

## Summary

### Test Identification

<b>Name</b>	2019 MAT SW 2.2
<b>Date Created</b>	20 May 2019
<b>Date Modified</b>	13 Jun 2019
<b>Subject</b>	Mathematics
<b>Status</b>	SCORED
<b>Sequence Number</b>	924720
<b>Total Test Time</b>	57 minutes
<b>Delivery Method</b>	Onscreen

### Curriculum Strand

<b>Number Sense &amp; Operations</b>	10	<b>Number Knowledge</b>	9
<b>Statistics</b>	10	<b>Algebra</b>	10

### Curriculum Level

<b>2B</b>	15	<b>2P</b>	9	<b>2A</b>	15
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### Cognitive Processing

<b>Surface</b>	34	<b>Deep</b>	16
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### Slider Settings

<b>Strands</b>		<b>Level</b>	
<b>Number Knowledge</b>	Most	<b>Level 2</b>	Most
<b>Number Sense &amp; Operations</b>	Most		
<b>Algebra</b>	Most		
<b>Statistics</b>	Most		

## Marking Guide : 2019 MAT SW 2.2

Q.No	Marking Key
1	d
2	d
3	c
4	b
5	c
6	b
7	c
8	c
9	b
10	b
11	d
12	a
13	c
14	c
15	c
16	c
17	d
18	b
19	a
20	a
21	a
22	b
23	a
24	b
<u>25</u>	24
<u>26</u>	20
27	c
28	d
29	b
30	d
31	c
32	b
33	b

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### Instructions

**Underlined Questions** e.g. 10 :Use teacher judgement. Give 1 if answer matches marking guide (unless otherwise instructed). For incorrect answers give 0 (zero).

**All other Questions:** Enter the response chosen by the student using letters. For example, 'a' for the first option; 'b' for the second option; 'c' for the third option and so on.

**Questions Not Answered:** Enter a dash (-).

Q.No	Marking Key
34	b
35	b
36	b
37	6 'Accept 6.0'
38	a
39	c
40	b
41	a
42	d
43	b
44	b
45	c
46	b
47	a
48	a
49	c
50	b

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Instructions

**Underlined Questions** e.g. 10 :Use teacher judgement. Give 1 if answer matches marking guide (unless otherwise instructed). For incorrect answers give 0 (zero).

**All other Questions:** Enter the response chosen by the student using letters. For example, 'a' for the first option; 'b' for the second option; 'c' for the third option and so on.

**Questions Not Answered:** Enter a dash (-).

Choose a circle to show how much each sentence is like you

Very Unlike Me 1	Unlike Me 2	Like Me 3	Very Like Me 4
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**01.** I like maths at school.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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**02.** I am good at maths.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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**03.** My teacher thinks I am good at maths.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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**04.** My Mum and Dad think I am good at maths.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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**05.** I enjoy doing maths in my own time (not at school).

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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**06.** I enjoy doing things in maths that I haven't tried before.

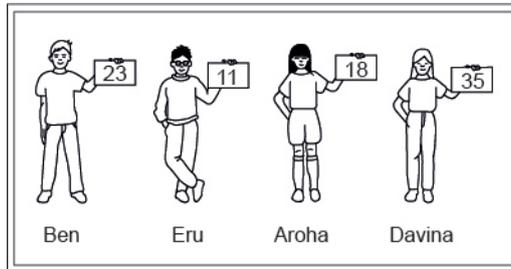
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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## Practice Questions

These practice questions are to help you understand how to show your answer for different types of questions.

**P01.** Who is holding a card with an even number on it?

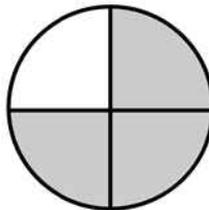


- Ben
- Eru
- Aroha
- Davina

**P02.** Complete this number pattern.

2, 4, \_\_\_\_\_, \_\_\_\_\_, 10

**P03.** What fraction of this circle is shaded?



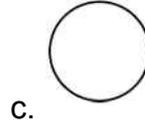
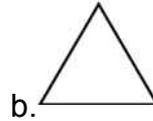
\_\_\_\_\_



**P04.** Match the sentence with the correct shape.

1. I have three sides

2. I have 4 sides



**P05.** Which numbers make this number sentence **TRUE**?

$$2 + \star > 5$$

1

2

3

4

5

**P06.** Put the numbers 1, 2, 3, and 4 in the boxes to order these numbers from biggest (1) to smallest (4).

 3 7 2 0

**P07.** Select whether the following statements are True or False.

In the number 213, the value of 1 is ten.

