundredths as common fractions, decimals and percentages</li> </ul>						*							
<ul style="list-style-type: none"> <li>• represents and explains the equivalence between tenths and hundredths on a hundreds grid</li> <li>• represents and explains the equivalence between tenths and hundredths using concrete materials</li> </ul>							*						
<ul style="list-style-type: none"> <li>• uses the division key on a calculator to express simple common fractions as decimals</li> </ul>								*					

**ASSESSMENT TASK FOR STAGE 3  
NUMBER 2: FRACTIONS**

**STAGE 1: 1 QUESTION**

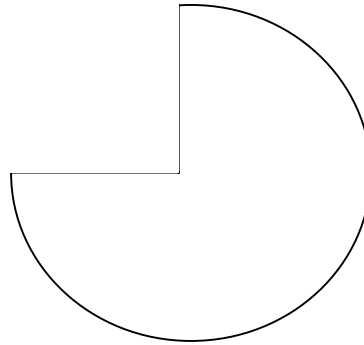
1. Circle the fraction below which indicates how much of the circle is missing

$\frac{1}{2}$

$\frac{3}{4}$

$\frac{1}{4}$

$\frac{5}{8}$

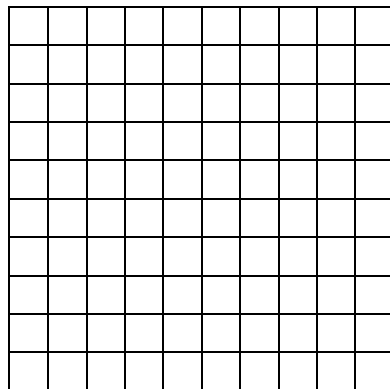


**STAGE 2: 2 QUESTIONS**

2. The display on my calculator shows

0.16
------

Colour the correct number of squares which would represent my calculator number this on the hundreds grid below. Each square on the grid represents one hundredth of the grid.



3. Circle the correct set of words for  $\frac{23}{100}$

Twenty-three thousandths

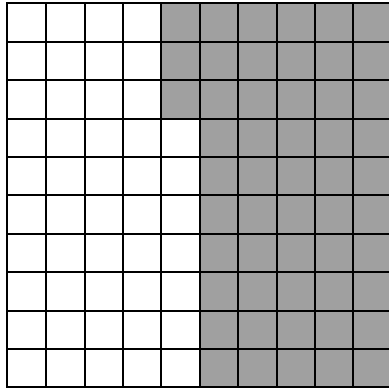
Twenty tenths and one hundredth

Twenty-three hundredths

One hundred and twenty-three tenths

**STAGE 3: 5 QUESTIONS**

4. a) Circle the decimal number below which represents the UNSHADED area of the grid. Each square on the grid represents one hundredth of the grid.



- 0.47
  - 1.00
  - 0.53
  - 0.67
- b) What percentage of the above grid is SHADED? Circle your answer below.
- 50%
  - 47%
  - 53%
  - 10%
5. Circle the word which describes the type of fraction in the sale sign below.

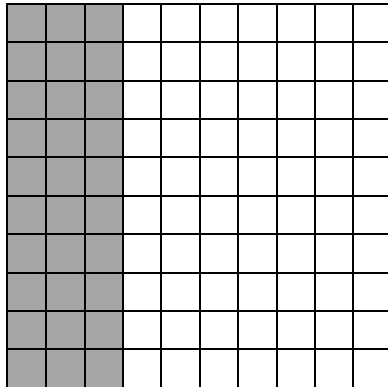
- Common fraction
- Percentage
- Decimal

SALE  $\frac{1}{3}$  OFF ALL SPORTS SHOES!

