

ARE YOU READY TO DOWNLOAD TESTS FOR EVERY YEAR 4 MATHS OUTCOME?



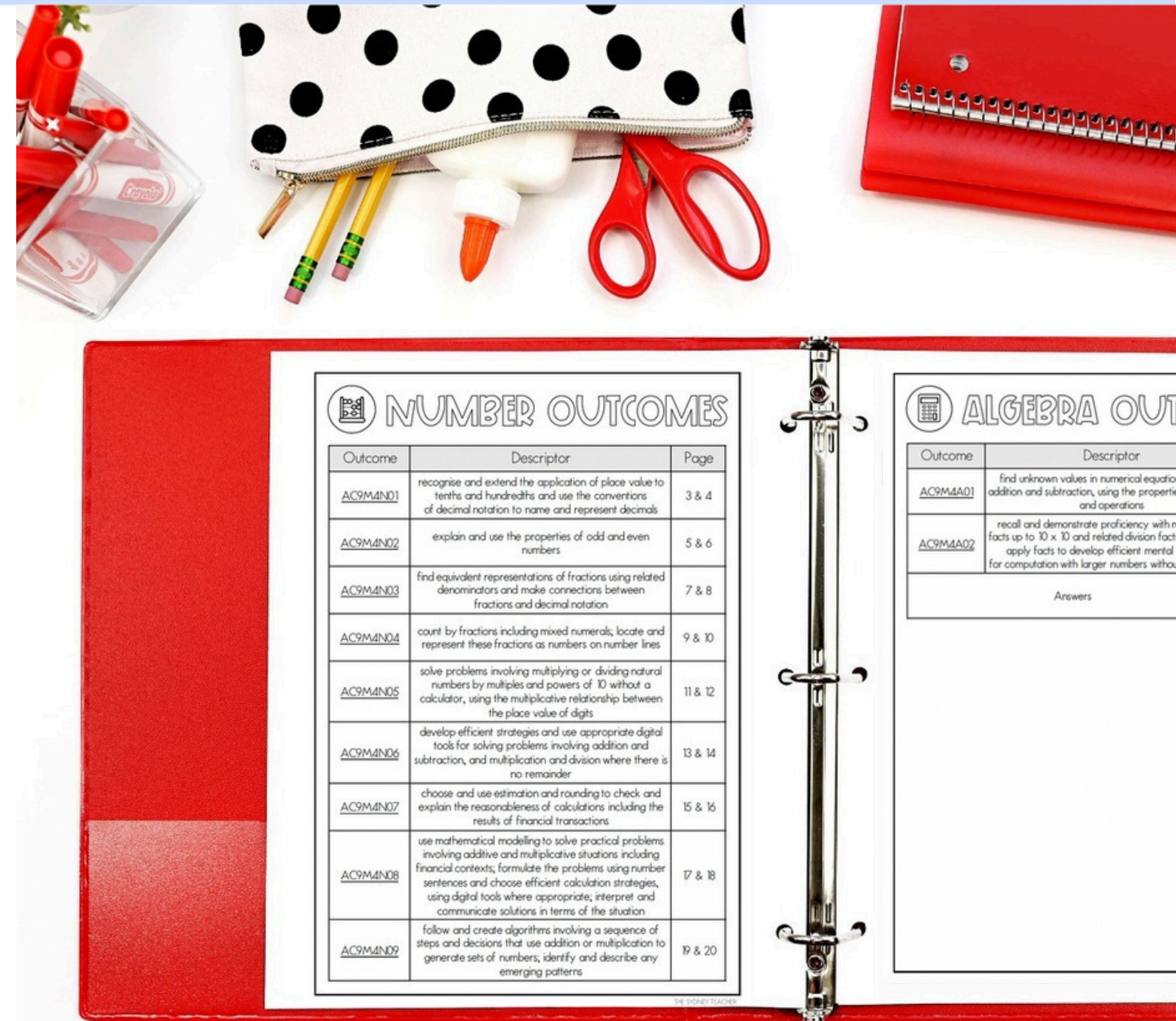
Includes a pre and post-test for all 23 Maths outcomes



Aligned to the new Australian Curriculum (V9.0)



Includes an editable spreadsheet for you to compare pre and post test results



TESTS FOR ALL 23 OUTCOMES!



