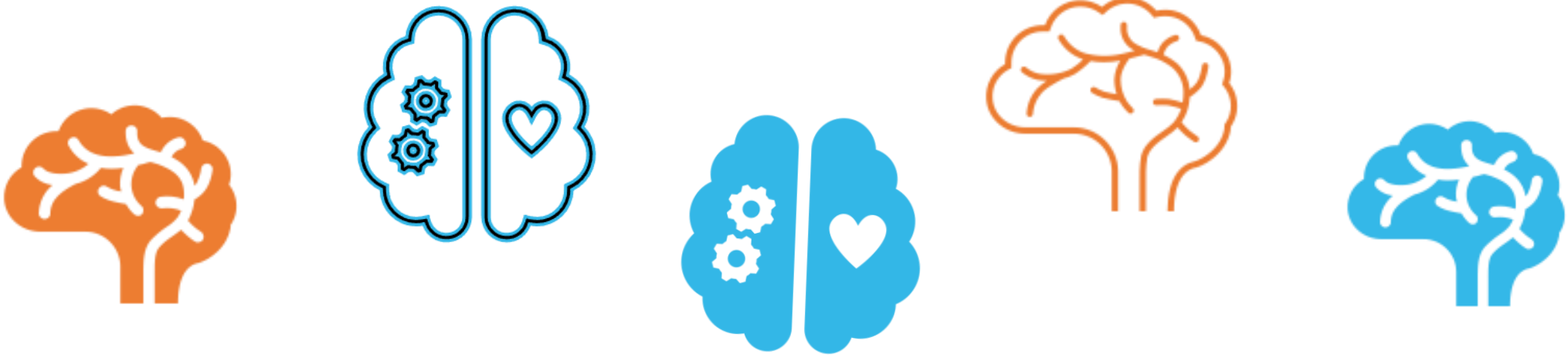


Show what you know



A number task

1 piece A4 'good copy paper'

Coloured pencils /
textas

Table set-up:

It's time to get your workspace ready!

Here are some things you'll need. →

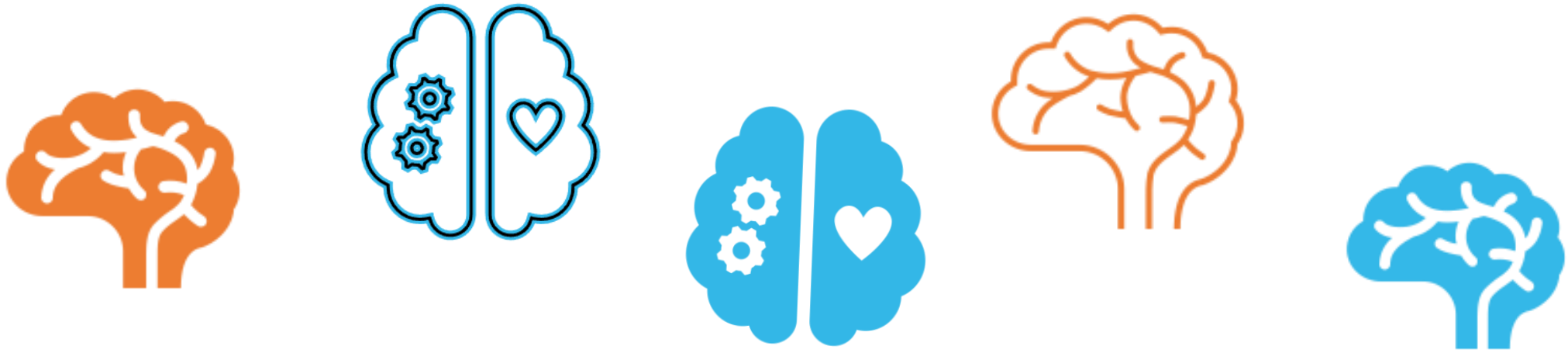
Be sure to set them up in a way that feels right for you. This may look different if you are left-handed for instance.

