

Inclusion and Home Learning Guide is part of a Learning Pack

downloadable from the AIMING HIGH website <https://aiminghigh.aimssec.ac.za>

It provides related activities for home learning for all ages and learning stages from pre-school to school-leaving, together with guidance for home-learning and also for inclusion in school lessons, all on the **Common Theme 'Working Backwards'**

Guidance for school lessons is given in the separate Notes for Teachers documents.

Choose what seems suitable for the age or attainment level of your learners.

THE ANSWER IS 2022, BUT WHAT IS THE QUESTION?



Find the prime factors of 2022.

How many ways can you arrange the digits 2, 2, 2 and 0 to get different numbers? What is the sum of those numbers?

You can be a creative mathematician, you can be someone who has your own mathematical ideas. Find your own interesting facts about 2022 and calculations that have the answer 2022.

Is it correct to say "twenty twenty-two" or should we say "two thousand and twenty-two" or are both correct? Why?

People say "twenty twenty two" so do the 2 twenties mean – 20 thousands, 20 hundreds, 20 tens or 20 units?

What different questions can you find with 2022 as the answer?

Compare your questions with other people's.

Perhaps you can make up one that is easy, one that is harder and one that is very hard.

What interesting facts can you find about the year that you were born?

HELP

How old are you? If you are 9 years old then write down some interesting calculations that have the answer 9 (or whatever your age is, do the same for your age).

For example all these have the answer 9:

3×3 ; half of 18 ; $10 - 1$; $20 - 11$; $16 - 7$; 3^2 ; square root of 81 etc.

See the problem 'I'm Eight'

<https://aiminghigh.aimssec.ac.za/years-3-10-i-am-eight/>



NEXT

Explore Wild and Wonderful Number Patterns, see <http://nrich.maths.org/33>

Make up some of your own number patterns.

You've probably come across number patterns before, ones like :-

2 4 6 8 10 12 ...

512 256 128 64 32 ...

220 210 200 190 180 170 ...

11 14 17 20 23 26 ...

Work out the rules that produced each of the patterns.

What is the reason for the series of dots appearing after each one?

Now make up some of your own number patterns.