ALGEBRA OUTCOMES

Outcome	Descriptor
AC9M4A01	find unknown values in numerical equations involving addition and subtraction, using the properties of addition and operations
AC9M4A02	recall and demonstrate proficiency with multiplication facts up to 10×10 and related division facts; apply facts to develop efficient mental strategies for computation with larger numbers without a calculator
Answers	



NUMBER OUTCOMES

Outcome	Descriptor
AC9M4N01	recognise and extend the application of place value to tenths and hundredths and use the conventions of decimal notation to name and represent decimals
AC9M4N02	explain and use the properties of odd and even numbers
AC9M4N03	find equivalent representations of fractions using related denominators and make connections between fractions and decimal notation
AC9M4N04	count by fractions including mixed numerals; locate and represent these fractions as numbers on number lines
AC9M4N05	solve problems involving multiplying or dividing natural numbers by multiples and powers of 10 without a calculator, using the multiplicative relationship between the place value of digits
AC9M4N06	develop efficient strategies and use appropriate digital tools for solving problems involving addition and subtraction, and multiplication and division where there is no remainder
AC9M4N07	choose and use estimation and rounding to check and explain the reasonableness of calculations including the results of financial transactions
AC9M4N08	use mathematical modelling to solve practical problems involving additive and multiplicative situations including financial contexts; formulate the problems using number sentences and choose efficient calculation strategies, using digital tools where appropriate; interpret and communicate solutions in terms of the situation
AC9M4N09	follow and create algorithms involving a sequence of steps and decisions that use addition or multiplication to generate sets of numbers; identify and describe any emerging patterns



MEASUREMENT OUTCOMES

Outcome	Descriptor
AC9M4M01	interpret unmarked and partial units when measuring and comparing attributes of length, mass, capacity, duration, temperature, using scaled and digital instruments and appropriate units
AC9M4M02	recognise ways of measuring and approximating the perimeter and area of shapes and enclosed spaces, using appropriate formal and informal units
AC9M4M03	solve problems involving the duration of time including situations involving "am" and "pm" and conversions between units of time
AC9M4M04	estimate and compare angles using angle names including acute, obtuse, straight angle, reflex and revolution and recognise their relationship to a right angle



SPACE OUTCOMES

Outcome	Descriptor
AC9M4SP01	represent and approximate composite shapes and objects in the environment, using combinations of familiar shapes and objects
AC9M4SP02	create and interpret grid reference systems using grid references and directions to locate and describe positions and pathways
AC9M4SP03	recognise line and rotational symmetry of shapes and objects; identify symmetrical patterns and pictures, using dynamic geometry software where appropriate

Answers



STATISTICS OUTCOMES

Outcome	Descriptor	Page
AC9M4ST01	acquire data for categorical and discrete numerical variables to address a question of interest or purpose, using digital tools; represent data using many-to-one pictographs, column graphs and other displays or visualisations; interpret and discuss the information that has been created	2 & 3
AC9M4ST02	analyse the effectiveness of different displays or visualisations in illustrating and comparing data distributions, then discuss the shape of distributions and the variation in the data	4 & 5
AC9M4ST03 (see note below)	conduct statistical investigations, collecting data through survey responses and other methods; record and display data using digital tools; interpret the data and communicate the results	6 & 7



PROBABILITY OUTCOMES

Outcome	Descriptor	Page
AC9M4P01	describe possible everyday events and the possible outcomes of chance experiments and order outcomes or events based on their likelihood of occurring; identify independent or dependent events	8 & 9
AC9M4P02 (see note below)	conduct repeated chance experiments to observe relationships between outcomes; identify and describe the variation in results	10 & 11

Answers

12 - 21

IMPORTANT NOTE:

Pre and post tests for outcome [AC9M4ST03](#) will require 10 coloured blocks for each student
Pre test for outcome [AC9M4P02](#) will require a coin for each student
Post test for outcome [AC9M4P02](#) will require a die for each student

INCLUDES ALL THESE AND MORE!

