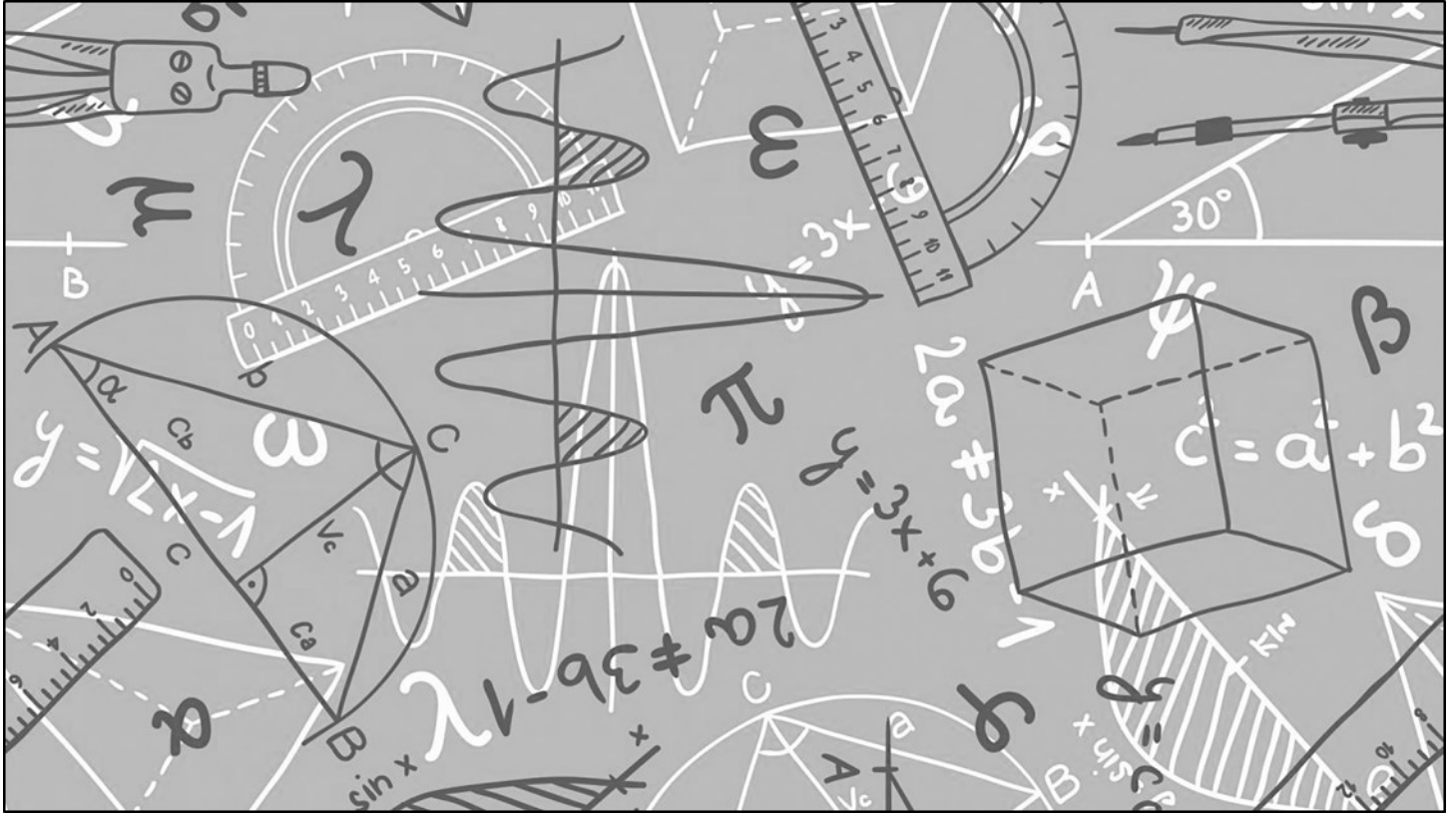# Springwood High School

# Maths



# We can't wait to meet you

All the Maths teachers at Springwood High School are very much looking forward to meeting you. Normally at this time of year you find out about us, we find out about you and together we do some maths. Unfortunately, due to the usual transition activities being cancelled, we won't meet in person, however hopefully by completing this booklet you will be able to "meet" some of the Maths department at Springwood High School , research some of their favourite mathematicians and do some maths, either on your own or with your family.

