Year 7 Maths Revision: Autumn Term

Your assessment could include any topics that you have been taught since the start of year 7, until the end of Autumn Term.

In addition to revision material given to you by your teacher, you should be using the mathswatch website to revise topics that you know you struggle with, especially from earlier in year 7.

Ask your teacher for your login details, and write them here:

vle.mathswatch.com
User:
Password:

Choose topics below that you know you need to revise, and log onto mathswatch to watch the video clips and try the questions.

<table>
<thead>
<tr>
<th>YEAR 7 TOPICS</th>
<th>MathsWatch Clip numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integer place value</td>
<td>N1a</td>
</tr>
<tr>
<td>Mental addition and subtraction</td>
<td>N3a and N4a</td>
</tr>
<tr>
<td>Written addition and subtraction of integers</td>
<td>N3b and N4b</td>
</tr>
<tr>
<td>Addition and subtraction of decimals</td>
<td>N13b and N14b</td>
</tr>
<tr>
<td>Multiplication and division of integers</td>
<td>N15a and N28a; N16 and N29a</td>
</tr>
<tr>
<td>Area</td>
<td>G9, G20a, G20b, G20c and G20d</td>
</tr>
<tr>
<td>Multiplication and division of decimals</td>
<td>N15b, N28b and N29b</td>
</tr>
<tr>
<td>Mean</td>
<td>S7</td>
</tr>
<tr>
<td>Time</td>
<td>N7b</td>
</tr>
</tbody>
</table>

The rest of this booklet contains questions in the style that you will find in the assessment. Plan to do a page a day – or follow your teacher’s instructions. If you find any questions difficult, look up the topic on mathswatch and ask your teacher for help.

If you are in set 1, ask your teacher for extension material as your assessment may also include harder questions.
1. 

2 marks

2. Write these numbers in order from smallest to largest

16, 123, 73, 140, 77

1 marks

3. Write down the value of the 3 in the number 42 398

1 marks
4. work out

(a) 7 x 10

(b) 3.6 x 100

(c) 0.054 x 100

(d) 6000 ÷ 100

(e) 0.84 ÷ 10

(5 marks)

5. (a) Round 342 to the nearest ten

(b) Round 12 831 to the nearest thousand

(2 marks)
Fiona has four cards. Each card has a number written on it.

\[
\begin{array}{cccc}
4 & 9 & 1 & 5 \\
\end{array}
\]

Fiona puts all four cards on the table to make a number.

(a) (i) Write the numbers on the cards to show the smallest number Fiona can make with the four cards.

\[
\begin{array}{cccc}
\_ & \_ & \_ & \_ \\
\end{array}
\]

1 mark

(ii) Write the numbers on the cards to show the largest number Fiona can make with the four cards.

\[
\begin{array}{cccc}
\_ & \_ & \_ & \_ \\
\end{array}
\]

Fiona uses the cards to make a true statement.

(b) Write the number on the cards to make this true. Use each of Fiona’s cards once.

\[
\begin{array}{ccc}
\_ & + & \_ \\
\end{array} = \begin{array}{c}
\_ \\
\_ \\
\_ \\
\_ \\
\end{array}
\]

1 mark

A fifth card is needed to show the result of the multiplication $4915 \times 10$. She needs a fifth card.

(c) Write the number that should be on the fifth card.

\[
\begin{array}{c}
\_ \\
\end{array}
\]

1 mark
7. Tony has a hot-dog stall.
He uses sauce from a bottle which holds 224 ml.
He puts about 7 ml of sauce on each hot-dog.
How many hot-dogs can he put sauce on from one bottle?

A bottle of cola costs £1.14
Emma buys 4 packets of biscuits and one bottle of cola.
She pays with a £10 note.
Work out how much change she should get.
9. Calculate the perimeter of the shape below giving units with your answer

(4 marks)
10. The three triangles in the diagram below are exactly the same. Calculate the total area of the shape. Give units with your answer.

(4 marks)
1.
(a) Write the number **7428** in words.

........................................................................................................................................

(1)

The mountain K3 is eight thousand and fifty one metres high.
(b) Write the number **eight thousand and fifty one** in figures.

........................................................................................................................................

(1)

The table shows the heights of six mountains.