6. Complete the table below.

Fraction	Decimal	Percentage
$\frac{48}{100}$	0.48	48%
$\frac{15}{100}$		
		2%
	0.63	

7. Examine the hundredths grid below and answer the following questions.



a) How many hundredths are shaded? \_\_\_\_\_

b) How many tenths are shaded? \_\_\_\_\_

8. Which set of keys on a calculator would you press to change  $\frac{7}{8}$  into a decimal?

Circle your answer below

$8 \div 7 =$

$7 \times 8 =$

$7 \div 8 =$

$8 \times 7 =$

## STAGE 3 OUTCOME ASSESSMENT MAPPING GRID

<b>Stage of Task</b>	<b>3 NUMBER</b>
<b>Outcome</b>	<b>3. Number Facts</b>
<b>Outcome Descriptor</b>	<b>Recalls division facts up to 100 and uses them in everyday situations.</b>
<b>Stage</b>	<b>Number of Indicator Questions</b>
1	1
2	3
3	4

Question	1	2	3	4	5	6	7	8				
<b>Stage</b>	1	2	2	2	3	3	3	3				
<b>Indicator Description</b>												
<ul style="list-style-type: none"> <li>• models subtraction facts using discrete materials</li> <li>• records subtraction facts in vertical and horizontal arrangements</li> </ul>	*											
<ul style="list-style-type: none"> <li>• identifies patterns in addition facts and related subtraction facts</li> <li>• investigates and recognises patterns when a single digit is subtracted or added to a set of numbers</li> </ul>		*										
<ul style="list-style-type: none"> <li>• makes and explains patterns on a hundreds chart by recording the answers for multiplication facts</li> </ul>			*									
<ul style="list-style-type: none"> <li>• makes and explains patterns on a hundreds chart by recording the answers for multiplication facts</li> </ul>				*								
<ul style="list-style-type: none"> <li>• completes a tables grid involving facts in random order</li> </ul>					*							
<ul style="list-style-type: none"> <li>• uses known multiplication facts to calculate unknown division facts, eg uses <math>7 \times 3 = 21</math> (<math>21 \div 7 = 3</math>) to calculate <math>42 \div 7 = 6</math></li> <li>• uses memorised multiplication facts to recall division facts</li> </ul>						*						
<ul style="list-style-type: none"> <li>• uses skip counting to mentally calculate division facts</li> </ul>							*					
<ul style="list-style-type: none"> <li>• uses known multiplication facts to calculate unknown division facts, eg uses <math>7 \times 3 = 21</math> (<math>21 \div 7 = 3</math>) to calculate <math>42 \div 7 = 6</math></li> </ul>								*				

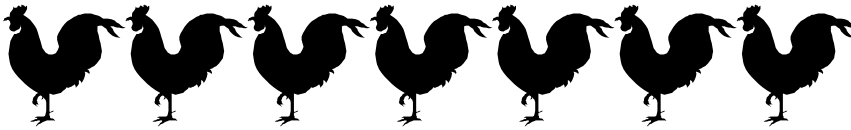
**ASSESSMENT TASK FOR STAGE 3  
NUMBER 3: NUMBER FACTS**

**STAGE 1: 1 QUESTION**

1. Complete these number sentences.



a) 5 frogs take away 2 frogs = \_\_\_\_\_



b) 
$$\begin{array}{r} 7 \\ - 3 \\ \hline \end{array}$$

**STAGE 2: 3 QUESTIONS**

2. Circle the sentence which describes this number pattern. 15, 12, 9, 6, ...

- The numbers are going up by 3 each time.
- 3 is being subtracted from each number.
- Each number is a multiple of 4.
- Each number is being divided by 3.

3. On the hundreds chart below

a) colour the 5x table

b) colour the 9x table up to 9x9

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	79	89	90
91	92	93	94	95	96	97	98	99	100