MEASUREMENT

Outcome AC9M4M01: interpret unmarked and partial units when comparing attributes of length, mass, capacity, duration and temperature, using scaled and digital instruments and appropriate units

PRE TEST Term: 1 2 3 4 Week: 1 2 3 4 5

- Use a ruler to draw lines the following lengths:
 - 4cm
 - 5.5cm
 - 50mm
 - 35mm
- What is the difference in length between line A and B?
- Record the mass shown on each scale including the appropriate unit of measurement for the object:
 -
 -
- What is the difference in mass between the two objects?
- Match the measurement to the correct milk container:
 - 2L
 - 1L
 - 35L
- What is the difference between the smallest container?
- Record the times shown on the clocks:
 -
 -
 -
 -
- How much time has elapsed between clock a and b?
- Record the temperature on the thermometer:
 -
 -
- What is the difference between the two temperatures?

SPACE

Outcome AC9M4SP02: create and interpret grid reference systems and directions to locate and describe positions on a map

PRE TEST Term: 1 2 3 4 Week: 1 2 3 4 5

- Use grid references to describe the positions of the following places:

Place	Grid Reference
A	
B	
C	
D	
- Complete the following on the map above:
 - Record an X in D1
 - Colour the building in C3
 - Draw a path from A to D
- Using the map above, follow the directions to record the final position:
 - Starting in A4, travel north 1 grid space then east 1 space. What is your final position?
 - Starting on the road north of the lake, travel to the eastern end of the road. What is your final position?
- Write directions for the most direct path from A1 to D3:

MEASUREMENT ANSWERS

Outcome AC9M4M01: interpret unmarked and partial units when measuring and comparing attributes of length, mass, capacity, duration and temperature, using scaled and digital instruments and appropriate units

PRE TEST Term: 1 2 3 4 Week: 1 2 3 4 5 6 7 8 9 10 11

- Use a ruler to draw lines the following lengths:
 - 4cm
 - 5.5cm
 - 50mm
 - 35mm
- What is the difference in length between line A and B? **15cm**
- Record the mass shown on each scale including the appropriate unit of measurement for the object:
 - 1.5kg / 1500g**
 - 0.2kg / 200g**
- What is the difference in mass between the two objects? **1.3kg / 1300g**
- Match the measurement to the correct milk container:
 - 2L**
 - 1L**
 - 35L**
 - 600mL**
- What is the difference between the smallest container? **29L / 2900mL**
- Record the times shown on the clocks:
 - 2:15**
 - 6:20**
 - 8:40**
 - 12:30**
- How much time has elapsed between clock a and b? **4 hrs 5 mins**
- Record the temperature on the thermometer:
 - 45°C**
 - 8°C**
 - 30°C**
- What is the difference between the two temperatures? **37°C**

NUMBER

Outcome AC9M4N09: follow and create algorithms involving a sequence of decisions that use addition or multiplication to generate sets of numbers, identify any emerging patterns

PRE TEST Term: 1 2 3 4 Week: 1 2 3 4 5 6 7 8

- Fill in the missing digits on the input/output tables according to the rule provided:
 - Rule: $\times 3$
 - Rule: $+ 10$
 - Rule: $\times 2 + 3$
- Study each input/output table to find the rule, then fill in the missing digit:
 - Rule: $\div 2$
 - Rule: $\div 5$
 - Rule: $\div 10$
- Zac is designing a 5-tiered cake for a wedding. He is decorating each tier (level) with edible flowers. He places 3 flowers on the first tier, 6 flowers on the second and 9 flowers on the third. If he continues this pattern for the fourth and fifth tier, how many will be placed on each? What is the rule Zac is using?

