Exploring Numbers

With Miss Maths

This week our online lessons will look at different types of numbers.
We will be investigating numbers.

Today we will look at consecutive numbers.

What are consecutive numbers?

Three Neighbours
(a problem by NRich)

▶ Take three numbers that are 'next door neighbours' when you count. These are called consecutive numbers. E.g.2,3,4

▶ Add them together.

▶ What do you notice?

▶ Take another three consecutive numbers and add them together.

▶ What do you notice?

▶ Can you prove that this is always true by looking carefully at one of your examples?

Before we begin let's look at the skills you will develop:

- ▶ Independent thinking

Q What do I have to do?

Q How do I go about this?

- ▶ Arithmetic skills

Q Will I use a formal method or a mental calculation?

- ▶ Exploring numbers ('playing around with them')
- ▶ Making observations, spotting patterns
- ▶ Making a rule and proving it
- ▶ Creative thinking
- ▶ Resilience
- ▶ Communicating ideas

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(a problem by NRich)

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▶ Add them together.

▶ What do you notice?

▶ Take another three consecutive numbers and add them together.

▶ What do you notice? Take some time now to explore...

▶ Can you prove that this is always true by looking carefully at one of your examples?

- 2+3+4=9

- 5+6+7=18

- 10+11+12=33

- 35 + 36 + 37 =

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   35
   36 +
   37
  ─────
  108
  ─────
    |
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If we replace each number with a letter we have a+b+c=

What can you tell me about the sum of these numbers?

Can you make a rule /spot a pattern in all of the examples?

Play around with the numbers and see what you come up with…

We will explore your answers in our lesson at 11am.

If you can't join our online lesson our solutions we will be shared tomorrow.