	7 Mathematics
	PRACTICE ALT 2: Decimals
	Name:

SANDRINGHAM COLLEGE

DESCRIPTION

In this Assessed Learning Task, you will use you understanding of decimals to answer a variety of questions using the skills listed in the rubric.

Extension	*This section will test your understanding of enrichment levels skills and how you apply enrichment level skills in problem solving and reasoning sections.*
Core	*This section will test your understanding of core levels skills and how you apply core level skills in problem solving and reasoning sections.*
Entry	*This section will test your understanding of entry levels skills and how you apply entry level skills in problem solving and reasoning sections.*

This ASSESSED LEARNING TASK will be used to measure your growth and achievement against the skills and understandings in the unit of work studied before this assessment.

Type of Task:	Test in two sections	
Conditions:	**Section 1:** 60 mins writing time • Technology free • Workbook	**Section 2:** 30 mins writing time • Scientific calculator • Workbook
Materials Allowed	• *Workbook* • *Pen / pencil / eraser*	

KEY SKILLS

	Entry	**Core**	**Enrichment**
Decimal place value, rounding, and ordering decimals	State the place value of a digit in a decimal	Round decimals to a give number of decimal places	Compare decimals using <, = or >
Multiplying and dividing by powers of 10	Multiply and divide whole numbers by 10	Multiply and divide decimals numbers by 10	Multiply and divide decimal numbers by 100, and other powers of 10
Adding and subtracting numbers	Part 1: Use the addition algorithm to add whole numbers Part 2: Use the subtraction algorithm to find the difference between whole numbers	Add and subtracting decimal numbers	Use the addition and subtraction algorithm to add and subtract negative decimals
Multiplying numbers	Use the multiplication algorithm to multiply by a single digit number	Use the multiplication algorithm to multiply two decimals ("single digit")	Use the multiplication algorithm to multiply two decimals ("two-digit")
Dividing numbers	Calculate divisions with remainders	Use the division algorithm to divide by a single digit number	Part 1: Divide by a decimal number Part 2: Solve equations involving decimals
Percentage of a number	Convert percentages to decimals	Calculate the percentage of a number	Calculate the percentage of a number (could include decimals or values greater than 100%)
Applications	Apply entry level skills in a context and explain reasoning	Apply entry level skills in a context and explain reasoning	Apply extension level skills in a context and explain reasoning

Student Declaration

By submitting this task I declare that this assessment is my individual work after seeking and receiving feedback from my peers and teacher. I have not copied from another student's work or from any other source, except where due acknowledgement is made explicit, nor has any part being written or completed for me by another person.

1. What is the place value of the underlined number in the following? *[1A]*

   17.0$\underline{2}$6

2. Calculate the following. *[2A]*
   a. $430 \div 10$ b. 150×10

3. Calculate the following. *[3A.Part 1&2]*

   a. $1637 + 926$ b. $2153 - 529$

4. Calculate the following. *[4A]*

   8×623

5. Calculate the following. The answer to part b. is in the form __ rem. ___ *[5A]*

   a. $15 \div 5$ b. $19 \div 5$

6. Convert the following percentages to a decimal. *[6A]*

   a. 6%   b. 30%

1. Round each number to the number of decimal places indicated. *[1B]*

   a. 2.2793 (2 dp.)   b. 12.72927 (3 dp.)

2. Calculate the following. *[2B]*

   a. 5.3×10 b. $0.35 \div 10$

3. Calculate the following. *[3B]*

   $15.7 + 8.46$

4. Calculate the following. *[4B]*

   0.06×5.72

5. Calculate the following. *[5B]*

   $3216 \div 8$

6. Calculate the following. *[6B]*

   60% of 520

1. Put a $<$, $=$ or $>$ between the decimals. *[1C]*

    17.6   17.06

2. Calculate the following. *[2C]*

    0.2×10^2

3. Calculate the following. *[3C]*

    $^-353 - \ ^-772$

4. Calculate the following *[4C, 5C Part 1]*

    0.52×1.034 $13.61 \div 0.05$

5. Solve the following. *[5C Part 2]*

    $5(x + 7) = 12.56$

6. Calculate 0.45% of 67300 *[6C]*

1. Round the recurring decimals to the number of decimal places requested.

    $0.35\overline{9}$ (4 dp.)

2. Convert the following.

    $3.56m$ to mm

3. Substitute $a = 8.97$ and $b = {}^{-}12.2$ into $a + b$.

4. Estimate the missing value in the following:

    $3.2102 \times \boxed{} = 0.0958695$

5. Write an equation to represent the following and then solve it to find the mystery number.

   When I subtract 4.6 from my number and divide it by 0.7 the answer is 1.12

6. Decrease 900 by 1.3%

7. 12% of some value is 4.116. Work out the original value.

Student Name……….…..……………

Technology Active – Calculator Allowed

APPLICATION QUESTIONS

1.

Shana buys the items shown.

$6.10

$3.50

$14.40

She gives the shop owner $30.

How much change should Shana get?

$6	$7	$24	$54
⬭	⬭	⬭	⬭

2.

A baker uses 12.5 kilograms of flour each day.

Flour costs $3.62 per kilogram.

FLOUR

What is the cost of the flour used each day?

$ [   ]

3.

The table below lists the original price and the amount of discount of the same shirt at four different shops.

SHIRT SALE		
Shop	Original price	Discount
A	$20	25%
B	$24	$\frac{1}{3}$
C	$30	30%
D	$18	$2 off

Which shop has the lowest sale price for the shirt?

A   B   C   D

○   ○   ○   ○

4.

Find the value of x if the average of the numbers below is 13.2. Make sure to show your use of opposite operations.

$$x, 20, 12.7, 5.2, 9$$

1.   Kylie is calculating $432 - 91$. Her working out is shown below.

$$
\begin{array}{r}
432 \\
-\ 91 \\
\hline
461 \\
\end{array}
$$

What error did Kylie make? Is Kylie's answer bigger or smaller than you would have expected it to be?

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2.   George says that when you multiply a number by 10 you add a zero on the end of it. Katie says that's not always true. Who do you agree with and why? Give an example to justify your reasoning.

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3. George says that 0.37 is 37 tenths. Explain why George is incorrect.

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4. Explain why $a\%$ of b has the same value as $b\%$ of a. You can use an example to support your reasoning.

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