## Summary

|  | Test Identification |
| :--- | :--- |
| Name | 2021 MY MATH 2.3 |
| Date Created | 16 May 2021 |
| Date Modified | 17 Aug 2021 |
| Subject | Mathematics |
| Status | SCORED |
| Sequence Number | 1132712 |
| Total Test Time | 59 minutes |
| Delivery Method | Onscreen |


|  | Curriculum Strand |  |
| :--- | :---: | :---: |
| Number Sense \& | 14 | Number Knowledge |
| Operations |  |  |
| Statistics | 13 | Algebra |


| Curriculum Level |  |  |  |  |  |
| :--- | :--- | :---: | :--- | :---: | :---: |
| 2B | 4 | 2P | 0 |  |  |
| 3B | 6 | $3 P$ | 14 |  |  |
| 4B | 4 | $4 P$ | 1 |  |  |

## Cognitive Processing

Surface

## Slider Settings

| Number Knowledge | Most |
| :---: | :---: |
| Number Sense \& | Most |
| Operations |  |
| Algebra | Most |
| Statistics | Mo |

## Marking Guide : 2021 MY MATH 2.3

| Q.No | Marking Key |
| :--- | :--- |
| $\mathbf{1}$ | $14,42,50,87,98$ <br> 'Allow 1 missed out or transposed number as long as this does not <br> affect order of values' |
| $\mathbf{2}$ | 32 |
| $\underline{\mathbf{3}}$ | Art, maths, music, p.e, reading <br> 'All required for 1 mark. Must be in order stated in Answer Key.' |
| $\mathbf{4}$ | b |
| $\underline{5}$ | 33 (also accept 34) <br> 'Accept 34, as Liu is holding one in hand' |
| $\underline{6}$ | Harold, Simima, Liu <br> 'All required for 1 mark. Must be in order stated in Answer Key.' |
| $\mathbf{7}$ | C |
| $\underline{8}$ | 4 |
| $\underline{9}$ | 5 |
| $\mathbf{1 0}$ | b |
| $\mathbf{1 1}$ | C |
| $\mathbf{1 2}$ | May, June and July <br> 'Months do not have to be in order of popularity, One mark' |
| $\mathbf{1 3}$ | 6 |
| $\mathbf{1 4}$ | $3 / 4$ or equivalent |
| $\mathbf{1 5}$ | $2 / 3$ or equivalent |
| $\mathbf{1 6}$ | d |
| $\mathbf{1 7}$ | d |
| $\mathbf{1 8}$ | b |
| $\mathbf{1 9}$ | a |
| $\mathbf{2 0}$ | true |
| $\mathbf{2 1}$ | false |
| $\underline{22}$ | true |
| $\mathbf{2 3}$ | d |
| $\mathbf{2 4}$ | b |
| $\mathbf{2 5}$ | b |
| $\mathbf{2 6}$ | b |
| $\mathbf{2 7}$ | c |
| $\mathbf{2 8}$ | d |

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 |
| :--- | :--- |
| $\mathbf{2 9}$ | c |
| $\mathbf{3 0}$ | a |
| $\mathbf{3 1}$ | a |
| $\mathbf{3 2}$ | c |
| 33 | c |
| $\mathbf{3 4}$ | b |
| $\mathbf{3 5}$ | a |
| $\mathbf{3 6}$ | c |
| $\mathbf{3 7}$ | e |
| $\mathbf{3 8}$ | a |
| $\mathbf{3 9}$ | b |
| $\mathbf{4 0}$ | $2,4,1,3$ <br> 'all in order for one mark' |
| $\mathbf{4 1}$ | c |
| $\mathbf{4 2}$ | Appropriate combination of activity and emotion. Example: mum <br> leaves, beginning to be kind of scared <br> 'Give mark if reason plausible and accurate use of vertical scale <br> demonstrated' |
| $\mathbf{4 3}$ | Appropriate combination of activity and emotion. Example: hears a <br> strange noise, extremely scared. <br> 'Give mark if reason plausible and accurate use of vertical scale <br> demonstrated' |
| $\mathbf{4 4}$ | Appropriate combination of activity and emotion. Example: goes to <br> sleep, not scared. <br> 'Give mark if reason plausible and accurate use of vertical scale <br> demonstrated' |
| $\mathbf{4 5}$ | d |
| $\mathbf{y}$ |  |

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 family/whānau 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. Meve's family picked strawberries. Meve picked 50, Johnny picked 42, Dad picked 87, Mum picked 98 and Aunty Sam picked 14.


Write these numbers from smallest to largest.

Use the following information to answer questions 02 to 03.
Kuni asked her classmates what their favourite subject was.
The tally chart shows their answers.

| Favourite Subject |  |  |
| :--- | :--- | :--- |
| Reading | $H H$ | I |
| Music | II |  |
| Art | $H H$ |  |
| Maths | $H H$ |  |
| P.E. | $\\| H$ | HI |

2. How many people did Kuni ask?
3. Kuni has forgotten to fill in the key. Complete the key for Kuni by filling in the names of the subjects.


