## Summary

|  | Test Identification |
| :--- | :--- |
| Name | 2019 MAT SW 1.2 |
| Date Created | 02 Feb 2019 |
| Date Modified | 13 Mar 2019 |
| Subject | Mathematics |
| Status | SCORED |
| Sequence Number | 892960 |
| Total Test Time | 57 minutes |
| Delivery Method | Onscreen |


|  | Curriculum Strand |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Number Sense \& | $11 \quad$ Number Knowledge |  |  |  |
| Operations |  |  |  |  |
| Statistics | $10 \quad$ Algebra |  |  |  |
|  | Curriculum Level |  |  |  |
| 2B 13 | 2P 10 | 2A |  |  |

## Cognitive Processing

Surface 33 Deep 17

| Slider Settings |  |  |  |
| :---: | :---: | :---: | :---: |
| Strands |  | Level |  |
| Number Knowledge | Most | Level 2 | Most |
| Number Sense \& | Most |  |  |
| Operations |  |  |  |
| Algebra | Most |  |  |
| Statistics | Most |  |  |

## Marking Guide : 2019 MAT SW 1.2

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

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 | a |
| 35 | c |
| 36 | b |
| 37 | b |
| 38 | c |
| 39 | b |
| 40 | b |
| 41 | b |
| 42 | 43, 71 |
| 43 | Add 7 <br> 'Any equivalent answer for 1 mark.' |
| 44 | a |
| 45 | d |
| 46 | d |
| 47 | b ${ }^{\text {a }}$ |
| 48 | d |
| 49 | b - |
| 50 | b |

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 <br> Unlike <br> Me | Unlike <br> Me |  | Like Me |
| :---: | :---: | :---: | :---: | | Very |
| :---: |
| Like Me |

1. I like maths at school.
2. I am good at maths.
3. My teacher thinks I am good at maths.
4. My Mum and Dad think I am good at maths.
5. I enjoy doing maths in my own time (not at school).
6. I enjoy doing things in maths that I haven't tried before.

## 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?
BenEruArohaDavina

P02. Complete this number pattern.
$2,4, \ldots, \ldots, 10$

P03. What fraction of this circle is shaded?

$\square$
$\square$

P04. Match the sentence with the correct shape.
$\square$ 1. I have three sides
2. I have 4 sides
a.

$\square$

c.


P05. Which numbers make this number sentence TRUE?

$$
2+\forall>5
$$123

4
5

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

$\square$
$\square$ 0

P07. Select whether the following statements are True or False.
TRUE
FALSE
In the number 213 , the value of 1 is ten.
In the number 504, the value of 5 is fifty.
$\bigcirc$
$\sigma$
$\sigma$
$\sigma$

1. Look at the number sentence below.
$5+\square=5$
What number belongs in the box?
01
$\sigma$
2
2. Which plate is a circle?

0

$\sigma$

$\sigma$

03. Which card does NOT show 8 dots?
$\bigcirc$

$\square$

$\square$


0

04. Which of the following charts shows the data from the tally chart below?

Favourite Colours

| Red | HI |
| :--- | :--- |
| Green | $\\|$ |
| Purple | HI |
| Yellow | HH |
| Blue | HI |

$\sigma$

## Favourite Colours

| Red | 5 |
| :--- | :---: |
| Green | 2 |
| Purple | 10 |
| Yellow | 7 |
| Blue | 9 |

Favourite Colours

| Red | 4 |
| :--- | :---: |
| Green | 2 |
| Purple | 10 |
| Yellow | 6 |
| Blue | 9 |

Favourite Colours

| Red | 5 |
| :--- | :--- |
| Green | 2 |
| Purple | 2 |
| Yellow | 7 |
| Blue | 8 |

Favourite Colours

| Red | 4 |
| :--- | :--- |
| Green | 2 |
| Purple | 8 |
| Yellow | 6 |
| Blue | 8 |

5. Look at the signs for three different movie theatres in the mall. Which movie theatre has the least number of seats?
Theatre 1Theatre 2Theatre 3
6. What is another way to write seven hundred and eighty four?8478470084
7. Diane's board was 4 metres long. She cut off a piece 1 metre long. How long was her board then?3 metres5 metres41 metres
8. Look at the cube below.