Once everyone is set up, we'll find out more about today's task. :)


Grey lead pencil

Scrap paper

Every group is made up of different minds.



**Every mind has a unique set of understandings
and different ways of seeing. Together, our
minds already
have a lot of knowledge!**

Numbers are all around us 
and we continue to explore and use
numbers every day.

1

5

Here's a question to practise
brainstorming what we already know:

What do you know about two-digit numbers?

1. Spend some time thinking.
2. Spend some time sharing ideas as a group.

1 1

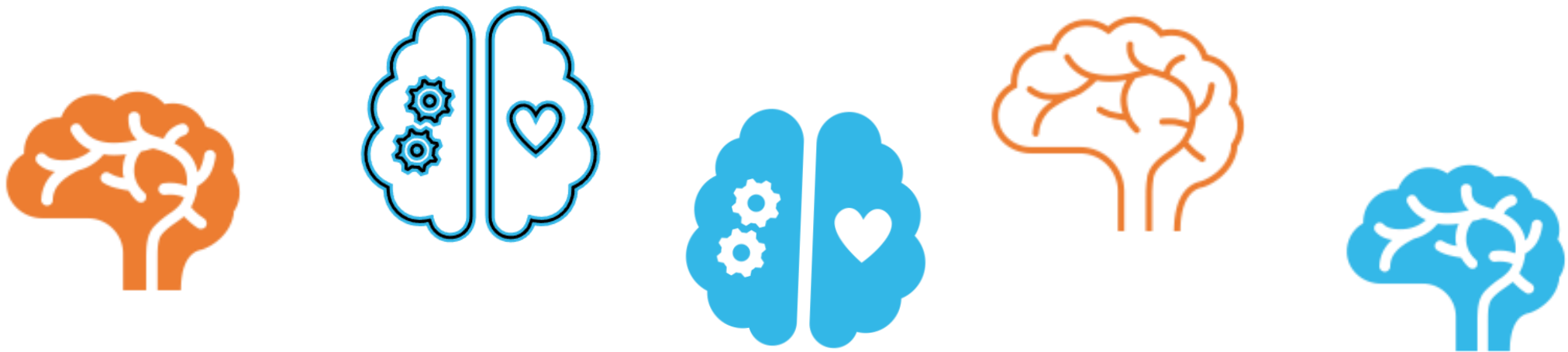
1 2

1 3

1 4

1 5

**Between us, we already know
a fair bit about two-digit numbers!**



**Today's task is to choose a number from 11 to 99
and 'show what you know' (or what you *think*
you know) about your chosen number.**

Some benefits of ‘showing what you know’:

- It activates our brain before we learn more about a topic.**
- It shows that different minds have different mathematical ideas. Sharing and discussing different ideas can help us learn.**
- It gives us insights into what we already know (or think we know!) so we can deepen and extend our understandings.**





**Here is an example and some tips
for showing what you know.**

Step 1: Choose a number

Choose a 2-digit number from 11 to 99.

This is the number you will 'show what you know' about.