Key

$\square$
04. What is 583607 rounded to the nearest hundred?

## Use the following information to answer questions 05 to 06.

Harold, Liu and Simima collect marbles.
Finish these sentences about Liu, Simima, Harold and their marbles.

05.

There are $\qquad$ marbles altogether.
06.
$\qquad$ has more marbles than
but fewer than $\qquad$

End of Section
07. The rule for the table is that numbers in each row and column must add up to the same number.
What number goes in the centre of the table?

| 4 | 11 | 6 |
| :---: | :---: | :---: |
| 9 |  | 5 |
| 8 | 3 | 10 |12

$\sigma$ 7
$\sigma$ 12

## Answer questions 08 to 09.

8. 

$12 \div 3=$ $\qquad$
09. $11-2 \times 3=$
10. The pictogram shows the number of flowers planted in Amherst parks, but the key is missing.
Townspeople planted 90 roses, 165 daisies, and 210 tulips.
How many actual flowers does each flower in the pictogram represent?
50
$\sigma$ 30
$\sigma$ 25
$\sigma$ 35
11. What is the average temperature for October?

$45^{\circ} \mathrm{F}$
$50^{\circ} \mathrm{F}$
$B$
$55^{\circ} \mathrm{F}$$60^{\circ} \mathrm{F}$

## Use the following information to answer question12..

The table below shows the number of visitors to Bent's Fort from March through September.

Visitors to Bent's Fort

| Month | Mar. | Apr. | May | Jun. | Jul. | Aug. | Sep. |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Visitors <br> (rounded to nearest hundred) | 1600 | 3200 | 4100 | 4300 | 6100 | 3300 | 2400 |

12. According to the months shown, what were the three MOST popular months to visit Bent's Fort?
1) 
2) $\qquad$
3) $\qquad$

## End of Section

Use the following information to answer questions 13 to 15.
At a party, a cake was cut into pieces.

13. How many pieces are there in $\frac{1}{2}$ of the cake?
14. Write the fraction for 9 pieces of the cake?
15. Ben ate 4 pieces of cake.

What fraction of the cake is left?

## End of Section

16. Which of the following values should be placed in the box to make the equation TRUE?

$$
8=56 \div \square
$$10

$\sigma$ 987
17. In a race, the three fastest times were 12.13 seconds, 11.23 seconds and 12.31 seconds.

Which one of the following orders of first, second and third is correct?11.23, 12.31, 12.1312.31, 12.13, 11.23
12.13, 11.23, 12.31
11.23, 12.13, 12.31
18. The graph below shows the number of oranges harvested from the Acevedo's orange tree over a 6-year period.
Which of the following is a correct conclusion about the graph?


Fewer oranges were harvested in 2002 than in 1997.
More oranges were harvested in 2001 than in 1998.
The number of oranges harvested increased every year.The number of oranges harvested decreased from 2000 to 2001.
19. Which problem can be solved using the number sentence in the box?

```
2\times25=\
```

Janice hás 2 boxes of seashells. There are 25 shells in each box.
How many shells does Janice have?
A pet shop had 25 goldfish. Someone bought 2 goldfish.
How many were left?
There were 25 children in the pool. 2 more children got in the pool.
How many children were now in the pool?
Garth filled 2 baskets with eggs. He used a total of 25 eggs.
How many eggs did he put in each basket?

Use the following information to answer questions 20 to 22.
A class was asked to insert the correct symbol (=, < or >) in the equations below to make them correct.
Select those that are TRUE and those that are FALSE.
20.

## TRUE <br> FALSE

$6 \div 2=6 \times \frac{1}{2}$
21.

## TRUE

$7 \times 3<20$
22.

## TRUE

$8-4+2>4 \div 1$
$\sigma$


FALSE

## End of Section

23. Darrell graphed the money he has earned for the past five weeks.

If this pattern continues, what would be a reasonable prediction of his earnings for the sixth week?

Money Earned from Chores
Over \$20Between \$14 and \$18Between \$12 and \$14Between \$8 and \$10
24. A function machine uses a rule to change numbers into other numbers. The picture below shows what happened when the numbers 4,12 and 7 went into the machine. What number will come out of the machine if the number 9 goes into it?


## $\sigma$ <br> 63

72819025. The Sports Store was selling running shoes at a special sale price. The normal price is $\$ 60.80$. They were reduced by $\frac{1}{4}$ of the normal price.
How much were they reduced by?
\$12.20\$15.20$\$ 45.60$$\$ 48.60$
26. What number should go in the box?

$$
\frac{1}{2} \text { of } \square=20
$$

27. A teacher asked 30 students in her class the flavour of their favourite ice cream. The table shows how the teacher recorded the students' responses. In the bar graph beside the table, which ice cream flavour corresponds to the bar that is labelled X?

| Favourite <br> Ice Cream | Number of <br> Students |
| :--- | :--- |
| Butterscotch | IIII |
| Chocolate | HH HH |
| Strawberry | HH IIII |
| Vanilla | HH II |


$\bigcirc$ Butterscotch
Chocolate
Strawberry

## Vanilla

28. When you subtract one of these numbers from 900, the answer is greater than 400. Which number is it?712667579
$\sigma$ 459
29. 

