



**Good morning everyone,**

*Let us now light a candle and cross our hands over our hearts and say the Morning Verse. This term there will be another part added to the Morning verse you already know.*

**Morning verse**

**I look into the world  
In which the sun is shining  
In which the stars are sparkling  
In which the stones repose**

**Where living plants are growing  
Where sentient beasts are living  
Where human souls on earth  
Give dwelling to the spirit.**

**I look into the soul,  
That lives within my being  
The World Creator weaves  
In sunlight and in soul light,  
In world space there without  
In soul depths here within.**

*Before we start today, I would like you to do star jumps, but before that, make sure you have enough space around you.*

*Have your feet together and arms beside you. When you jump, your legs go to the sides and your arms swing straight up and your hands clap. Now, when you do your star jumps, I would like you to recite **the 8 times table**. It will be tricky at first, but with practice you will get better.*

*Once you are finished, you can sit down and practice the new tongue twister:*

***How much wood would a woodchuck chuck, If a woodchuck could chuck wood?***

***A woodchuck would chuck as much wood as a woodchuck would, if a woodchuck could chuck wood.***

*Read the tongue twister a few times and then try to say it from memory. Once you are confident say it fast 3 times.*

*Once finished, you can open your spelling book and in your most beautiful running writing and by using your fountain pen (or a grey led) copy the spelling list twice. Do not forget to include the date and make sure all the letters are in lower case. Also try to look, cover, copy and then check your spelling.*