Which figure below has the same number of corners?

$\sigma$
$\sigma$


09. Wendy is making this calendar for the bulletin board.

What day of the week should January 22 be on?

| JANUARY |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sun | Mon | Tue | Wed | Thu | Fri | Sat |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 |  |
| 7 | 8 | 9 | 10 | 11 |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

Sunday
Monday
Wednesday
Friday
10. A pattern of shapes is to be repeated many times. The figure below shows one completed pattern and the beginning of the next. What shape comes next?

$\qquad$


$\infty$
S

11. Which of the following is another way to write three hundred and sixteen thousand, four hundred and thirty-seven?

300420306347
$\sigma$
316437366430
12. Kwame made a graph of the time he spent playing outdoors each day for 5 days. What is the MOST time he spent outdoors in one day?


60 minutes
50 minutes40 minutes20 minutes
13. How is eight thousand and seventy-six written as a numeral?8067807687068760
14. Which of the following shows a figure drawn with a line of symmetry?
$\sigma$

$\sigma$

$\sigma$

$\sigma$

15. Look at the pattern of shapes.

If the pattern continues in the same way, what will be the next shape?

$\bigcirc$

$\sigma$

$\sigma$

$\square$

16. What sign is missing in this number sentence?

25 $\square$ $10=35$+X-
17. Roscoe wanted to decide which video game to play at his birthday party.

Which of the following questions would BEST help him decide which game to play?Do you like TV better than video games?
$\sigma$
What do you like to do in your spare time?
$\sigma$
Do you like fruit punch or soda to drink?
$\infty$
What is your favourite video game?
18. Which of the following has the same shape as a cylinder?An eggA bookA basketballA can of soup
19. Benny made a cake. He cut the cake into 10 equal pieces. He and his family ate onehalf of the cake after dinner.


How many pieces of cake did they eat?
20. Which number sentence can be used to solve the problem below?

Maya bought 12 packages of light bulbs. There were 2 light bulbs in each package. How many light bulbs did Maya buy?

21. Ben put 4 white T-shirts, 7 yellow T-shirts, and 3 blue T-shirts in the dryer.

If he pulls one T -shirt out of the dryer without looking, which colour T-shirt will he MOST likely choose?He will most likely choose a white T-shirt.He will most likely choose a yellow T-shirt.He will most likely choose a blue T-shirt.Each colour T-shirt is equally likely to be chosen.
22. James reads 8 pages of a book each day for 4 days.

Which number sentence could James use to find the total number of pages he read?$8+4$
$8 \times 4$
$4+4+4+4$
23. Which statement about the survey is TRUE?

| The toy store made a survey of favourite toys. These were the results. |  |
| :---: | :---: |
| Number of Votes |  |
| Action figures | H H H III |
| Stuffed animals | H II |
| Dolls | H H H H |
| Video games | H H H H IIIII |
| Building blocks | HI |
| Cars, trucks, and trains | H III |

Stuffed animals and action figures received the fewest number of votes.Dolls and action figures received the most votes.Most children voted for dolls and building blocks as their favourite toys.Half of the votes were for video games and dolls as the favourite toys.
24. Which fraction is equal to one whole?

25. What is another name for four hundred plus forty plus eight?
26. On Thursday Becky made some popcorn balls.

On Friday she made 6 popcorn balls.
On Saturday she made 12 popcorn balls.
Becky took all 23 popcorn balls that she made to a party.
How many popcorn balls did she make on Thursday?5111741
27. Jessie likes to draw pictures.

The chart below shows how many pictures she drew each month. If the pattern continues, how many pictures will she draw in May?

| Months | Jan. | Feb. | Mar. | Apr. | May |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Number of Pictures | 5 | 10 | 15 |  |  |17

$\sigma$ 20
$\sigma$ 25
$\sigma$ 30
28. Look at this pattern.

Which of the following shows the same kind of pattern?