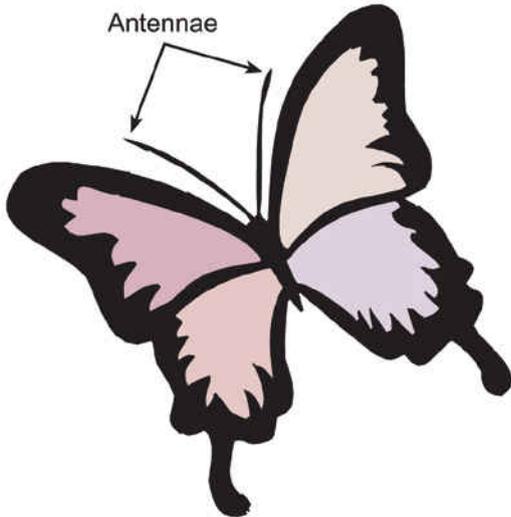
**TRUE**

**FALSE**

In the number 504, the value of 5 is fifty.

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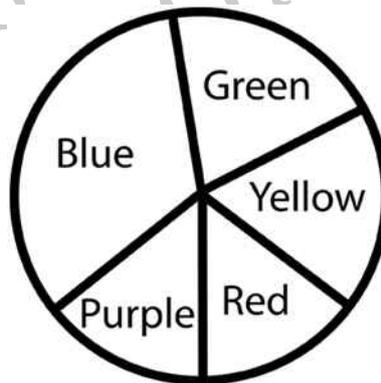
01. A butterfly has two antennae.



What is the total number of antennae on seven butterflies?

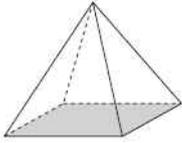
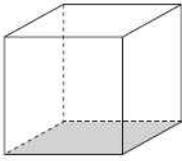
- 7
- 9
- 12
- 14

02. Ms Barry's students made a graph from the results of voting on their favourite colour. Based on the graph, which statement is **TRUE**?



- More students like the colour purple than the colour green.
- More students like the colour red than the colour blue.
- Yellow is the least popular colour.
- Blue is the most popular colour.

03. Which figure below has a round base?



04. Look at the picture of hands below.  
If the pattern continues, which hand will be next?



**05.** 23, 22, 21, 20, 19,  
Which number comes next?

- 20
- 19
- 18
- 17

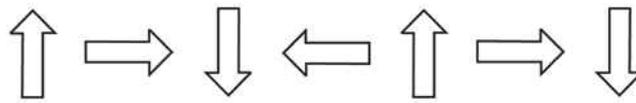
**06.** Bernard is making a cake.

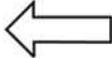


To measure the milk, which one of the following items should Bernard use?

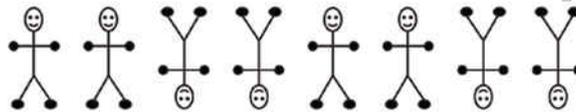
- Ruler
- Measuring cup
- Measuring scales
- Tape measure

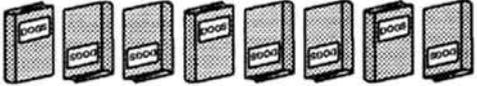
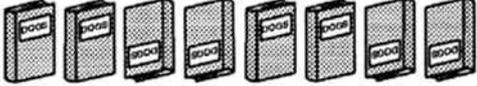
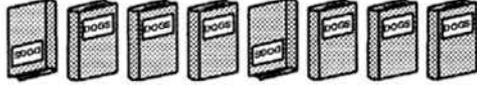
07. Look at the pattern below.  
Which comes next?