4th level: **12**

5th level: **15**

Rule: **$+ 3$**

NUMBER

Outcome AC9M4N03: find equivalent representations of fractions using models, numerators and denominators and make connections between fractions and decimals

PRE TEST Term: 1 2 3 4 Week: 1 2 3 4 5 6 7 8

- Use the models to find the equivalent fractions and record the missing:
 -
 -
 -
- Use the fractions wall to find equivalent fractions for the following:
 - $\frac{1}{2} = \frac{\quad}{6}$
 - $\frac{2}{3} = \frac{\quad}{6}$
 - $\frac{6}{8} = \frac{\quad}{4}$
 - $\frac{8}{10} = \frac{\quad}{5}$
- Colour the bars to represent each fraction then record its matching:

Fraction	Model	Decimal
a) $\frac{1}{2}$		0.5
b) $\frac{3}{5}$		0.6
- Benny has cut his cake into quarters and Lina has cut hers into twelfths. Calculate how many pieces of cake Benny and Lina ate if they both ate three quarters of their cakes:

Benny: **3** Lina: **9**

NUMBER ANSWERS

Outcome AC9M4N04: count by fractions including mixed numerals, locate and represent these fractions as numbers on number lines

PRE TEST Term: 1 2 3 4 Week: 1 2 3 4 5 6 7 8 9 10 11

- Record the missing fraction in each of the sequences below:
 - $\frac{1}{4}, \frac{2}{4}, \frac{3}{4}, 1$
 - $\frac{1}{2}, 1, 1\frac{1}{2}, 2$
 - $\frac{3}{5}, \frac{4}{5}, 1$
 - $\frac{2}{3}, 1, 1\frac{1}{3}, 2\frac{2}{3}$
- Subdivide and label the following number lines to show thirds and quarters. An example has been provided for you:

For each question award 1 mark for correctly and evenly subdividing the number line and 1 mark if all labels are correct.
- Record the missing fractions on each number line:
 - $\frac{1}{3}, \frac{2}{3}, 1$**
 - $\frac{1}{2}, 1, 1\frac{1}{2}, 2$**
- Alice is making a cake that requires 15 cups of flour. If she is only able to use a $\frac{1}{4}$ cup measure, how many scoops will she need?

6 scoops

STATISTICS

Outcome AC9M4SP01: acquire data for categorical and discrete numerical variables to address a question of interest or purpose, using digital tools, represent data using many-to-one pictographs, column graphs and other displays or visualisations, interpret and discuss the information that has been created

PRE TEST Term: 1 2 3 4 Week: 1 2 3 4 5 6

- Study the pictograph then answer the questions:

Day	Books Borrowed
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	

 - On what day were the most books borrowed?
 - How many books were borrowed on Tuesday?
 - How many more books were borrowed on Friday than on Tuesday?
- Create a graph to represent the data in the table. Don't forget to graph and include an appropriate title.

Favourite Fruit in 4S	Number of Students
Banana	4
Strawberry	5
Mango	5
Apple	6

 - What is the most popular fruit?
 - How many students like apple or mango?
- How many students are in 4S? **20**

PROBABILITY

Outcome AC9M4P01: describe possible everyday events and the possible outcomes of experiments and order outcomes or events based on their likelihood of occurring, independent or dependent events

POST TEST Term: 1 2 3 4 Week: 1 2 3 4 5 6

- Order the events from most likely (1) to least likely (3):
 - You will speak to another student today
 - Your teacher will sing the national anthem in front of the class
 - An asteroid will land on the school oval
- The following terms are used to describe the chance of something happening. Write an event to match each possible outcome:

Likely: **It will rain tomorrow**

Unlikely: **A coin will land heads up**

Certain: **The sun will rise tomorrow**
- Answer the following questions about the marbles in the jar:
 - If I close my eyes and select a marble from the jar, which colour am I most likely to choose? **White**
 - If I put the first marble back, and select another, which colour am I most likely to choose this time? **White**
- Danny wants to set up a chance experiment where there is an even chance of selecting a black or white marble:
 - Draw marbles in the jar to show what the experiment would look like if Danny has 4 marbles.
 - Describe the chance of selecting a white marble as a fraction: **$\frac{1}{2}$**

STATISTICS ANSWERS

Outcome AC9M4SP01: acquire data for categorical and discrete numerical variables to address a question of interest or purpose, using digital tools, represent data using many-to-one pictographs, column graphs and other displays or visualisations, interpret and discuss the information that has been created

PRE TEST Term: 1 2 3 4 Week: 1 2 3 4 5 6 7 8 9 10 11

- Study the pictograph then answer the questions:


Day	Books Borrowed
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	

 - On what day were the most books borrowed? **Wednesday**
 - How many books were borrowed on Tuesday? **10**
 - How many more books were borrowed on Friday than on Tuesday? **20**
- Create a graph to represent the data in the table. Don't forget to label the graph and include an appropriate title.

Favourite Fruit in 4S	Number of Students
Banana	4
Strawberry	5
Mango	5
Apple	6

 - What is the most popular fruit? **Apple**
 - How many students like either apple or mango? **11**
- How many students are in 4S? **20**

A CLOSER LOOK - TESTS

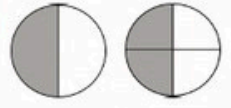
NUMBER


Name: _____
Date: _____


Outcome AC9M4N03: find equivalent representations of fractions using related denominators and make connections between fractions and decimal notation

PRE TEST Term: 1 2 3 4 Week: 1 2 3 4 5 6 7 8 9 10 11

1. Use the models to find the equivalent fractions and record the missing digits:

a) 
 $\frac{1}{2} = \frac{\square}{4}$

b) 
 $\frac{4}{10} = \frac{\square}{\square}$

c) 
 $\frac{\square}{\square} = \frac{\square}{\square}$

3

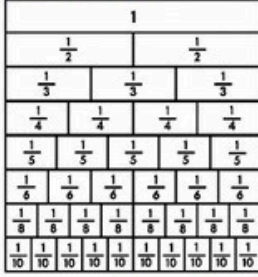
2. Use the fractions wall to find equivalent fractions for the following:

a) $\frac{1}{2} = \frac{\square}{6}$

b) $\frac{2}{3} = \frac{\square}{6}$

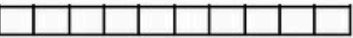

c) $\frac{6}{8} = \frac{\square}{\square}$

d) $\frac{8}{10} = \frac{\square}{\square}$




4

3. Colour the bars to represent each fraction then record its matching decimal:

	FRACTION	MODEL	DECIMAL
a)	$\frac{1}{2}$		
b)	$\frac{3}{5}$		

4

4. Benny has cut his cake into quarters and Lina has cut hers into twelfths. Calculate how many pieces of cake Benny and Lina ate if they both ate three quarters of their cakes:
Benny: _____ Lina: _____



TOTAL

13


THE SYDNEY TEACHER

→ Outcome aligned

→ Easily mark and score on the side panel

→ Includes a range of questions that increase in difficulty

A CLOSER LOOK - ANSWERS

 MEASUREMENT

ANSWERS

Outcome AC9M4M01: interpret unmarked and partial units when measuring and comparing attributes of length, mass, capacity, duration and temperature, using scaled and digital instruments and appropriate units