4. Use the hundreds chart or your knowledge of the multiplication tables to find the answers to

a)  $3 \times 9 = \underline{\quad}$

b)  $4 \times 5 = \underline{\quad}$

c)  $9 \times 9 = \underline{\quad}$

**STAGE 3: 4 QUESTIONS**

5. Complete the tables grid.

x	7	9	4	3
5	35			
8				
7				
4				

6. A factory produces 9 trucks in a day. How many days would it take to make 810 trucks. Circle your answer.

- 81 days
- 9 days
- 100 days
- 90 days

7. Use this sequence of numbers to answer the following questions.

7, 14, 21, 28, 35, 42, 49

a)  $49 \div 7 = \underline{\quad}$

b) How many 7's in 28?  $\underline{\quad}$

c)  $42 \div ? = 7$

8. Circle the multiplication fact which would help you calculate  $54 \div 9 = 6$

$5 \times 4 = 20$

$3 \times 3 = 9$

$3 \times 9 = 27$

## STAGE 3 OUTCOME ASSESSMENT MAPPING GRID

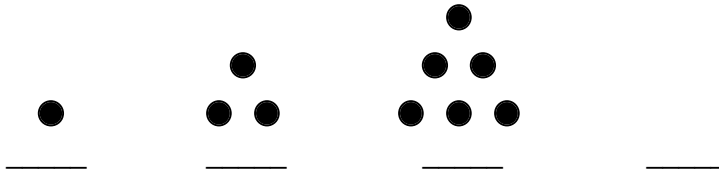
<b>Stage of Task</b>	<b>3 NUMBER</b>
<b>Outcome</b>	<b>4. Number Operations</b>
<b>Outcome Descriptor</b>	<b>Counts, compares, orders and calculates with decimals (up to two places) including multiplying and dividing by whole numbers up to 10.</b>
<b>Stage</b>	<b>Number of Indicator Questions</b>
1	1
2	3
3	4

Question	1	2	3	4	5	6	7	8				
<b>Stage</b>	1	2	2	2	3	3	3	3				
<b>Indicator Description</b>												
<ul style="list-style-type: none"> <li>• writes a pattern of numbers to fit a dot pattern</li> <li>• continues or fills in number sequences</li> </ul>	*											
<ul style="list-style-type: none"> <li>• uses multiplication facts to work out division facts</li> </ul>		*										
<ul style="list-style-type: none"> <li>• relates addition and subtraction to a written method using concrete material</li> </ul>			*									
<ul style="list-style-type: none"> <li>• uses sharing (more than one at a time) to solve division problems</li> <li>• uses multiplication facts to work out division facts</li> </ul>				*								
<ul style="list-style-type: none"> <li>• adds tenths and hundredths in the decimal form</li> <li>• subtracts tenths and hundredths in the decimal form</li> <li>• multiplies tenths and hundredths by whole numbers up to 10</li> <li>• divides tenths and hundredths by whole numbers up to 10</li> </ul>					*							
<ul style="list-style-type: none"> <li>• compares and orders decimals with up to 2 decimal places</li> </ul>						*						
<ul style="list-style-type: none"> <li>• counts by ones, tenths or hundredths, on and back from a decimal number</li> </ul>							*					
<ul style="list-style-type: none"> <li>• uses a calculator to identify a decimal fraction which could be multiplied by a given whole number to produce an answer within a specified range, eg what number could you multiply by 100 to get an answer between 150 and 200?</li> </ul>								*				

**ASSESSMENT TASK FOR STAGE 3  
NUMBER 4: NUMBER OPERATIONS**

**STAGE 1: 1 QUESTION**

1. Draw the next dot pattern in the sequence and write the numbers of dots on the lines below.



**STAGE 2: 3 QUESTIONS**

2. Circle the division fact which relates to  $4 \times 4$

- $16 \div 2$
- $16 \div 4$
- $16 \div 8$

3. Use the number line below to work out the answer to  $18 + 23$ . Make sure you also write your answer to the question.



4. **20 students have to sit at tables in groups of 4 students. Circle the number sentence which you would use to work out how many tables were needed.**

- $20 \div 4 = 5$
- $5 + 5 + 5 + 5 = 20$
- $4 \times 3 + 8 = 20$

### STAGE 3: 4 QUESTIONS

5. Tick the number sentences which are correct. (You may use a calculator)

$0.2 + 0.58 = 0.78$

$7/100 \times 6 = 21/50$

$0.24 \div 6 = 0.44$

$1.3 + 0.67 = 1.67$

$0.32 \times 10 = 3.2$

$0.86 - 0.28 = 1.14$

6. Circle the biggest number and underline the smallest number.

2.84    1.62    0.03    0.79    7.90    0.97

7. Write the next number in the series.

a) 0.8, 0.7, 0.6, \_\_\_\_\_

b) 2.87, 2.88, 2.89, \_\_\_\_\_

8. Circle the numbers which, when multiplied by 10, will give an answer between 100 and 200.

6.24

13.08

19.99

0.15

## STAGE 3 OUTCOME ASSESSMENT MAPPING GRID

<b>Stage of Task</b>	<b>3 NUMBER</b>
<b>Outcome</b>	<b>5: Applying Number</b>
<b>Outcome Descriptor</b>	<b>Selects and uses appropriate mental, written and calculator techniques to approximate and calculate solutions to problems involving whole numbers, money and decimal fractions.</b>
<b>Stage</b>	<b>Number of Indicator Questions</b>
1	1
2	2
3	5

