Summary

Algebra

Statistics

	Test Ide	entification			
Name		2023 MAT SW 1	.2		
Date Created		30 Jan 2023			
Date Modified		22 Mar 2023			
Subject		Mathematics			
Status		SCORED			
Sequence Number		1301133			
Total Test Time		52 minutes			
Delivery Method		Onscreen			
	Curricul	um Strand			
Number Sense & Operations	18	Number Knowle	edge		15
Statistics	7	Algebra			7
	Curricu	lum Level			
2B 10	2P	10		2A	12
3B 3	3P	3		3A	7
	Cognitive	Processing			
Surface	25	Deep			22
	Slider	Settings			
Strands		Leve	ı		
Number Knowledge	Most	Leve	I 2	Most	
Number Sense & Operations	Most	Leve	I 3	Some	

Some

Some

Marking Guide: 2023 MAT SW 1.2

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

Instructions

Underlined Questions e.g. <u>10</u>: 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	d
36	d
37	d
38	С
39	а
40	а
41	b
42	е
43	a
44	С
45	С
46	С
47	e

Instructions

Underlined Questions e.g. <u>10</u> :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.

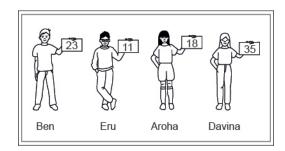
Questions Not Answered: Enter a dash (-).

Choose a circle to show how much each sentence is like you	Very Unlike Me	Unlike Me	Like Me	Very Like Me
	1	2	3	4
01. It is very important to me to be good at maths.				
02. I try to get more maths answers right than my friends.				
03. I like hard, challenging maths.				
04. I do as much school work as possible in maths.				
05. I like to help my friends with their maths school work.				
06. I like it when the maths examples are hard.	NS OF		0	

Practice Questions

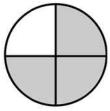
These practice questions are to help you understand how to show your answer for different types of questions.

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 a.
2. I have 4 sides b. c.
P05. Which numbers make this number sentence TRUE?
2 +★> 5
\square 2
□ 5
P06. Put the numbers 1, 2, 3, and 4 in the boxes to order these numbers from biggest (1)
to smallest (4).
2
0

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

	IRUE	FAL5E
In the number 213, the value of 1 is ten.		
In the number 504, the value of 5 is fifty.		



Answer questions 01 to 02.

02.

End of Section

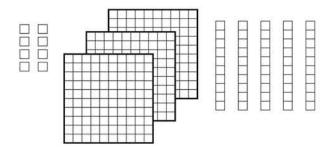
03. Wendy is making this calendar for the bulletin board. What day of the week should January 22 be on?

		JA	NUA	RY		
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11		
						-

- Sunday
- Monday
- Wednesday
- Friday

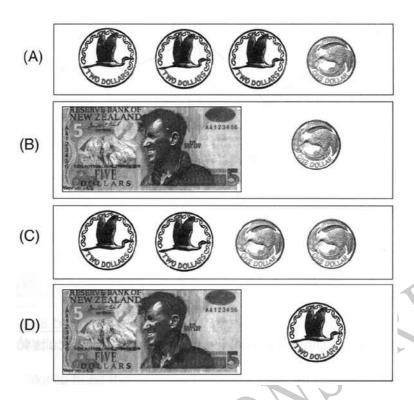
04. Each small square is equal to 1. There are 10 small squares in each strip. There are 100 small squares in each large square.

What number is shown?



- **16**
- 358
- **538**
- 835

05. Taimani gets \$7.00 each week for mowing lawns. Which **TWO** ways could she be paid?



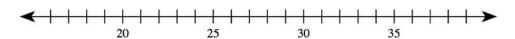
- A or B
- A or D
- B or D
- C or D

06. Tony had \$20. He paid \$8 for a ticket to a baseball game. At the game, he bought a hot dog for \$3.

What amount of money did Tony have left?

- \$5
- \$9
- \$11
- \$15

07. How far is 37 from 25?



- 8
- \bigcirc 11
- 12
- **08.** What sign is missing in this number sentence?

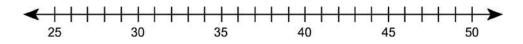
CREE

- **+**
- \bigcirc x
- **-**
- 09. Niki bought 3 bags of oranges. Each bag had 10 oranges.

How many oranges did Niki buy?

- **30**
- **20**
- 13
- \bigcirc 7
- **10.** Look at the number line below.

How far is 45 from 30?



- **14**
- 15
- **16**

Use the following information to answer questions 11 to 12.

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

11. 3 pizzas?



_____ Slices

12. $2\frac{1}{2}$ pizzas?

End of Section



Slices

13. Carrie practises the piano each day.

The table shows how long she practised each day last week.

How many minutes longer did she practise on Wednesday then on Tuesday?