PRE TEST Term: 1 2 3 4 Week: 1 2 3 4 5 6 7 8 9 10 11

1. Use a ruler to draw lines the following lengths:

a) 4cm
b) 5.5cm
c) 50mm
d) 35mm

1 mark each

1 mark for the correct calculation
1 mark for the correct unit, cm

2. What is the difference in length between line A and B? 1.5cm

3. For questions 3 & 4 award 1 mark for the correct measurement and 1 mark for the correct unit (g/kg)

a) 1.5kg / 1500g b) 0.2kg / 200g

4. What is the difference in mass between the two objects?
1.3kg / 1300g

5. Match the measurements to the correct milk container:

2L 1L 3.5L 600mL

6. What is the difference in capacity between the smallest and largest container? 2.9L / 2900mL

7. Record the times shown on the clocks:

a) 2:15 b) 6:20 c) 8:40 d) 12:30

8. How much time has elapsed between clock a and b? 4 hrs 5 mins

9. Record the temperatures shown on the thermometer in degrees Celsius:

a) 45°C
b) 15°C

10. What is the difference between the two temperatures? 30°C

Qn 5: 1 mark for each correct match.
Qn 6: 1 mark for correct calculation & 1 for the correct unit

Qn 7: 1 mark for each correct clock.
Qn 8: 1 mark for the correct hour & 1 mark for correct mins.

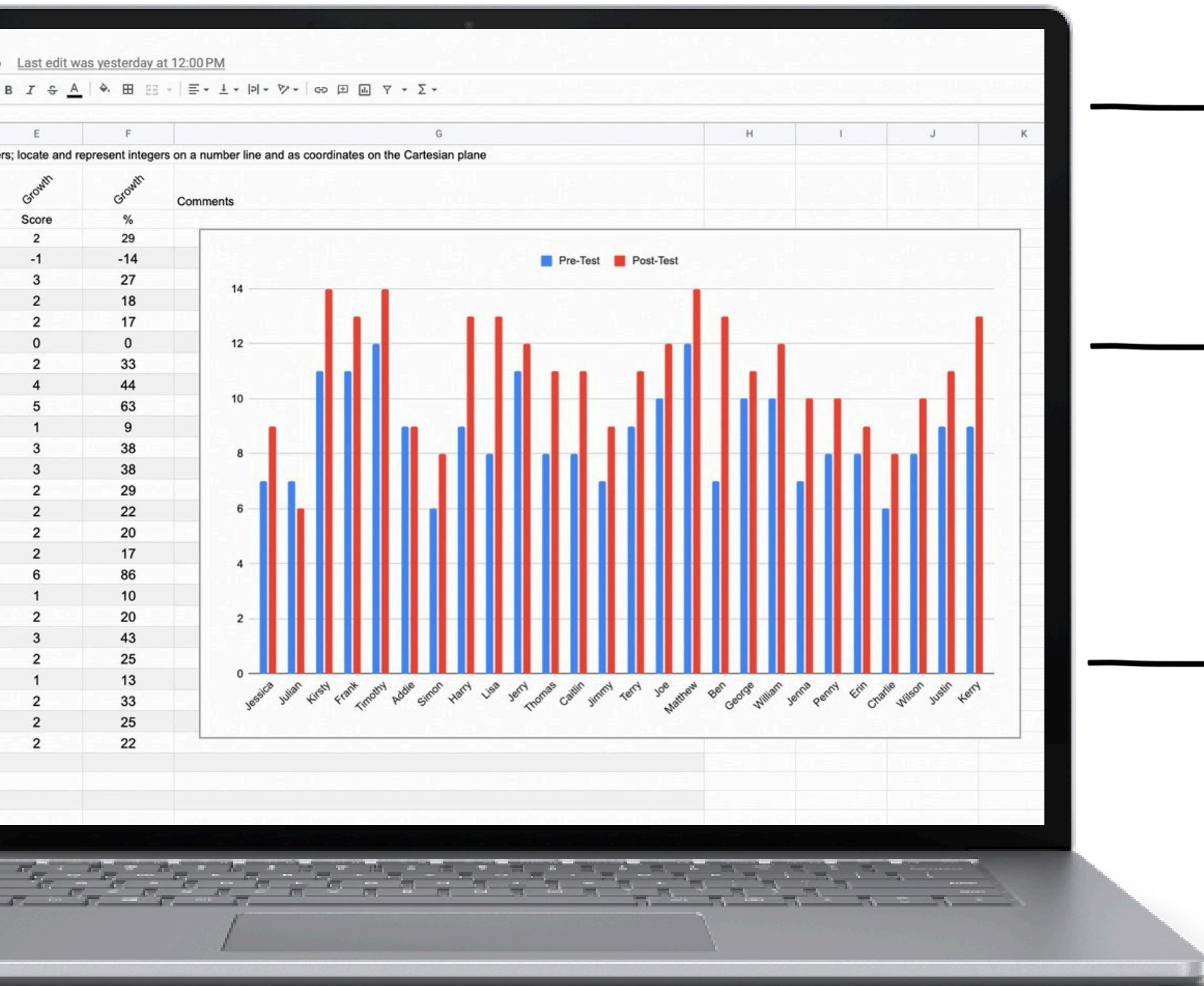
Qn 9 and 10: 1 mark for the correct temp. & 1 mark for using °C