\section*{$\sigma$





29. Lily has 7 blue T-shirts and some red T-shirts in her drawer. There are 16 T-shirts altogether.
How many T-shirts are red?891123
30. Use the information below to answer the question.


This is one-tenth
$\square$

What is

$?$
1.5
3.9
5.9
9.5
31. What number is represented by the shaded part of the figure below?


| $\bigcirc$ | 0.19 |
| :---: | :---: |
| $\bigcirc$ | 1.09 |
| $\bigcirc$ | 1.19 |
| $\bigcirc$ | 2.09 |

32. Look at the group of things in the circle below.


Which of these things belongs with the things in the circle?
$\sigma$
$\qquad$


33. Each boy and girl in the class voted for his or her favourite kind of music. The results are below.
Which kind of music did MOST students prefer?
ClassicalRock
CountryOther
34. Harry asked several classmates to name their favourite after-school activity and showed the results in this table.
Which graph correctly displays this information?

| Activity | Number of Students |
| :--- | :---: |
| Band | 12 |
| Drama | 6 |
| Math/ |  |
| Science Club | 6 |
| Sports | 24 |

Favourite Activities
Favourite Activities
Favourite Activities


Favourite Activities

35. The table below shows the number of each kind of poster that was sold by a Year 4 class.
The number of fish posters sold was less than the number of

| Poster Sales |  |
| :---: | :---: |
| Kind of Poster | Number Sold |
| Cat | 242 |
| Fish | 259 |
| Frog | 201 |
| Lizard | 284 |
| Bird | 215 |

cat posters.
frog posters.
lizard posters.bird posters.
36. The probability of getting 3 green lights in a row on Smith Street is 1 out of 80 . Which of the following fractions represents this probability?$\frac{1}{81}$$\frac{1}{80}$
$\frac{3}{80}$
O
$\frac{80}{1}$
37. Kevin used a rule to make the number pattern shown below.
$30,33,36,39,42$,
Which of the following uses the same rule?35, 34, 33, 3235, 38, 41, 4435, 37, 39, 41$35,38,40,43$
38. What is the number below?

Seventy two277072
39. What number goes in the box to make the equation below TRUE?

$$
56=\square \times 7
$$9876

40. The table shows the cost of hamburgers.

If the pattern continues, what will be the cost for 6 hamburgers?

| Number of <br> Hamburgers | Total Cost |
| :---: | :---: |
| 1 | $\$ 2.25$ |
| 2 | $\$ 4.50$ |
| 3 | $\$ 6.75$ |
| 4 | $\$ 9.00$ |
| 5 | $\$ 11.25$ |$\$ 12.50$\$13.50\$13.75\$14.25

41. 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?6122638

## Use the information to answer questions 42 to 43.

36, _, 50, 57, 64, $\qquad$
42. Complete this pattern.

36, $\qquad$ 50, 57, 64,
43. What is the rule for this pattern?
44. There is only one red marble in each of the bags shown below. Without looking, you are to pick a marble out of one of the bags.
Which bag would give you the greatest chance of picking the red marble?


Bag with 10 marbles
Bag with 100 marbles
Bag with 1000 marblesIt makes no difference
45. What type of solid figure is represented by the drawing below?


Cylinder

Prism
46. Which of these shows 642 in expanded notation?
$\sigma$

$$
\begin{aligned}
& 640+2 \\
& 600+42 \\
& 600+20+4 \\
& 600+40+2
\end{aligned}
$$

47. 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?


5\%
48. The graph below shows the amount of time Leon spent reading each day last week. If the trend shown on the graph continues, which of the following is the MOST reasonable prediction of the amount of time Leon will spend reading on Friday?
60 minutes80 minutes100 minutes120 minutes
49. Look at the picture below.


Which number sentence matches the picture?
$6+4$
$6-4$
$6-6$
50. The bar graph shows the number of different kinds of birds that Karen saw at her bird feeder last week.
How many more robins than woodpeckers did she see?
11653

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.

```
3 answers still saving...You can keep going
```

34:50 test time left

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.

## 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: 08002255428.