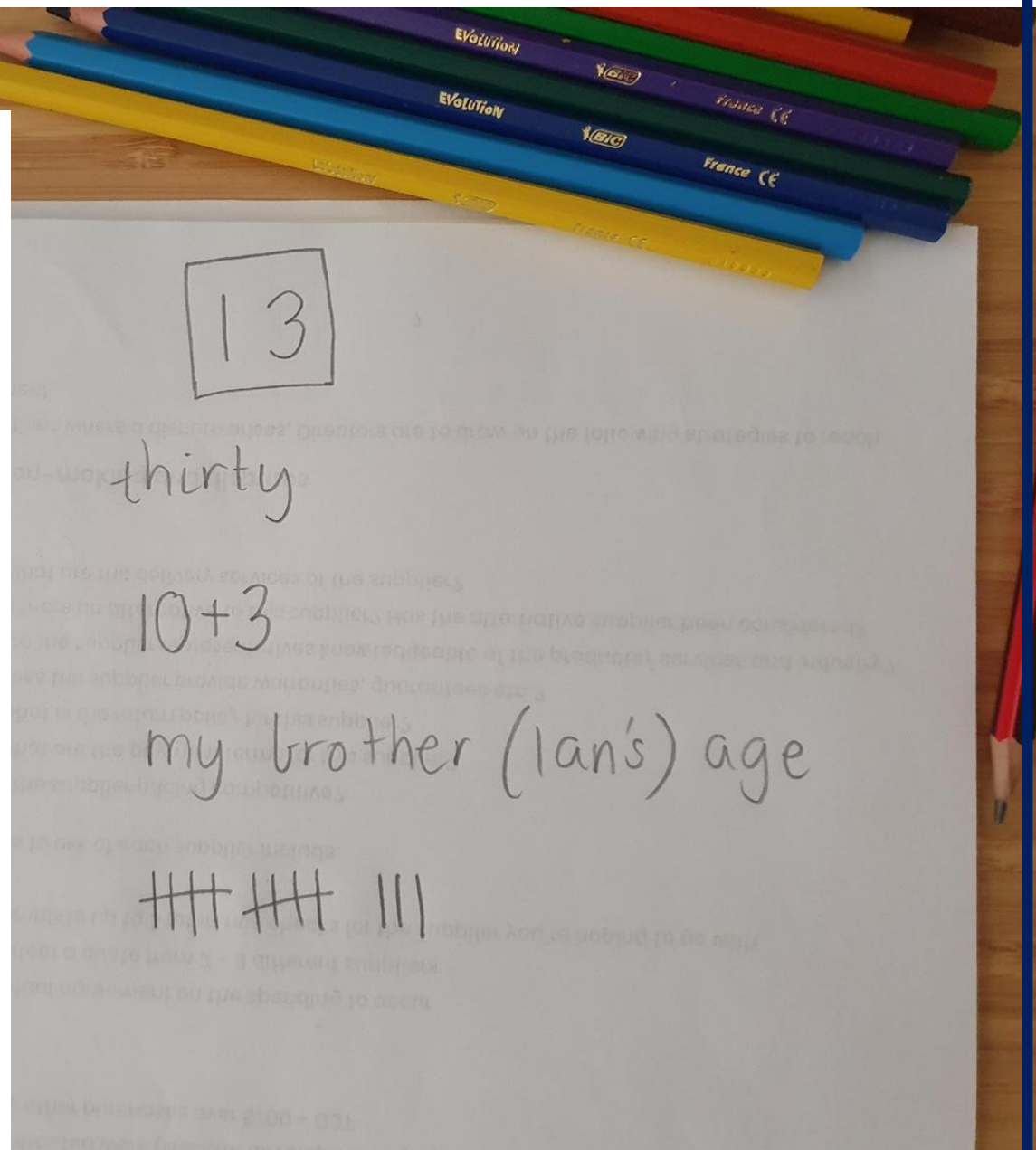


Step 2: Brainstorm ideas

Brainstorm ideas about your chosen number on scrap paper.

See the example here.

- What do you notice?
- Can you see any mistakes?
(aka opportunities to learn?)