- 
- 
- 

08. Look at the pattern of shapes below.  
Which of these shows the same kind of pattern?



- 
- 
- 
- 

09. What number makes this number sentence **TRUE**?

$$500 + \square + 9 = 569$$

- 5
- 60
- 69
- 90

10. The chart below shows the number of kilometres Ms Brighton drove each month for five months.

Ms Brighton drove 620 kilometres in May.

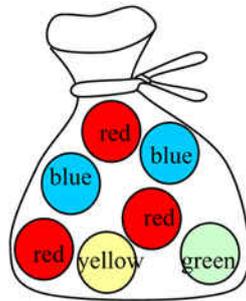
According to the chart, in which month was the number of kilometres she drove **greater than** 620?

Kilometres Driven

Month	Number of Kilometres
January	529
February	661
March	618
April	556
May	620

- January
- February
- March
- April

11. Rachel put 3 red marbles, 2 blue marbles, 1 yellow marble, and 1 green marble into a bag. All the marbles were the same shape and size. Without looking Rachel pulled 2 marbles out of the bag. Which of the following could she have pulled?

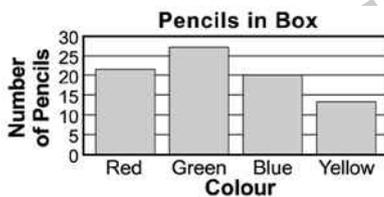
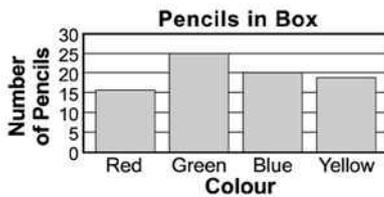
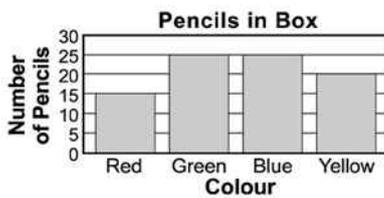
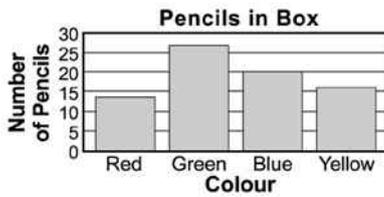


- Green, green
- Yellow, orange
- Blue, black
- Red, red

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12. The table below shows the number of each coloured pencil in a box. Which graph below shows the correct number of pencils in the box?

Pencils in Box	
Colour	Number in Box
Red	13
Green	26
Blue	20
Yellow	16



13.  $3 \times 6$  is the same as

$3 + 6$

$3 + 3 + 3$

$6 + 6 + 6$

$6 \div 3$

**14.** The table below shows the number of paddles Mr Watson must order for different numbers of canoes.  
If the pattern in the table continues, how many paddles must be ordered for 10 canoes?

Number of Canoes	2	4	6	8	10
Number of Paddles	4	8	12	16	?

- 17
- 18
- 20
- 23

**15.** 8, 12, 16, 20,  
Which is the next number in the sequence?

- 22
- 25
- 24
- 23

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16. Look at the graph.

How many fish did **Henry** and **Kristen** catch altogether?

Fish Caught	
Each  = 1 fish	
Henry	
Kristen	
Marisa	

- 4
- 6
- 10
- 12

17. The children in Vetra's class voted for their favourite take-away food.

The results were recorded in this table.

The **MOST** popular food was

Maxiburgers	### III
Fish & Chips	II
Chicken Chunks	### III
Pizza	### ### I

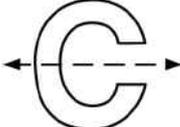
- Maxiburgers.
- Fish and Chips.
- Chicken Chunks.
- Pizza.

18. What fraction of this shape is shaded?



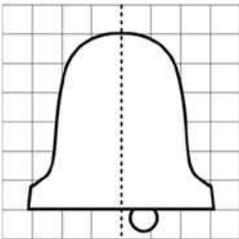
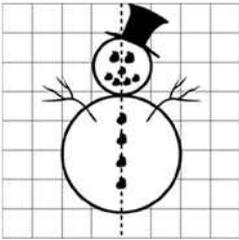
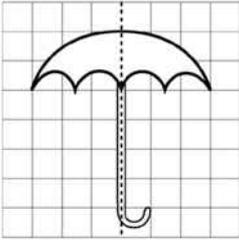
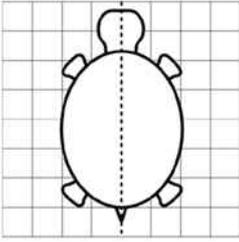
- $\frac{1}{2}$
- $\frac{2}{3}$
- $\frac{3}{2}$
- $\frac{3}{1}$