Piano Practise Times

Day	Minutes
Monday	26
Tuesday	24
Wednesday	30
Thursday	35
Friday	15

- \bigcirc 6
- 5
- 4
- 2
- 14. Which fraction represents the largest part of a whole?
- $\begin{array}{c} \begin{array}{c} \begin{array}{c} \frac{1}{4} \\ \end{array} \\ \begin{array}{c} \frac{1}{3} \end{array}$

15. Jonah conducted a survey of vehicles going past his school one Friday morning between 8:30 am and 9:00 am.

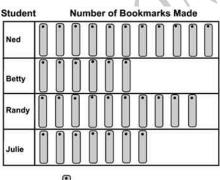
This survey tells us that between 8:30 am and 9:00 am

Cars	###1
Buses	III
Vans	##
Trucks	##
Motor bikes	1

- cars are the slowest form of transport.
- fewer cars use the road than any other vehicles.
- cars are more reliable than trucks for deliveries.
- cars are the most common form of transport.

16. Four students made bookmarks to sell at the school fair. The graph shows the number of bookmarks each student made.

How many more bookmarks did Ned make than Julie?

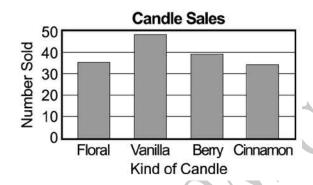


Each represents 2 bookmarks.

- \bigcirc 6
- 8
- O 16
- **18**

17. 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
- **18.** What is the value of 36 15?
- **21**
- **27**
- **31**

19. There were 560 apples in a barrel. The farmer sold 298.



Which one of the number sentences correctly shows how many apples were left in the barrel?

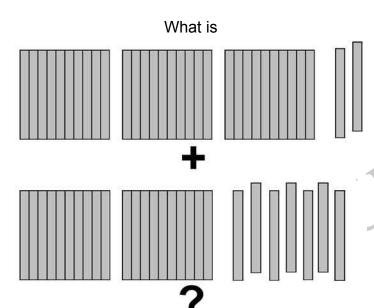
- 298 560
- 560 + 298
- 560 298
- \bigcirc 560 ÷ 298

20. Use the information below to answer the question.

This is one

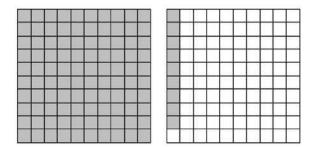


This is one-tenth



- **1.5**
- 3.9
- **5.9**
- 9.5

21. What number is represented by the shaded part of the figure below?



- 0.19
- **1.09**
- **1.19**
- 2.09
- 22.



- **49**
- **54**
- **56**
- **S8**

23. The table shows the amount of time Karen spent practising ice skating. If the pattern in the table continues, how many minutes will Karen spend practising on Saturday?

Day	Practise Time
Monday	30 minutes
Tueday	45 minutes
Wednesday	60 minutes
Thursday	75 minutes
Friday	90 minutes
Saturday	?

- 95
- **100**
- **105**
- 110

24. Tom drove 103 kilometres in the morning and 125 kilometres in the afternoon. How many kilometres did Tom drive in all, to the nearest hundred?

- **100**
- **200**
- 300

25. Which of the following fractions is the greatest?

- $\frac{1}{9}$
- \bigcirc $\frac{1}{2}$
- \bigcirc $\frac{1}{5}$
- $\bigcirc \qquad \frac{1}{10}$

- **26.** What is 583 607 rounded to the nearest hundred?
- **583 000**
- **S83 600**
- **S83 700**
- 84 000
- **27.** The tally chart below shows the number of cherries each Sue, Liz and Joe ate. Which student's graph matches the tally marks in the chart?

Cherries Eaten	
Sue	####
Liz	##1
Joe	4111

- Cherries Eaten

 9
 6
 3
 0
 Sue Liz Joe
 Student A
- Cherries Eaten

 9
 6
 3
 0
 Sue Liz Joe
 Student B
- Cherries Eaten

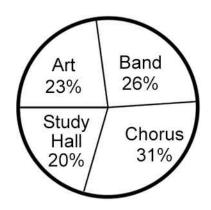
 12
 9
 6
 3
 0
 Sue Liz Joe
 Student C
- Cherries Eaten

 12
 9
 6
 3
 0
 Sue Liz Joe
 Student D

mistake Which c	of these could she do to correct the mistake?		
	Add 100		
	Add 1		
	Subtract 1		
	Subtract 100		
29. Car	rmen bought 4 boxes of pencils. Each box contained 36 pencils.		
How ma	any pencils did Carmen buy?		
	40		
	124		
	130		
	144		
30. There are 50 hamburgers to serve 38 children. If each child is to have at least one hamburger, at most how many of the children can have more than one?			
	6 12 26 38		
31. Wh	ich of these shows 642 in expanded notation?		
	640 + 2		
	600 + 42		
	600 + 20 + 4		
	600 + 40 + 2		

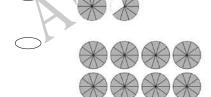
28. Juanita wanted to use her calculator to add 1379 and 243. She entered 1279 + 243 by

32. The circle graph below shows the percentage of students who selected each elective. How much greater was the percentage of students who selected chorus than selected art?