<table>
<thead>
<tr>
<th>Mountain</th>
<th>Height (metres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diran</td>
<td>7266</td>
</tr>
<tr>
<td>Lhotse</td>
<td>8516</td>
</tr>
<tr>
<td>K12</td>
<td>7428</td>
</tr>
<tr>
<td>Cho Oyu</td>
<td>8188</td>
</tr>
<tr>
<td>Jannu</td>
<td>7711</td>
</tr>
<tr>
<td>Makalu</td>
<td>8485</td>
</tr>
</tbody>
</table>

(c) Write down the name of the highest of these mountains.

........................................................................................................................................

(1)

(d) Write the number **8188** to the nearest hundred.

........................................................................................................................................

(1)
2.

347 + 62 =

154 - 81 =

74 \times 5 =

378 \div 3 =
3. Write the correct symbol =, < or > in each circle

\[
\begin{align*}
9 \times 3 & \quad \bigcirc & 8 \times 4 \\
9 - 3 & \quad \bigcirc & 8 - 4 \\
9 + 3 & \quad \bigcirc & 8 + 4
\end{align*}
\]

4. Write these numbers in order of size, starting with the smallest.

\[
\begin{array}{ccccc}
3.01 & 13.0 & 0.31 & 1.30 & 3.1 \\
\end{array}
\]

\[
\overset{\text{Smallest}}{\begin{array}{c}
\end{array}}
\]

2 marks

5. Complete the table by rounding each number to the accuracy given at the top of the column.

<table>
<thead>
<tr>
<th>Number</th>
<th>To the nearest integer</th>
<th>To 1 decimal place</th>
<th>To 2 decimal places</th>
</tr>
</thead>
<tbody>
<tr>
<td>47.439</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.952</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4 marks
6.

(a) A three-digit number is a multiple of 4

What could the number be?

Give an example.

______________________ 1 mark

Now give a different example.

______________________ 1 mark

(b) A two-digit number is a factor of 100

What could the number be?

Give an example.

______________________ 1 mark

Now give a different example.

______________________ 1 mark
7.

(a) Join all the pairs of numbers that **add** together to equal **1**

The first one is done for you.

- 0.1 + 0.99
- 0.11 + 0.9
- 0.01 + 0.999
- 0.91 + 0.89
- 0.001 + 0.09

2 marks

(b) Now join all the pairs of numbers that **multiply** to equal **1**

The first one is done for you.

- 1 * 2
- 0.5 * 4
- 0.25 * 1
- 0.1 * 20
- 0.05 * 10

2 marks

![Jack's picture with 44.8 kg]

Then Jack weighs himself together with his dog.

![Jack with dog and 60.4 kg]

How much does the dog weigh?
9. Here are five number cards.

0.47  10  100  1000  4.07

Use four of the cards to complete these calculations. You can use each card only once.

\[ 47 \div \square = \square \]

\[ \square \times \square = 40.7 \]

2 mark

10. Shape A and shape B are each made from five identical squares.

Shape A and shape B are each made from five identical squares.

The **perimeter** of shape A is **72 cm**.

Work out the **perimeter** of shape B.

3 mark
11. Now Lisa multiplies two different numbers.
Complete the grid, then give the answer below.

<table>
<thead>
<tr>
<th></th>
<th>40</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>___</td>
<td>600</td>
<td>18</td>
</tr>
</tbody>
</table>

4 mark

12. Jack buys **four** apples.
He pays with a **£2** coin.
He gets **£1.20** change.

How much does **one** apple cost?

3 mark
13. Lisa has some boxes that are all cubes of the same size. She uses four of the boxes to make a pile with a height of $72\text{ cm}$. She puts one more box on top of the pile.

Work out the height of the pile of five boxes.
14. Here are some numbers.

\[ 9.6 \quad 12.6 \quad 15.4 \quad 7.6 \quad 12.4 \quad 17.4 \]

Write the numbers in pairs so that the **sum** of the numbers in each pair is the same.  

[2 marks]
15.

Look at the rectangle.

The total area of the rectangle is $40 \text{cm}^2$

Work out lengths $x$ and $y$
16.

Eva sees these prices for burgers and bread rolls.

<table>
<thead>
<tr>
<th>Burgers</th>
<th>Bread rolls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pack of 8</td>
<td>Pack of 12</td>
</tr>
<tr>
<td>£3.65</td>
<td>£1.95</td>
</tr>
</tbody>
</table>

Eva has £15
She wants to buy 24 burgers and 24 bread rolls.

Does she have enough money?
You **must** show your working.

[4 marks]
17. Ranjit has six coins in his pocket.
   If he picks five of the coins
       the most he could pick is £4.60
       the least he could pick is £2.70
   How much money does he have altogether? [4 marks]