19. Which dashed line is a line of symmetry?

- 
- 
- 
- 

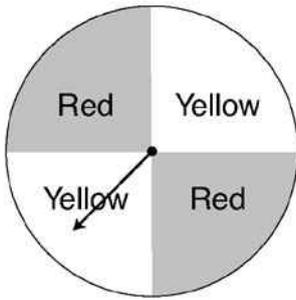
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20. In which figure is the dotted line a line of symmetry?



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21. Sarah made a spinner.



What is the likelihood of the arrow on Sarah's spinner landing on green?

- Impossible
- Poor chance
- Even chance
- Good Chance
- Certain

22. Ginger bought 3 children's tickets and some adult tickets for a fair. She bought a total of 11 tickets.

How many adult tickets did Ginger buy?

- 7
- 8
- 12
- 14

23. Which digit is in the hundreds place in the number 3174?

- 1
- 3
- 4
- 7

24. What fraction shows the number of blocks that are grey?

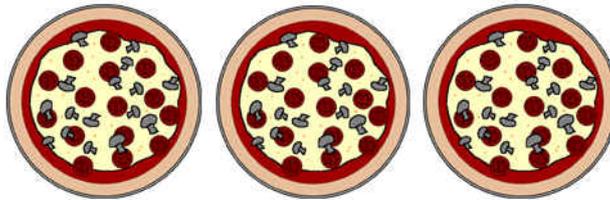


- $\frac{4}{6}$
- $\frac{4}{10}$
- $\frac{6}{10}$

Use the following information to answer questions 25 to 26.

Joe's Pizza Shop cuts its pizzas into 8 slices.  
How many slices would there be in

25. 3 pizzas?



\_\_\_\_\_ Slices

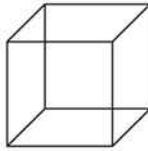
26.  $2\frac{1}{2}$  pizzas?



\_\_\_\_\_ Slices

End of Section

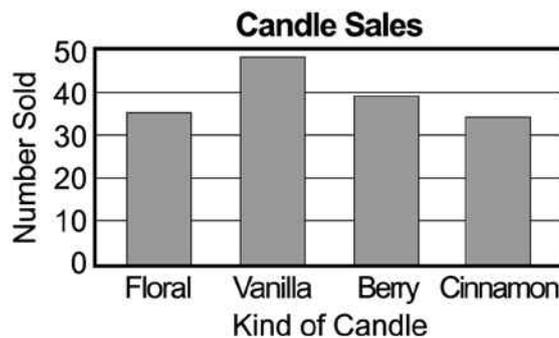
27. How many faces does a cube have?



- 4
- 5
- 6
- 8

28. The table below shows the number of each kind of candle a shop sold. The shop manager made the bar graph below to display the information in the table. Which of the amounts from the table is **NOT** graphed correctly?

Candle Sales	
Kind of Candle	Number Sold
Floral	35
Vanilla	48
Berry	39
Cinnamon	46



- Floral
- Vanilla
- Berry
- Cinnamon

29. There are 30 people in the music room. There are 74 people in the cafeteria. How many more people are in the cafeteria than the music room?

- 40
- 44
- 54
- 104

30. Ali had 50 apples. He sold some and then had 20 left. Which of these is a number sentence that shows this?

- $\square - 20 = 50$
- $20 - \square = 50$
- $\square - 50 = 20$
- $50 - \square = 20$

31. This diagram shows one view of a house. What would the top view of the house look like?



- 
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**32.** One side of a rectangle is 8 metres long. Another side of the rectangle is 10 metres long.

What are the lengths of the other 2 sides of the rectangle?

- They could be any length.
- 10 metres and 8 metres.
- 10 metres and 10 metres.
- 8 metres and 8 metres.

**33.** There are 60 pieces of art paper and 42 children.

If each child gets one piece of art paper, how many pieces will be left for another project?