Question	1	2	3	4	5	6	7	8				
<b>Stage</b>	1	2	2	3	3	3	3	3				
<b>Indicator Description</b>												
<ul style="list-style-type: none"> <li>represents and describes combinations of coins which make up to a coin of higher value</li> </ul>	*											
<ul style="list-style-type: none"> <li>estimates answers by rounding, eg \$4.95 is about \$5 so \$30 will be enough for; 119km and 78km is close to 200km so 160km must be a wrong answer</li> </ul>		*										
<ul style="list-style-type: none"> <li>makes an appropriate choice between addition, subtraction, multiplication and division to solve problems</li> </ul>			*									
<ul style="list-style-type: none"> <li>solves realistic money problems, eg which is the better buy – pack of 2 for \$1.40 or pack of 6 for \$3.60?</li> </ul>				*								
<ul style="list-style-type: none"> <li>solves problems involving decimal fractions, eg what is the area of a paddock 3.3km long and 2km wide?</li> </ul>					*							
<ul style="list-style-type: none"> <li>predicts the number of possible outfits arising from 3 different t-shirts and 2 different pairs of shorts</li> </ul>						*						
<ul style="list-style-type: none"> <li>uses multiplication facts to justify the answer to a division question involving whole numbers up to 100</li> </ul>							*					
<ul style="list-style-type: none"> <li>interprets the answer to a division question in the context of a problem, eg realising that the answer to 48 / 5 needs to be rounded up if the problem involves the number of cars needed to take 48 people to an event</li> </ul>								*				

**ASSESSMENT TASK FOR STAGE 3  
NUMBER 5: APPLYING NUMBER**

**STAGE 1: 1 QUESTION**

1. Circle the group of coins which is equal to \$2.00

- 3 x 50c   2 x 20c   1 x 5c
- 10 x 10c   5 X 20c   1 X 5c
- 1 x \$1   1 x 50c   1 x \$2

**STAGE 2: 2 QUESTIONS**

2. Round \$4.95 to the nearest whole dollar. Circle the correct answer.

- \$4
- \$3
- \$5
- \$10

3. Ninety apples were shared equally into 10 bags. Find out how many apples were in each bag. Circle the number fact you would use to work out the correct answer.

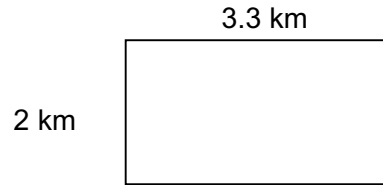
- $90 + 10$
- $90 - 10$
- $90 \div 10$
- $10 \times 90$

**STAGE 3: 5 QUESTIONS**

4. One chocolate bar costs \$1.25, a double pack costs \$2.40 and a pack of 6 costs \$7.50. Which would be the best buy? Circle your answer.

- Single chocolate bar
- Double pack
- Pack of 6

5. Circle the area of the paddock in the list below



- 5.3 km
  - 6.6 square km
  - 5.3 square km
  - 6.6 km
6. If Bill has a blue t-shirt, a white t-shirt and a red t-shirt, and 1 pair of black shorts and 1 pair of denim shorts, circle the number of different outfits he could wear.
- 9
  - 6
  - 3
  - 5
7. Which multiplication fact would help you work out how to share \$65 among 5 people? Circle your answer.
- $5 \times 10$
  - 13 groups of 5
  - 3 groups of 15
  - $65 \times 5$
8. 38 people are going to a wedding. Each taxi holds 4 people. How many taxis will be needed? Circle your answer.
- 7
  - 10
  - 9
  - 8