### **Week 4 Spelling list**

diagnosis

gherkin

disagree

recognise

hundredths

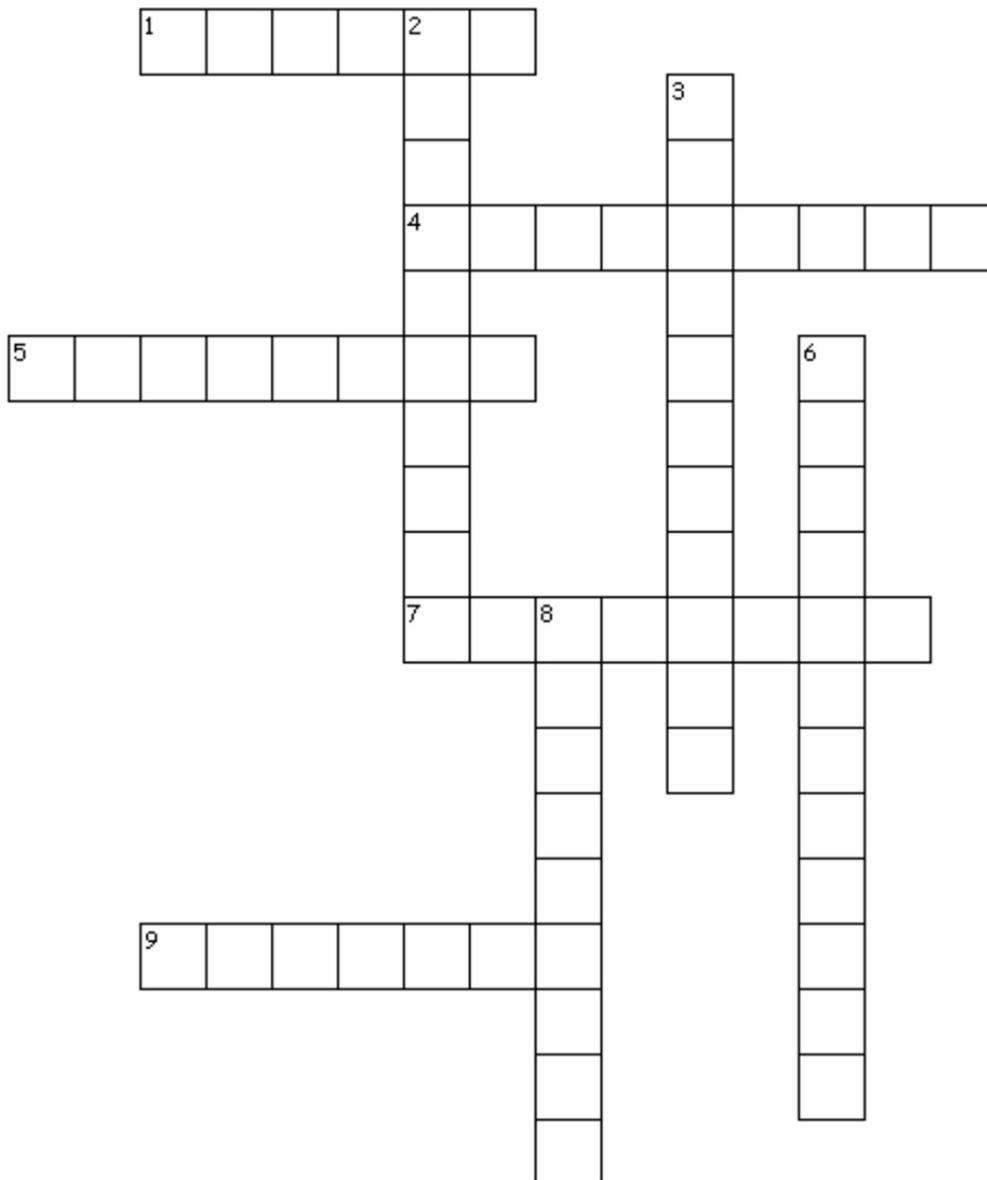
tenths

strategy

**denominator**

**disagreement**

The crossword below contains only the words from the spelling list. Every word has a clue which is written below the crossword.



Across

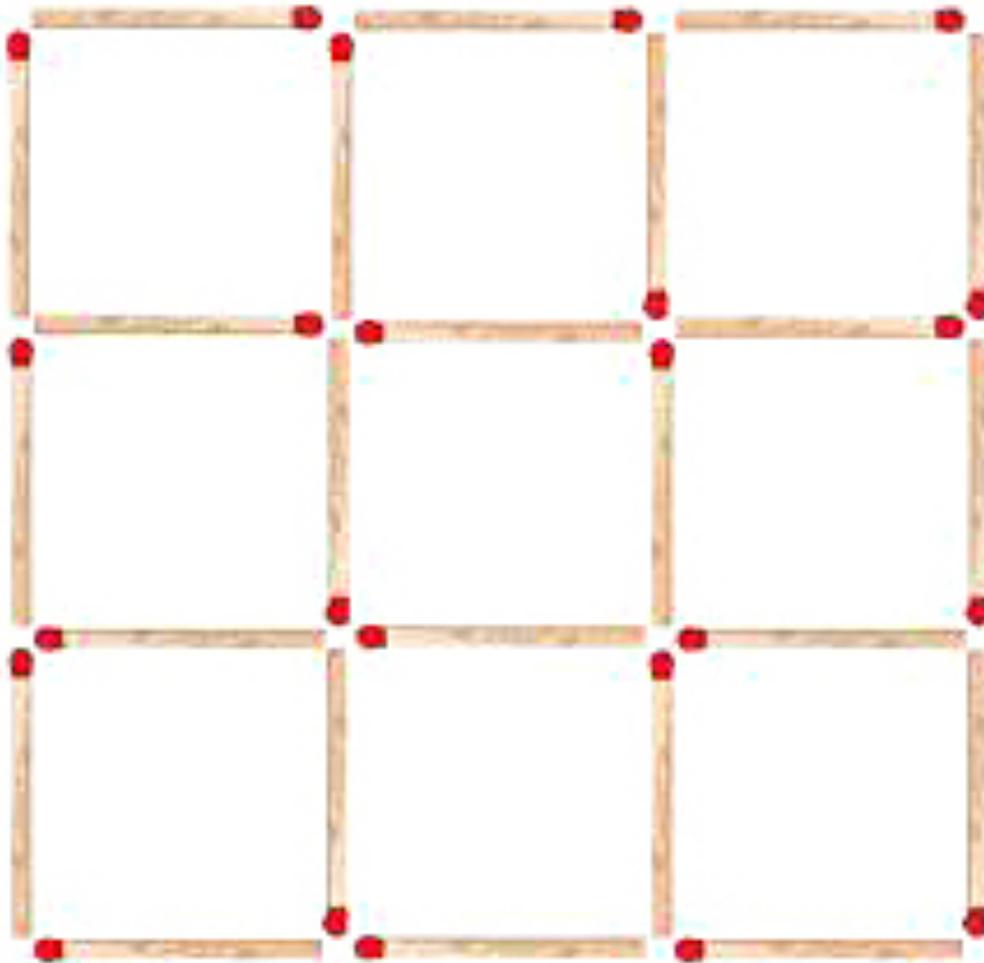
- 1. first place to the right of the decimal point
- 4. discovery of illness or a problem
- 5. express a different opinion
- 7. a plan of action
- 9. small cucumber