THE SYDNEY TEACHER

→ Answer sheets are provided for all tests

→ Easy to follow marking guideline to ensure consistent teacher judgement across the grade

A CLOSER LOOK - SPREADSHEETS

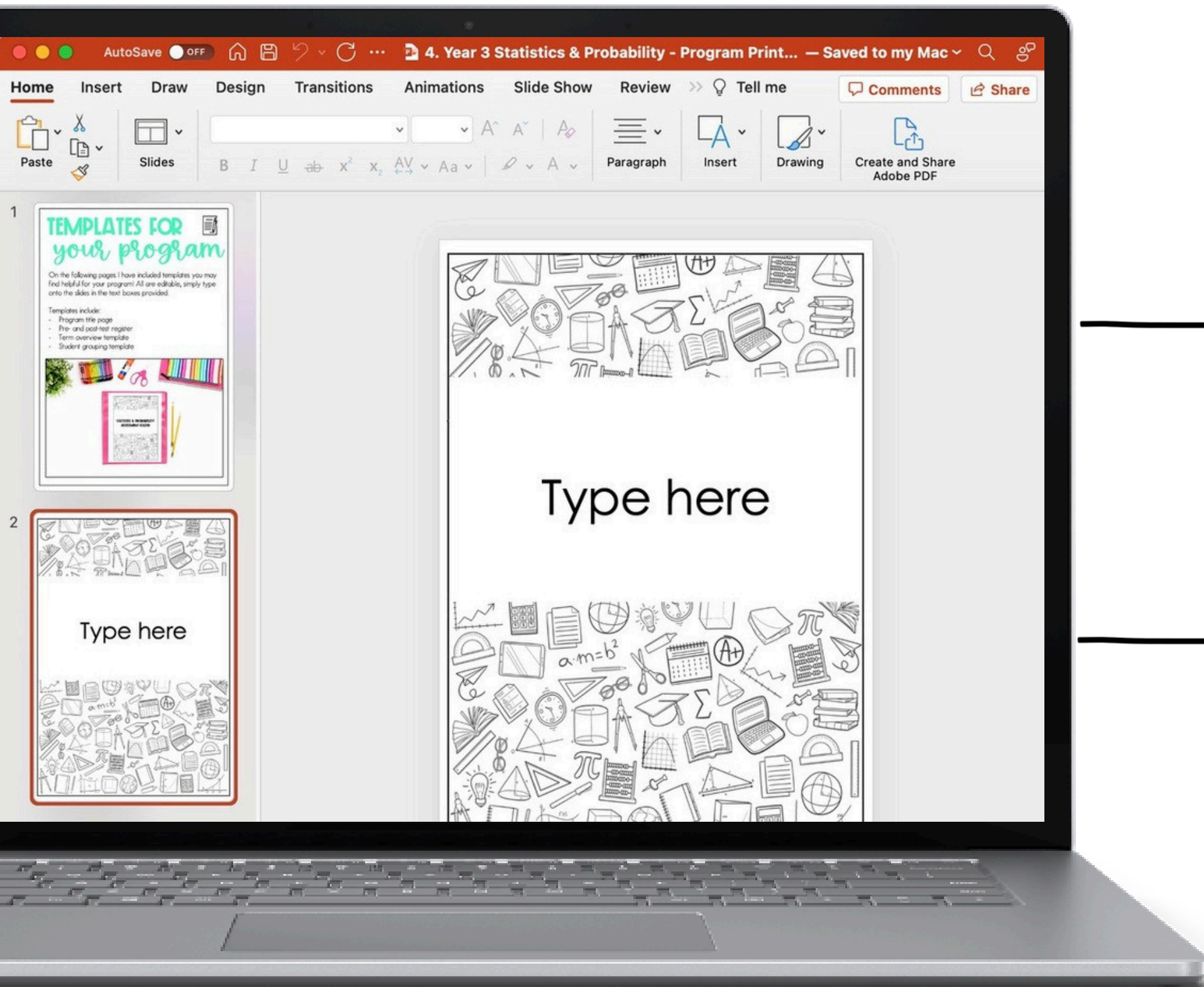


→ Spreadsheets included for every outcome

→ Spreadsheet automatically graphs results

→ The perfect formative and summative assessment tool


A CLOSER LOOK - PROGRAM DOCS





→ Editable title pages for your program

→ Editable program checklists

HOW YOU CAN USE THIS RESOURCE

 **Use pre-tests** at the beginning of each topic to group students and inform teaching

 **Use post-tests** to track growth, evaluate teaching and write reports

 **ALGEBRA**

Name: _____
Date: _____

Outcome AC9M5A02: find unknown values in numerical equations involving multiplication and division using the properties of numbers and operations

POST TEST Term: 1 2 3 4 Week: 1 2 3 4 5 6 7 8 9 10 11

1. Find the missing numbers, showing all working out:

a) $8 \times 3 = 4 \times \square$	b) $10 \times 4 = \square \times 5$	c) $\square \times 9 = 6 \times 18$	<div><div></div><div>3</div></div>
<div></div>	<div></div>	<div></div>	

2. Find the missing numbers, showing all working out:

a) $18 \div 9 = 6 \div \square$	b) $15 \div 5 = \square \div 11$	c) $\square \div 9 = 56 \div 8$	<div><div></div><div>3</div></div>
<div></div>	<div></div>	<div></div>	

3. Find the missing numbers, showing all working out:

a) $3 \times 3 + \square = 84 \div 7$	b) $108 \div 12 - \square = 2 \times 2$	<div><div></div><div>4</div></div>
<div></div>	<div></div>	

4. Record 1 number in each of the squares below so that the number sentence is balanced. In each square you must write a different odd number.

\times $=$ \div

TOTAL

11

WHAT OTHER TEACHERS ARE SAYING!

A fantastic time saving resource. I love that it is aligned to Version 9 of the Australian Curriculum and that the **questions reflect each outcome perfectly and also increase in difficulty.**

The assessment tracking document is a useful tool and clearly shows where more teaching is required. **Thank you for this exceptional resource** that has clearly had a lot of time and thought put into its creation!



I love this bundle! I've been waiting for something like this to show itself and I couldn't be happier that it's here! **All pre and post tests for each standard all in one place WITH answers** 🥰 I am over the moon to finally have this bundle! Thank you thank you thank you 😊

LOOKING FOR ALL GRADES 3-6?



“

These comprehensive
pre and post tests are a
life saver for all teachers.
Thank you!!

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