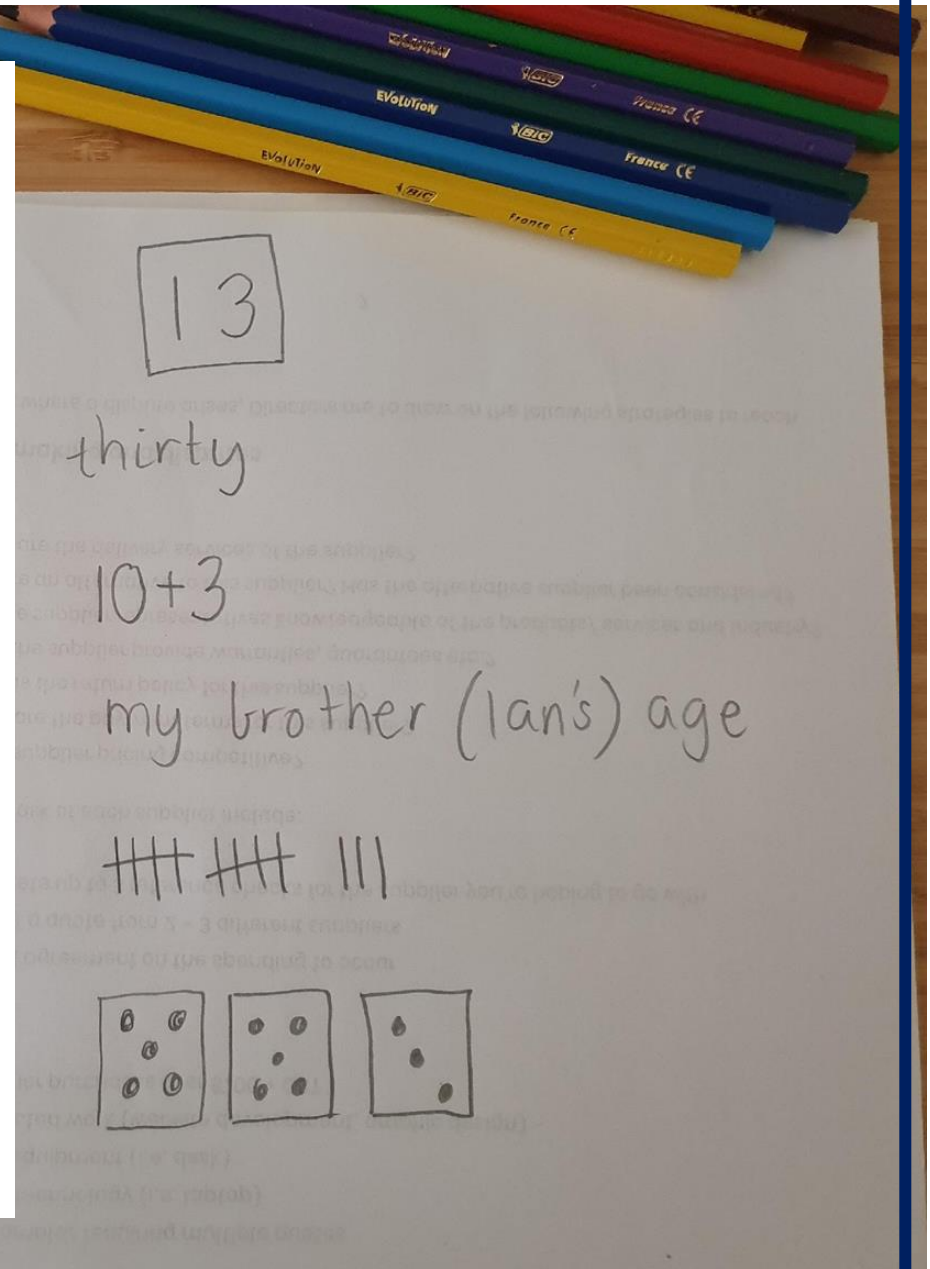
Step 2: Brainstorm ideas

Keep adding ideas to your list.

Dig deep! 'Show' what you know by including some **visual models*** of your chosen number.

*A **visual model** usually consists of materials, a picture or image.

What **visual models** can you see here?



Step 2: Brainstorm ideas

There are many different ways to think about and describe numbers.