Down

- 2. second place to the right of the decimal point
- 3. the number below the line in a fraction
- 6. opposite of agreement
- 8. identify something you have seen before

Before we move on to Quick Maths, I would like you to solve the matchstick problem attached below (you will need a box of matches, alternatively, you can draw).

Leave just six squares by removing eight matchsticks.



Once finished, you can close your spelling book and open your purple maths practice book. Below you will find a maths warm-up sheet which includes exercises of variable difficulty. The ones at the top are the easiest while the bottom ones are the most challenging. You do not have to solve them all, but make sure you challenge yourself.

#### Quick maths

- 1     ... + ... + ... = 22
  - 2     How many 9's in 27?
  - 3     ... x ... = 30 (write 2 options)
  - 4     I doubled the number, added 20 and got 100. What was the number?
  - 5     The bus left the terminal at 7.45 a.m. and arrived at its destination at 2.30 p.m. How long did the train travel?
  - 6     170 - ... = 70
- 
- 7     What is one fiftieth of 300?
  - 8     Half of 132 =
  - 9     \$131.75 - \$67.35 =
  - 10    1021 - ... = 775
  - 11    ... + 73 + ... = 291
  - 12    ... x 15 = 90
  - 13    What is three quarters of 100?
  - 14    Mr Hill planted 128 flowers but only  $\frac{3}{4}$  of them sprouted. How many flowers sprouted?
  - 15     $\frac{1}{16}$  of 48 =
  - 16    I tripled the number, took away 15 and got 180. What was the number?
  - 17    18 times 5 times 2 take away 20 then divide by 80. What is the answer?
  - 18    7362 - 3212 + 56 - 1527 =
-

- 19 144 shared between 8 =
- 20 Mrs Cook bought 5 tins of beans 79c a can and a can of dog food for \$1.15. How much did she spend on her purchases?
- 21 Add these fractions with uncommon denominators and simplify if possible:  $\frac{5}{8} + \frac{6}{9}$
- 22 Convert  $\frac{36}{17}$  to a mixed number fraction and simplify if possible.
- 23 To solve these equations, you will need to solve the multiplication before you do the addition and subtraction.
- $703 - 433 + (27 \times 7) =$   $(23 \times 9) - 77 + 22 =$
- 24 A birthday cake was cut into 16 slices.  $\frac{3}{4}$  were eaten during the party. You had  $\frac{1}{4}$  of the remainder the next day. What fraction of the original cake was left?