POPULATION

| Clear Lake | 8000 |
| :--- | :--- |
| Rancho Santa Fe | 4000 |
| Bull Shoals | 1500 |
| Beaver City | 750 |
| Jeffersonville | 500 |

A pictogram of the data above is to be drawn using $ㅇ ㅝ$ as the symbol that represents 500 people. How many 읒 would it take to represent the population of Rancho Santa Fe?148
$D$
804000
30. What is $2 / 3$ of 15 marbles?

10 marbles9 marbles
$D$
8 marbles
$\infty$
5 marbles
31. The points scored by a school football team this season are:
$6,7,11,12,22,28,28,30,33,35$
Which of the following stem-and-leaf plots correctly displays the data?

0

| Stem |  |
| :--- | :--- |
| Leaf |  |
| 0 | 6,7 |
| 1 | 1,2 |
| 2 | $2,8,8$ |
| 3 | $0,3,5$ |


| Stem |  |
| :--- | :--- |
| Leaf |  |
| 0 | 6,7 |
| 1 | 1,2 |
| 2 | 2,8 |
| 3 | $0,3,5$ |


| Stem |  |
| :--- | :--- |
| Leaf |  |
| 0 | 3 |
| 1 | 1 |
| 2 | 1,2 |
| 3 | 3 |
| 5 | 3 |
| 7 | 0 |
| 8 | 2,2 |

$\sigma$

| Stem |  |
| :--- | :--- | Leaf $\quad$| 2, |  |
| :--- | :--- |
| 0 | 3 |
| 1 | 1 |
| 2 | 1,2 |
| 3 | 3 |
| 4 |  |
| 5 | 3 |
| 6 |  |
| 7 |  |
| 8 | 2,2 |

32. Sam listed his scores from history class.

84, 86, 83, 78, 92, 87, 92, 90, 88, 86
Which line plot correctly displays his scores?

0


33. The graph below shows how the number of books of flower stamps in a vending machine changed over a period of hours.
Which is closest to the number of books of stamps in the machine at 11 am ?


41
46
5259
34. The circles are in a regular square pattern. Some of the circles are hidden by the card. What fraction of the circles are hidden?

$\frac{1}{2}$
$\frac{1}{3}$
$\frac{1}{4}$
$\frac{1}{5}$
35. The list shows the scores achieved by each member of Jaime's discussion group on the last test.
71, 80, 62, 93, 68, 87, 73, 78
Which stem-and-leaf plot correctly displays the information?
$\qquad$

$$
\begin{array}{c|l}
\text { Stem } & \text { Leaf } \\
\hline 6 & 2,8 \\
\hline 7 & 1,3,8 \\
\hline 8 & 0,7 \\
\hline 9 & 3
\end{array}
$$

$\qquad$
$D$

| Stem | Leaf |
| :---: | :--- |
| 6 | 1,0 |
| 7 | 1,2 |
| 8 | 7 |
| 9 | 3 |

36. What is the greatest common divisor of 54,36 , and 24 ?
$D$ 236
$\square$
9
37. If the value of the expression $x+2$ is less than 12 , which of the following could be a value of $x$ ?161412108
38. Which digit goes in the space to make the statement below TRUE? $4837206>48$ $\qquad$ 5379
39. Which arrow shows the location of -5 on the number line?
KLM
$D$
N
40. A cold country records the temperature on 4 days.

Put the numbers $1,2,3$, and 4 in the boxes to order the temperatures from the highest (1) to the lowest (4).$-15.2^{\circ} \mathrm{C}$
$-20.6^{\circ} \mathrm{C}$$-11.3^{\circ} \mathrm{C}$
$\square$ $-18.5^{\circ} \mathrm{C}$
41. Christy has 88 photographs to put in her album. If 9 photographs will fit on each page, how many pages will she need?


8

9
10
$\sigma$11

## Use the following information to answer questions 42 to 44.

This graph shows how scared Dominic got when he went camping with his family.


Dominic said "When mum sent me into the tent at 8.00 pm I got scared because it was dark and I was on my own. At 8.30pm mum came to tuck me in and read a story. I wasn't scared any more. Mum went back outside at 9:00pm. Then ..."
Using the graph, fill in the spaces to show what may have happened to Dominic and how he felt about it.
42.
Time Event Dominics's Feelings
9.00pm
43.

Time
Event
9.35pm

44.

Time
Event
Dominics's Feelings
10.00pm
45. Which of the following real-world situations could BEST be modelled by the following graph?


The height of a person growing from child to adultThe temperature of a cake after it is taken out of the oven
$\sigma$
The height of an airplane landing on a runway
$\sigma$
The amount of petrol in a car tank during a long trip

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.