# Meet the department...

In the Maths department we have 18 Maths Teachers, 2 learning mentors and a Maths teaching assistant. We have created a little treasure hunt for you. Some of them have shared their favourite number and favourite mathematician with you. When you join us, bring this page with you and try to find as many of these members of staff as possible and ask them why they chose these numbers and mathematicians as their favourite. They will then sign it. Once you have this page complete, hand it into the maths department and you will then get 5 achievement points!

**Ms Loizou**

**Favourite number**

6

**Favourite Mathematician**

Sophie Germain

Signed:………………..

**Mrs Jordan**

**Favourite number**

4

**Favourite Mathematician**

Fibonacci

Signed:………………..

**Mr Redman**

**Favourite number**

38

**Favourite Mathematician**

Blaise Pascal

Signed:………………..

**Miss Cook**

**Favourite number**

π

**Favourite Mathematician**

Hannah Fry

Signed:………………..

**Miss Brown**

**Favourite number**

5

**Favourite Mathematician**

Hypatia

Signed:………………..

**Mr Rawling**

**Favourite number**

28

**Favourite Mathematician**

Gerolamo Cardano

Signed:………………..

**Mrs Mckenzie**

**Favourite number**

11

**Favourite Mathematician**

Katherine Johnson

Signed:………………..

**Mrs Fontanel-Kennerson**

**Favourite number**

8

**Favourite Mathematician**

René Descartes

Signed:…………..

**Miss Edwards**

**Favourite number**

22

**Favourite Mathematician**

Dorothy Vaughan

Signed:………………..

**Miss Ashfield**

**Favourite number**

23

**Favourite Mathematician**

Albert Einstein

Signed:………………..

**Mr Coote**

**Favourite number**

5

**Favourite Mathematician**

Archimedes

Signed:………………..

**Mr Levy**

**Favourite number**

26.2

**Favourite Mathematician**

Pythagoras.

Signed:………………..

When you come to Springwood high school, you will be using the Times Tables Rock stars website to practise your times tables and to take part in competitions between each other, between form groups and between other schools.

But why wait until then?  We have created your login details already and we have your first competition that has just been launched!  We would like you to log onto Times Tables Rock Stars and complete as much of it as you can.  The form group with the most number of points will receive a prize, as will the student with the most number of points in the year group.

To log in, go to **https://play.ttrockstars.com/login/1787** and enter these details

**School: Springwood High School**

**Username:**

**Password:**

**Please remember not to share your login details.**

Rock and roll!

If you have any difficulties logging in or questions about TT Rock Stars in general, please email **maths@springwoodhighschool.co.uk**

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# FAQs

**I seem to be getting questions up to 12x12**

**- why is that?**

Assuming that's not intentional, make sure you're

playing in the Garage or Arena to get the tables

we've set for them.

**Why can't I login?**

The most likely cause is that one of the three bits of

information (school, username or password) hasn't

been entered as above.

**I have chosen a rock name that I'm unhappy**

**with - how do I change it?**

Ask the Maths Department to reset your rock name

so you can choose again when you login.

**I am unhappy with the look of my avatar -**

**what can be done?**

Everyone starts with the same avatar, no matter what

rock name they've chosen. Simply change the hair,

eyes and mouth to suit you.

**Someone has logged in as me and spent a**

**load of my coins - what can we do?**

Let the Maths Department know so that they can refund you and change your password.

At Springwood High School, all of our students use the excellent online learning tool Hegarty Maths. When you join us in September, we will set up your Hegarty Maths account and teach you how to use it. We are delighted that the team behind Hegarty Maths have launched an online programme called 'Secondary Ready' that you can access at home this summer using a 2 week free trial.

Simply register at

**numerise.com/secondary-ready**

and complete the course. It's only twelve lessons and if you complete them all, you will be super ready for your Year 7 maths lessons. Let us know if you finish it – we can't wait to hear how you get on.