- 9
- 18
- 27
- 42

**34.** Ron was listening to the radio and heard, "One hundred and twenty-four thousand and sixty-five books have been donated to the library."

What is this number?

- 12 465
- 124 065
- 124 650
- 100 024 065

35. This chart shows temperature readings made at different times on four days. When was the highest temperature recorded?

TEMPERATURES					
	6 a.m.	9 a.m.	Noon	3 p.m.	8 p.m.
Monday	15°	17°	20°	21°	19°
Tuesday	15°	15°	15°	10°	9°
Wednesday	8°	10°	14°	13°	15°
Thursday	8°	11°	14°	17°	20°

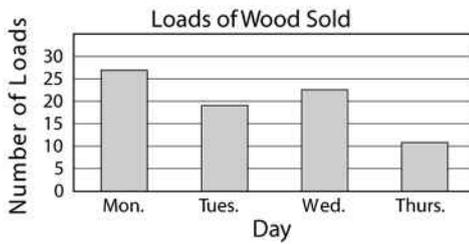
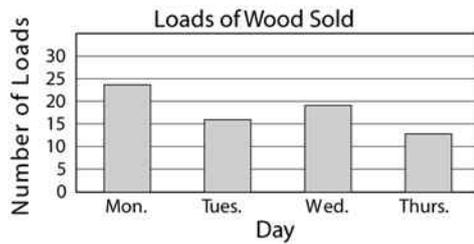
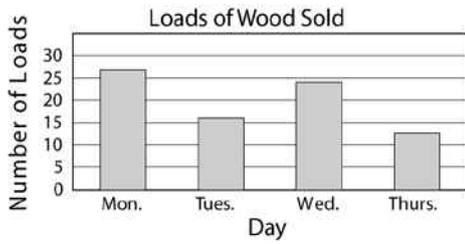
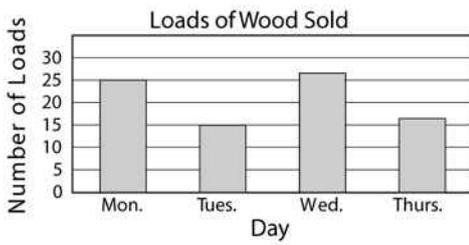
- Noon on Monday
- 3 pm on Monday
- Noon on Tuesday
- 3 pm on Wednesday

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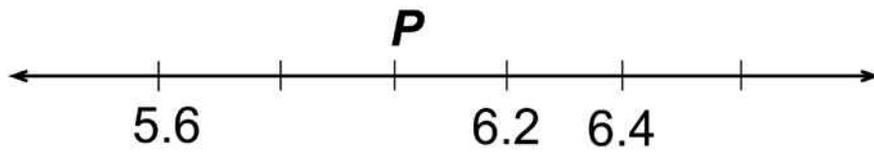
36. The table below shows the number of loads of wood Mr Clark sold each day for four days.

Which of the following shows this information correctly graphed?

Day	Number of Loads
Monday	27
Tuesday	16
Wednesday	24
Thursday	13



37. On the number line below, what number would be located at point *P*?



\_\_\_\_\_

38. Which class earned the **MOST** points from the two events?

POINTS EARNED FROM SCHOOL EVENTS

Class	Mathathon	Readathon
Mr. Lopez	425	411
Ms. Chen	328	456
Mrs. Green	447	342

- Mr Lopez's class
- Ms Chen's class
- Mrs Green's class
- All classes earned the same amount.

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**39.** Pete earns fifty cents for doing chores each week. The chart below shows his savings so far.

If Pete continues to save at this rate, how much money will he have saved at the end of Week 8?

Pete's Savings

Week	Money Saved
1	\$0.50
2	\$1.00
3	\$1.50
4	\$2.00

- \$3.00
- \$3.50
- \$4.00
- \$4.50

**40.** Sally is shorter than Ronnie. Sally is taller than Michael. Denise's height is between Sally's height and Ronnie's height.

Who is the shortest person?

- Denise
- Michael
- Ronnie
- Sally

**41.** Juanita wanted to use her calculator to add 1379 and 243. She entered  $1279 + 243$  by mistake.

Which of these could she do to correct the mistake?