***Now you can have a 5-minute break.***

*Welcome back. Yesterday, you heard about the influence Egyptian culture and other achievements had on the neighbouring lands and what great civilisation emerged and prospered after Egypt has faded away.*

*I would like you to spend the next 5-10 minutes, retelling this story to one of your parents.*

*Once you are finished, I would like you to play a recording named **Perimeter and Area** as well as look at the examples attached below.*

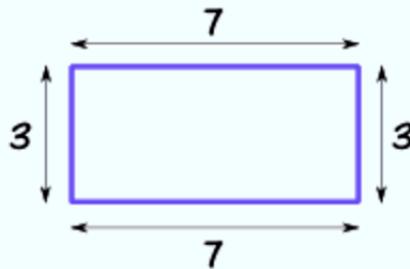
## **Perimeter and Area**

The ancient Egyptians were one of the first to develop methods and instruments for measuring land. The annual flood of the Nile River created a need for standards and surveying techniques so that property boundaries could be readily re-established when the water receded. The ability to measure area was also needed when building structures like temples, palaces, pyramids and even the planning of new cities. Knowing the area that a structure will require was crucial as ancient Egyptian engineers would have to make sure it could be erected precisely within the boundaries of the allocated land.

We have now practiced how to measure perimeter of a shape or area and we know that there are 2 ways of going about it. We can either measure all the way around the shape, or if the shape has opposite sides that are the same, we can use a formula:

**double length added to double width**  $(h \times 2) + (w \times 2) = \text{perimeter}$

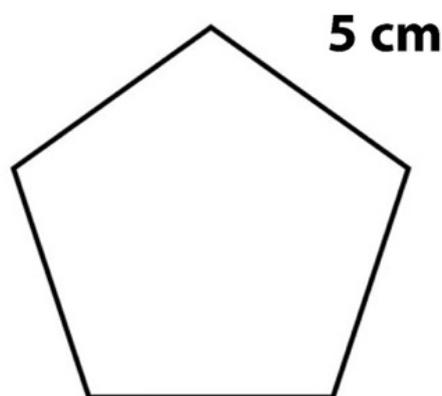
Example: the perimeter of this rectangle is  **$7+3+7+3 = 20$**



We can also rewrite the same in this way:

$$(3 \times 2) + (7 \times 2) = 6 + 14 = \mathbf{20}$$

If, for example, we are calculating the perimeter of a regular pentagon (all sides are the same length), then we just need to know the length of one side and then multiply that by the number of sides. You can also add all the sides together, but that will take longer and could be confusing, especially if your shape has 10 sides.



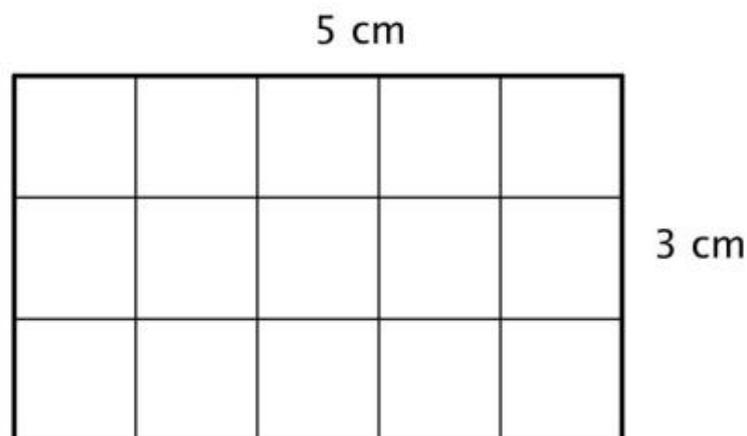
Here you can see, that this pentagon is regular (all sides are the same length), and that the length of one side is 5 cm, so instead of adding all sides together:

**$5 + 5 + 5 + 5 + 5 = 25$** , we can simply calculate it by multiplying the length of one side by the number of all the sides:  **$5 \times 5 = 25$**

Today, I will show you how to measure the area of rectangles and squares.

How would we describe what area is? It is the amount of space taken up by a two-dimensional shape or surface.

If you look at the example below, you can see a rectangle divided into small squares. Each one of them is 1cm wide and 1cm high. All we need to do is to count the number of these squares within the rectangle to find out how much area this shape requires.