# Maths Keywords...

Can you find all the keywords you will need for your first half term at Springwood High School?

```
Y R Y A P F F T Z P M M D Q U M Z L N U
F I J X F U D M E E B U D O N D I M X E
B D P J B K C D B R U F I H I B Y V W J
C K H U T U G Z I I Z M D L T V F S F S
Y P I Z P L N M G M I Q A W S Y V D R Q
H X A T M Y K O P E L S Q W R E P E W K
C O D K Q I A Q D T C T E E S M H R U T
P L A C E V A L U E G Q B T D Z D D M J
J V B S H U K I N R S M D D A T M N K N
Z T R K F S L D L P U C M M N M O U G M
W O O Z D A I P C N R Q E X Z P I H J M
E M N T M N V Y E C C C Q N A R J T Q N
U K E I G T V R C F R N B H D Q H Z S X
P N C X A U A L G N S L B W V I D I D E
S E T F O U K L W Q C T I R Q N N P N E
D Z J D Q P T C A R T B U S O R K G B F
F V N S N I T G B P K G L R W U D J R V
O F V S G P O L Y G O N Q I X R N R O L
O U J V F K T B N Q V Z U D U V A D K O
E L E F T K D W E F Y A C L J T J N R L
```

| | |
|---|---|
| ADD | PLACEVALUE |
| ASCENDING | POLYGON |
| DECIMAL | ROUND |
| DESCENDING | SQUARENUMBER |
| ESTIMATE | SUBTRACT |
| HUNDREDS | TENS |
| PERIMETER | UNITS |

# Totalines

Numbers have to be placed in the empty circles. The numbers to be used are listed under each diagram and no given number may be used twice.

The object is to place the numbers so that all those which lie along a straight line, as shown by the lines drawn, add up to the total which is also given under the diagram.
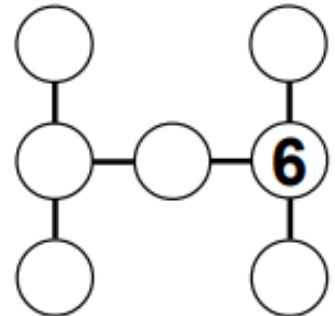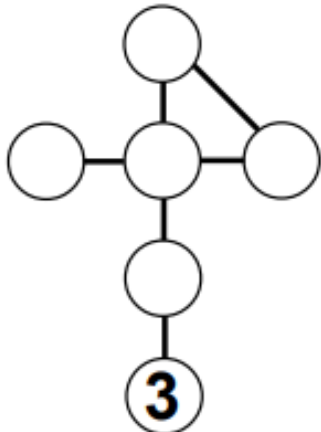
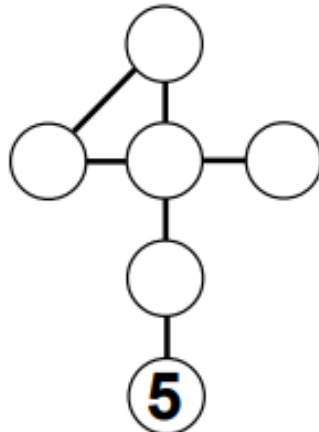The first one has been done for you.
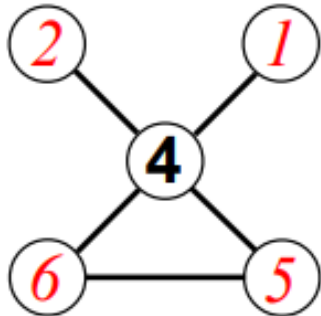
Use 1, 2, 5, 6
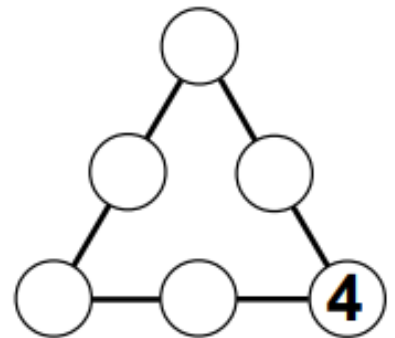Total **11**
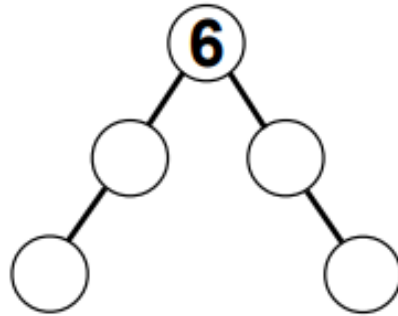
Use 2, 3, 4, 5
Total **13**

