



The Wilkie Way

NZ Curriculum Mathematical Number Knowledge & Skills Assessment Screen Four Odd Year

Student Name _____

Year Group _____

Area of Mathematics		
Whole numbers	/24	
Addition & Subtraction	/14	
Multiplication & Division	/20	
Fractions	/20	
Decimals & Percentages	/22	
Total	/100	

Comments:

	Begin Year 7	End Year 7/Begin Year 8	End Year 8
Overall			
Whole numbers			
Add/Sub			
Mult/Div			
Fractions			
Decimals & %			

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Before you start this booklet complete the headings in this place value chart. This may assist you with answering question 1

								ones

What do you know about numbers?

1. Write the following numbers.

a. two hundred and forty thousand six hundred and three

b. thirty four million nine hundred and seven thousand two hundred and sixty one

c. five million and twenty _____

2. Write the numbers

a. 10^2 _____

b. 10^6 _____

c. 10^3 _____

3. How many whole groups of 10 in each of these numbers?

a. 739 _____

b. 4857 _____

c. 42 583 _____

4. Complete the tables by rounding the number in the first column.

a.	to the closest 10	to the closest 100	to the closest 1000
54 931			

b.	to the closest whole number	to the closest tenth	to the closest hundredth
36.857			

5. Complete the following

a. 24.84×10

b. 576×100

c. 6.39×1000

d. $3000 \div 10$

e. $4396 \div 100$

f. $324 \div 1000$

6. Write the answers

a. 27.8×10^2

b. 7.68×10^4

c. $364.7 \div 10^3$

Score: /24

**What do you know about addition and subtraction?
Solve these equations mentally. Write the answer only.**

1a. $345 + 198 = \underline{\hspace{2cm}}$

b. $673 - 199 = \underline{\hspace{2cm}}$

Use a written method to solve these equations.

2a. $2548 + 764 =$

b. $3324 - 576 =$

3a. $387 + \underline{\hspace{2cm}} = 632$

b. $742 - \underline{\hspace{2cm}} = 286$

4a. $634.8 + 87.66 =$

b. $832.4 - 56.82 =$

Estimate the answer to the following equations to the closest hundred.

5a. $5364 + 883 = \underline{\hspace{2cm}}$

b. $9787 - 3472 = \underline{\hspace{2cm}}$

Solve the following equations

a. $(-5) + 8 = \underline{\hspace{2cm}}$

b. $(-4) + (-5) = \underline{\hspace{2cm}}$

c. $5 - (-7) = \underline{\hspace{2cm}}$

d. $(-9) - (-4) = \underline{\hspace{2cm}}$

Score: /14

What do you know about multiplication and division?

1a. Write all the factors of 32 _____

b. Circle all of the square numbers 24 25 40 64 72 84

c. What is the lowest common multiple of 2, 4 and 7 _____

d. What is the square root of 36 _____

e. What is the highest common factor of 48 and 72 _____

f. Circle the prime number 8 18 27 37 45 63

Solve the following equations and show how you arrived at your answer.

2a. $138 \times 24 =$

b. $257 \times 146 =$

3a. $446 \div 7 =$

b. $2563 \div 8 =$

4a. $6 \times 0.45 =$

b. $0.8 \times 6.34 =$

5. Show the remainder as a fraction or decimal

a. $6435 \div 6 =$

b. $2367 \div 4 =$

Estimate the answer to the following equations to the closest hundred.

6a. $473 \times 6 =$ _____

b. $821 \times 9 =$ _____

7a. $576 \div 3 =$ _____

b. $2417 \div 6 =$ _____

Write out the equation and give the answer

8a. 2^3 _____

b. 3^4 _____

Score: /20

What do you know about fractions?

1. Circle the fractions greater than $\frac{1}{2}$ $\frac{5}{8}$ $\frac{3}{7}$ $\frac{14}{20}$ $\frac{21}{4}$

2. Choose the correct fraction from the table equivalent to the fraction given.

$\frac{14}{6}$	$\frac{21}{12}$	$\frac{12}{18}$	$\frac{15}{24}$
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a. $\frac{2}{3}$ _____ b. $2\frac{1}{3}$ _____ c. $\frac{5}{8}$ _____ d. $\frac{7}{4}$ _____

Write these fractions where they belong on the number line

3a. $\frac{1}{3}$ b. $\frac{4}{6}$ c. $1\frac{1}{3}$ d. $\frac{18}{9}$



4. Add these fractions and write answer in simplest form.

a. $\frac{3}{4} + \frac{3}{8} =$ b. $\frac{2}{5} + \frac{4}{15} =$ c. $\frac{3}{8} + \frac{5}{6} =$

5. Subtract these fractions and write the answer in simplest form.

a. $\frac{4}{5} - \frac{3}{10} =$ b. $2\frac{2}{3} - \frac{5}{6} =$ c. $\frac{3}{4} - \frac{4}{7} =$

6a. $\frac{3}{4}$ of 32 = _____

b. $\frac{5}{8}$ of 64 _____

c. $\frac{7}{5}$ of 40 = _____

d. $\frac{3}{5}$ of _____ = 18

Score: /20

What do you know about decimals and percentages?

1. Write these numbers in order from smallest to largest.

a. 0.35 0.276 0.5 0.068 0.91 _____

b. 4.5 4.54 4.054 4.504 4.45 _____

c. 0.31 $\frac{3}{10}$ 3×10^{-2} _____

d. $\frac{3}{4}$ 60% 0.8 7×10^{-1} _____

2. Estimate the answer to the closest whole number

a. $34.687 + 24.7 =$ _____ b. $42.86 + 34.99 =$ _____

c. $79.22 - 34.9 =$ _____ d. $68.76 - 21.99 =$ _____

3. Write these fractions as decimal numbers.

a. $\frac{3}{5}$ _____ b. $\frac{5}{20}$ _____ c. $\frac{25}{4}$ _____ d. $\frac{5}{8}$ _____

4. Write these fractions as a percentage

a. $\frac{1}{8}$ _____ b. $\frac{4}{5}$ _____ c. $\frac{13}{25}$ _____ d. $\frac{9}{20}$ _____

5. Find

a. 20% of 142 _____ b. 60% of 242 _____ c. 25% of 96 _____

6. What is the whole amount?

a. 25% of _____ = 60 b. 75% of _____ = 36 c. 20% of _____ = 60

Score: /22