By counting the squares, we know that this rectangle takes up 15 squares.

Now, in this example we can see the little squares, but what if we are measuring rectangular or square shape that has no squares drawn on it?

Then we can simply multiply the width by height, just like that:

$$3 \times 5 = 15$$

which basically means: there are 3 rows of 5 squares in each row.

We know that this answer is right, because we can check by counting the individual squares. This formula cannot be applied to shapes that have all sides of different length. It will only work for shapes that have opposite sides of same length.

I can give you a very practical example of how to use the measurement of area in practice. Let's say you are planning to pave a certain area of your back garden, but you are unsure of how many pavers you will require.

Let's say you are using the measurement of cubits and the area measures 3 cubits wide by 5 cubits long. You also know that one paver is 1 cubit long by 1 cubit wide, so by using a formula for the measurement of area, you can calculate that it will take 15 pavers to pave your area.

This method was used in the same way in ancient Egypt for calculating how many stones will be required to lay a foundation of a pyramid or any other structure

The first task for you today will be to remember how you measured 3 different objects then measure the rectangular shapes attached below by using the formula you have learned.

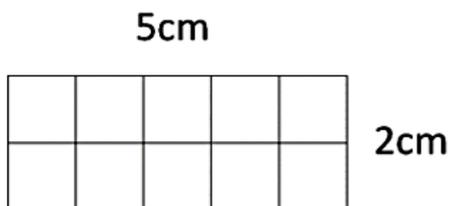
Then, I would like you to open your Main Lesson book and write the following:

### **Measuring the perimeter of rectangular shapes**

- **measuring all the way around the shape**
- **using a formula of double length multiplied by double width**

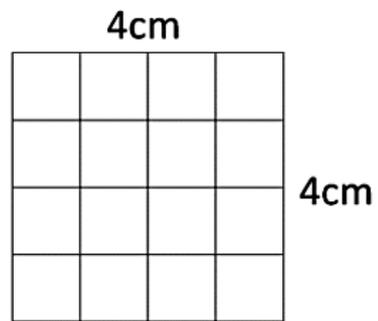
Once you have written out the text, I would like you to copy the shapes and calculations into your book below your text.

1)



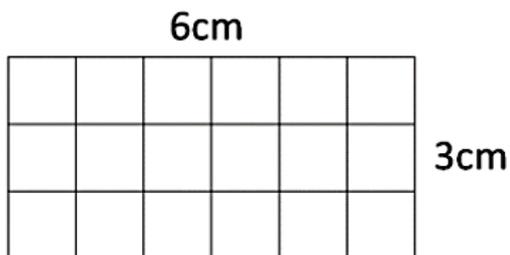
Perimeter = \_\_\_\_\_ cm

2)



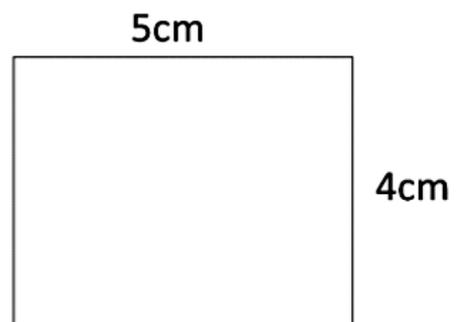
Perimeter = \_\_\_\_\_ cm

3)



Perimeter = \_\_\_\_\_ cm

4)



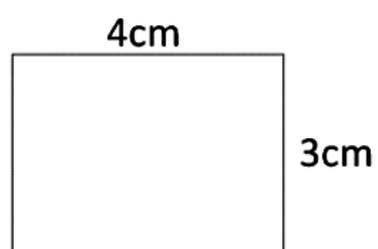
Perimeter = \_\_\_\_\_ cm

5)



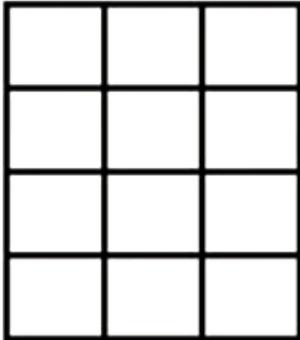
Perimeter = \_\_\_\_\_ cm

6)