Use 0, 1, 2, 3, 4, 5
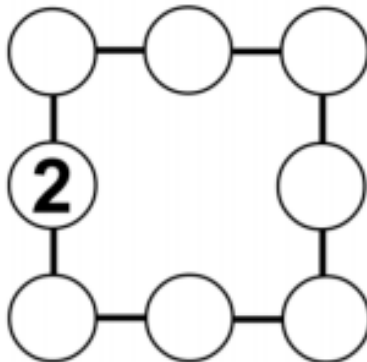Total **10**

Use 1, 2, 4, 5, 6
Total **11**

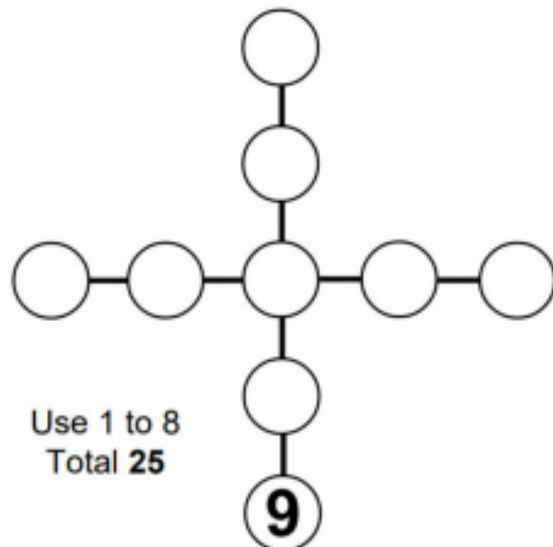Use 0, 1, 3, 4, 6
Total **10**

Use 0, 1, 2, 3, 5
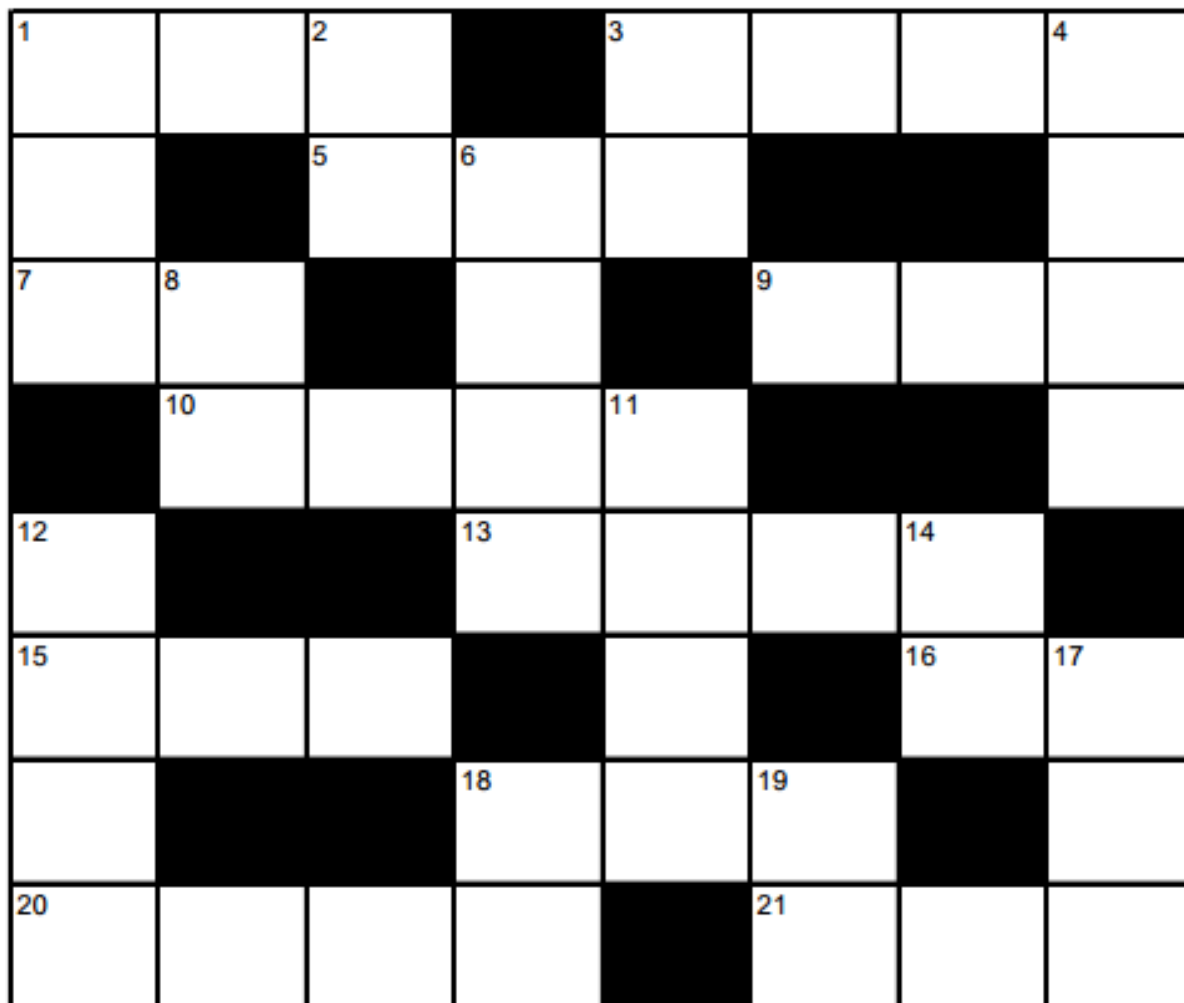Total **9**

## CHALLENGE!

Use 3, 4, 5, 6, 7, 8, 9
Total **18**

Use 1 to 8
Total **25**

# Cross number



## Enter the answers to the sums below into the matching squares on the numbered grid

| Clues Across | |
| --- | --- |
| 1: | 50% of 982 |
| 3: | 2518 + 2135 |
| 5: | 79 x 3 |
| 7: | Three-quarters of 128 |
| 9: | 513 + 429 |
| 10: | 153 x 11 |
| 13: | 2668 + 3174 |
| 15: | 2022 divided by 3 |
| 16: | 179 - 114 |
| 18: | 75% of 912 |
| 20: | 1739 + 2245 |
| 21: | Two-thirds of 846 |

| Clues Down | |
| --- | --- |
| 1: | Half of 878 |
| 2: | Square root of 144 |
| 3: | 376 divided by 8 |
| 4: | 7543 - 3915 |
| 6: | 737 x 5 |
| 8: | First prime number after 60 |