Why is it useful to do a rough brainstorm before a good copy?

my brother (ian's) age

|||| |||| |||



$$10 + 1 + 1 + 1 = 13$$

~~$$20 - 5 = 15$$~~

~~$$20 - 10 = 10$$~~

$20 - 10 = 10$
$10 + 3 = 13$

Step 3: Check your ideas

Take some time to look carefully at each of your ideas and think about whether they make sense to you.

How confident are you that they represent your chosen number?

my brother (ian's) age

|||| |||



$$10 + 1 + 1 + 1 = 13$$

~~$$20 - 5 = 15$$~~

~~$$20 - 10 = 10$$~~

$$\begin{array}{l} 20 - 10 = 10 \\ 10 + 3 = 13 \end{array}$$

Step 4: Add ideas to your good copy

After you've checked through your ideas, it's time to start presenting them on your good copy paper!

This is a chance for you to show some of your creative flair as you 'show what you know'.

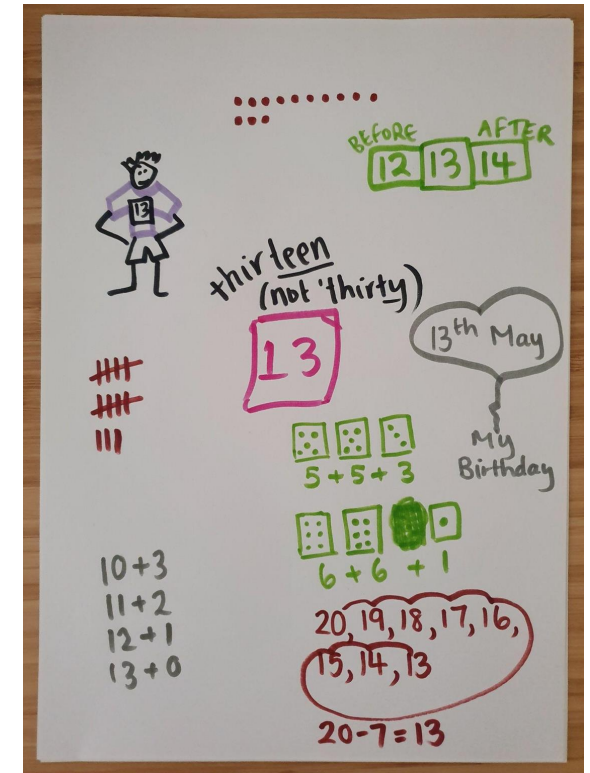
The image shows a piece of paper with various handwritten representations of the number 13. At the top right, there are two rows of dots: a top row of 13 dots and a bottom row of 3 dots. Below this, the numbers 12, 13, and 14 are written in green boxes, with 'BEFORE' above 12 and 'AFTER' above 14. To the left of these boxes is a simple drawing of a person with a square on their chest containing the number 13. Below the person are three groups of red hash marks: the first group has 13 marks, the second has 12, and the third has 11. In the center, the word 'thirteen' is written in black, with 'not 'thirty'' written below it in parentheses. To the right of this is a pink square containing the number 13. Further right is a thought bubble containing '13th May' and the text 'My Birthday' below it. Below the pink square are two rows of green dice faces: the first row shows three dice with 5, 5, and 3 dots, with the equation $5 + 5 + 3$ below; the second row shows three dice with 6, 6, and 1 dots, with the equation $6 + 6 + 1$ below. To the left of these dice are four simple addition problems: $10 + 3$, $11 + 2$, $12 + 1$, and $13 + 0$. At the bottom right, a red oval contains the numbers 20, 19, 18, 17, 16, 15, 14, and 13, with the equation $20 - 7 = 13$ written below it.

Step 1: Choose a number.

Step 2: Brainstorm ideas.

Step 3: Check your ideas.

Step 4: Add ideas to your good copy.



Learning intention:

Show what we (think we) know about 2-digit numbers.

Success criteria:

- Choose a number to work with.
- Use visual models to show what I know.
- Dig deep - come up with a variety of ideas.