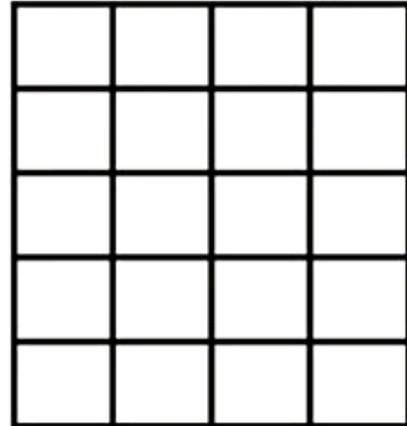


Perimeter = \_\_\_\_\_ cm

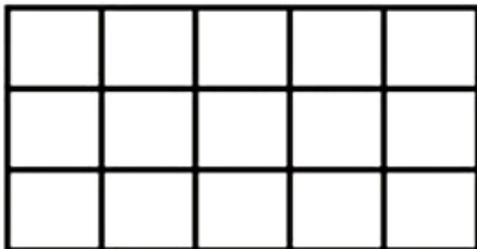
Once finished, I would like you to look at the following examples and work out how many square units each shape has:



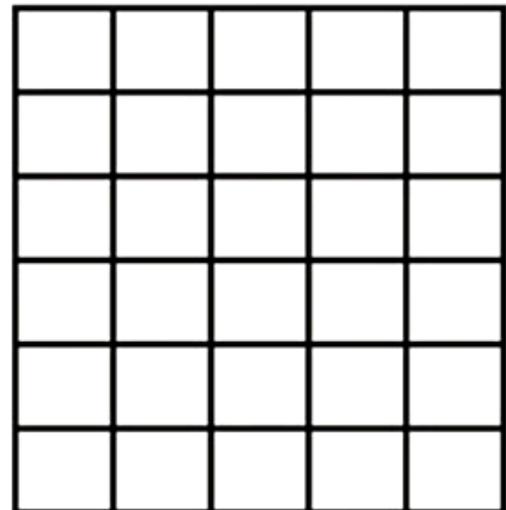
1. This shape has an area of \_\_\_\_\_ square units.



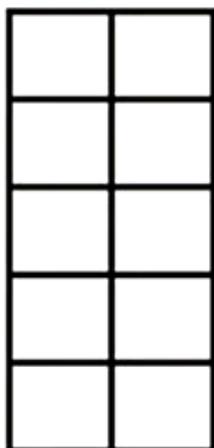
2. This shape has an area of \_\_\_\_\_ square units.



3. This shape has an area of \_\_\_\_\_ square units.



4. This shape has an area of \_\_\_\_\_ square units.



5. This shape has an area of \_\_\_\_\_ square units.

Your last task will be to look at the previous page of your Main Lesson book and carefully study the perimeters of the 3 objects that you have measured earlier. Then by using the formula of area measurement, try to work out the area of each of you objects in your maths practice books.

If your measured sides included fractions of cubits, you can round them off to the nearest number:

**2 and  $\frac{3}{4}$  cubits can be rounded off to 3 cubits**

**2 and  $\frac{1}{4}$  cubits can be rounded off to 2 cubits**

Once finished, you can illustrate your 3 objects and write out your area calculations on the following page of you Main Lesson book.

***If you still have some time left or would like to have more practice, I have attached a file named Additional Maths Practice.***

*If you choose to listen to the chapter book before you have morning tea, you can play the recording now, otherwise, you can cross your hands over your heart and say the **Main Lesson ending verse.***

May wisdom shine through me,  
May love glow within me,  
That in me may arise  
A helper of mankind  
A server of holy things,  
Selfless and true.

*Now you may blow out the candle.*

***Enjoy your morning tea.***