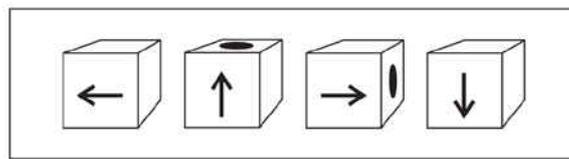
- Add 100
- Add 1
- Subtract 1
- Subtract 100

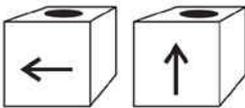
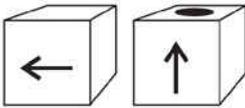
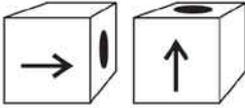
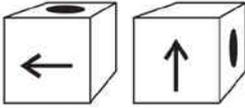
42. Carmen bought 4 boxes of pencils. Each box contained 36 pencils.

How many pencils did Carmen buy?

- 40
- 124
- 130
- 144

43. Which two figures come next in the pattern?



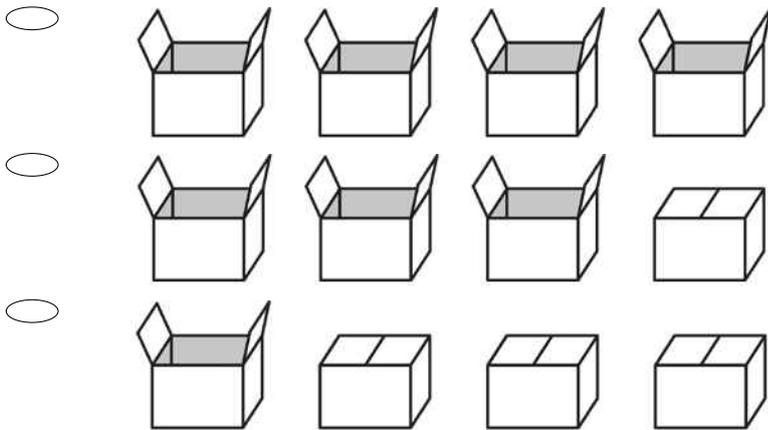
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44. 4, 4, 4, 9, 14

The mode of the scores listed above is

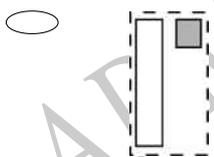
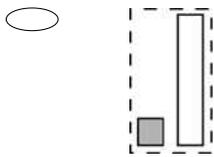
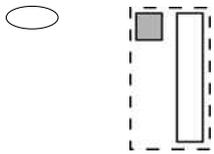
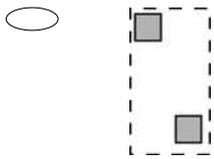
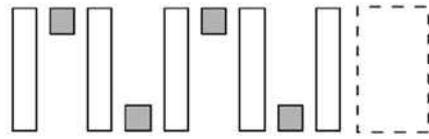
- 3
- 4
- 7
- 10

45. Which set of boxes shows  $\frac{1}{4}$  of the boxes opened?



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**46.** Look at the pattern of shapes shown below.  
 If the pattern continues, what will the next two shapes look like?

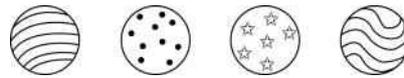


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**47.** This shape has no flat faces and no corners. It looks the same from all directions.  
 What shape is it?

- Sphere
- Cone
- Cylinder
- Pyramid

48. The balls in this picture are placed in a box and a child picks one without looking. What is the probability that the ball picked will be the one with dots?



- 1 out of 4
- 1 out of 3
- 1 out of 2
- 3 out of 4

49. Which represents exactly 1.7?

- 
- 
- 
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50.  $N$  stands for the number of stamps John had. He gave 12 stamps to his sister. Which expression tells how many stamps John has now?

- $N + 12$
- $N - 12$
- $12 - N$
- $12 \times N$

Please provide these instructions to all staff involved with administering e-asTTle online.

## Before the testing session

### 1. Make sure students have the right devices and browsers installed

Unsupported devices may result in the test not displaying correctly and affect students' scores.