| 11: | 7677 - 3789 |
| 12: | 7346 divided by 2 |
| 14: | 156 divided by 6 |
| 17: | Four-fifths of 730 |
| 18: | 8 squared |
| 19: | 90% of 50 |

# A Hexagon Problem
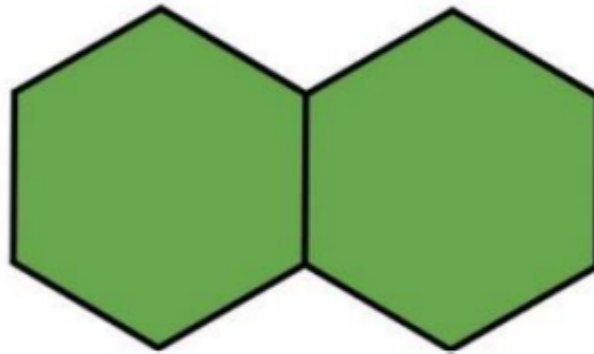


Heather can make two connected hexagons by drawing 11 lines.

What is the minimum number of lines Heather needs to draw 12 hexagons?

Extension: What numbers of hexagons are the most efficient to draw and why?

*This problem is taken from puzzleoftheweek.com. If you enjoy doing puzzles then have a go at the weekly problems on this website.*

Completed our booklet? That's incredible! Well done!

Check out nrich.maths.org for more problems to get you thinking.

Or research some of the famous mathematicians that have been mentioned in this booklet and create a poster that we can put on display.

If you have any questions, please do not hesitate to email us
**maths@springwoodhighschool.co.uk**