- **S**
- **8%**
- 11%
- **13%**

33. Which represents exactly 1.7?



- **34.** Which of the following fractions is equal to 1?
- $\begin{array}{c} \bigcirc \\ \frac{1}{4} \\ \bigcirc \\ \frac{4}{4} \end{array}$
- $\frac{8}{4}$
- **35.** Pat is using a rule to make the list of numbers shown below.

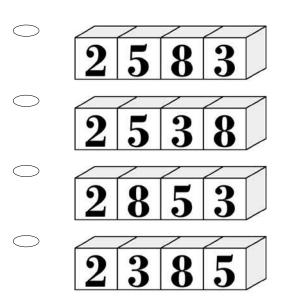
48, 39, 30, 21, 12,

If she continues using the same rule, what will be the next number in the list?

- 11
- 9
- **7**
- 3
- **36.** Which of the following will be a **TRUE** statement if an equal sign (=) is placed in the box?
- $5+2 \prod 5+5$
- $5 + 10 \square 10 5$
- \bigcirc 5 + 5 \square 10 \times 2
- \bigcirc 5 + 5 \square 2 × 5

37. John made a number with the blocks shown below. Sonya used the same blocks to make a number *less* than John's number. Which could be the number Sonya made?





38. A school library has 985 720 books. Which of the following is that number written in words?

- Nine hundred eighty-five, seven hundred and twenty
- Nine hundred thousand, seven hundred and twenty
- Nine hundred and eighty-five thousand, seven hundred and twenty
- Nine thousand eighty-five, seven hundred and twenty

39. Janet took a survey of her class. She asked each student how he or she gets to school. Her results are shown below.

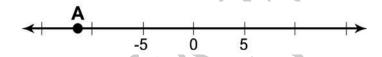
According to her results, which statement below is **NOT** true?

How Students Get to School

Ride a Bike	Ж
Take the Bus	W W II
Go by Car	JHI I
Walk	

- More students go by car than take the bus.
- More students ride a bike and walk than go by car.
- More students take the bus than either walk or go by car.
- More students ride a bike to school than walk.

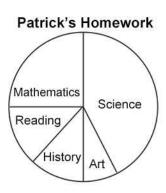
40. Which is *closest* to the location of point *A* on the number line?



- -11
- **○** -7
- \bigcirc 7
- \bigcirc 11

41. The pie chart below shows the portion of time Patrick spent on homework in each subject last week.

If Patrick spent 2 hours on Mathematics, about how many hours did he spend on homework altogether?



- 4
- 8
- **12**
- \bigcirc 16

42. If the value of the expression x + 2 is less than 12, which of the following could be a value of x?

- **16**
- O 14
- \bigcirc 10
- 8

43. Which of the following statements is **TRUE**?

- 2 > -2
- **2 < -4**
- -2 < -4
- <u>-4 > 4</u>

44. Wh	nich of these	e shows $\frac{3}{4}$?				
	0.7					
	0.43					
	0.75					
	0.34					
45. The objects on the scale make it balance exactly. On the left pan there is a 1 kg weight (mass) and half a brick. On the right pan there is one brick. What is the weight (mass) of one brick?						
		1 kg				
	0.5 kg					
	1 kg					
	2 kg					
	3 kg					

46. The table shows the number of visitors to some national parks, recorded in one year. Which of the following is a **TRUE** statement about the number of visitors to these parks?

Name of park	Number of Vistors
Assateague Island National Seashore	1 836 784
Cumberland Gap National Historical Park	1 317 835
Shenandoah National Park	1 473 100
Valley Forge National Historical Park	1 784 520

\bigcirc	1 836 784 < 1	784 520

_				
	1 473	100 < 1	∣ 317	835

47. (2, 5), (4, 9), (6, 13)

Which of the following describes what to do to the first number in each ordered pair shown above to obtain the corresponding second number?

- O Add 3
- Subtract 3
- Multiply by 2
- Multiply by 2 and subtract 1
- Multiply by 2 and add 1

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 Chrome, Edge or Firefox
- Windows tablets/hybrids e.g., Surface Pro must have a keyboard attached
- Mac devices need up-to-date Safari or Chrome

Tablet (9"+)

- iPads: The 2 most recent major iOS versions are supported. Students must use Safari.
- Androids: The 2 most recent major Android versions are supported. Students must use up-todate 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

<u>A practice test for each subject</u> 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. <u>Teacher scripts</u> 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 <u>help site</u>.

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

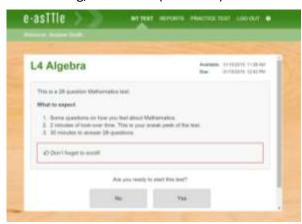
quiet activity they can continue with if they finish early.

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 <u>excluded.</u>

Images not loading

If an image is missing, students will see an icon they can click to try and reload the image.



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 <u>help site</u>. To report issues with online testing or for additional assistance, please contact the Education Service Desk: 0800 225 5428.