#### Desktop/Laptop

- Windows, Mac or Chromebook
- Minimum window width: 1280 pixels
- Windows devices need up-to-date Edge, Chrome, Firefox or IE11
- Windows tablets/hybrids e.g., Surface Pro must have a keyboard attached
- Mac devices need recent Chrome or Safari

#### Large Tablets (9" +)

- iPads: iOS 10+ with Safari
- Androids: Large tablet e.g., Samsung Galaxy Tab 4. Must have Android 5+ and latest Chrome
- Minimum window width: 768 pixels

iPad Minis and small Androids must not be used.

More information on device requirements and the underlying rationale is available on the [help site](#).

### 2. Sit the Practice Test

[A practice test for each subject](#) is available. These are also available in the Student Portal (no login required). Practice tests are designed to familiarise you and your students with e-asTTle online before sitting a real test. Each practice test contains attitude questions, look-over time and 5-8 questions designed to be relatively simple to answer. [Teacher scripts](#) are available for practice tests.

### 3. Ensure you have student login information

More information on accessing student logins and resetting passwords is available on the [help site](#).

### 4. Check if calculators are required (Maths/Pāngarau)

Tests with questions at mostly Level 5 and 6 require the use of calculators. Tests with questions at mostly Levels 2 to 4 do NOT require a calculator.

## During the testing session

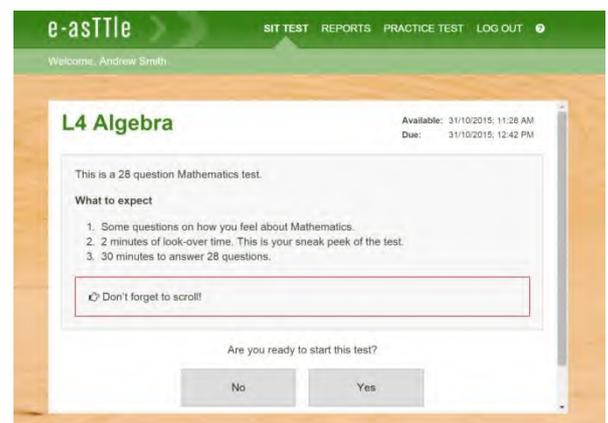
### 1. Check equipment

- Make sure students' devices are charged.
- Make sure students have scrap paper and a pen/pencil for working, calculators (if needed) and a quiet activity they can continue with if they finish early.

### 2. Read the Test Details to students

Once students select a test, they will see the test details page (example shown on right).

Read through this page aloud with your students.



Other reminders to discuss with students:

- Once they choose 'Yes', the timer starts. Once the timer is counting down, there is no way to pause the test. If students close the test accidentally, they can re-open it again, provided the timer hasn't finished.
- Ask students to raise their hand if something seems wrong.
- Fullscreen mode is recommended.

For students on iPad or Android tablet devices: remind them to lock their device in portrait mode.

For students on Windows hybrid devices (such as the Surface Pro): remind them to keep the keyboard attached during the test.

### 3. Supervising the test

Make sure you walk around and monitor students during the test. Students tend to continue with their test even if something has gone wrong – for example, a question does not display correctly. For this reason, check that pages are loading correctly, and students are scrolling to see all the content and options. It's a good idea to have a paper booklet of the test available during the testing session.

Students are generally expected to read the test content without assistance. Information on accommodations (e.g., reader-writers) is available on the [help site](#).

### 4. Know what to do if things go wrong

#### Internet disconnected

If student answers aren't saving, e-asTTle will show a yellow banner at the top of the page. The banner will turn red when there has been disconnection for 2 minutes or more. Students can keep answering whatever they can, and e-asTTle will try and save answers. Don't refresh or close the window if a coloured banner is showing.



If the Internet has been down, use your professional judgement to decide if students' results should be [excluded](#).

#### Images not loading

If an image is missing, students will see an icon they can click to try and reload the image.  **INFO MISSING**  
[Click to reload](#)

#### A question doesn't load fully or looks strange

If something has loaded incorrectly, it can sometimes be corrected by selecting the 'Next' button then the 'Previous' button to reload the question.

Detailed troubleshooting information is available on the [help site](#). To report issues with online testing or for additional assistance, please contact the Education Service Desk: 0800 225 5428.