




Year 3 Reasoning examples

Hundreds	Tens	Ones
		

Steph



The place value grid shows 467

Do you agree?

Explain your reasoning.

What do you notice about the number shown?

10 more than my number is the same as 100 less than 320

What is my number?

Explain how you know.

Write your own problem similar to describe the original number.

Sort these statements into always, sometimes or never.

- When counting in 50s, the numbers are even.
- There are only two digits in a multiple of 50
- Only the hundreds and tens column changes when counting in 50s.

When I calculated $392 - 20$ I used my known fact $9 - 2 = 7$

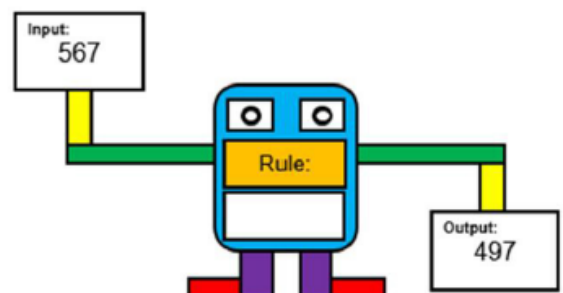
Charlotte



Explain Charlotte's method.

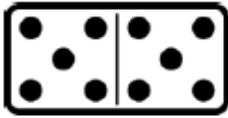
Sally thinks the rule for the function machine is subtract 60

Is she correct? Explain.



Which is the odd one out?

Explain why.



Two 5s

$$5 + 5 =$$



Ten

Here is a blue strip of paper.



An orange strip is four times as long.



The strips are joined end to end.



20 cm

How long is the blue strip?

How long is the orange strip?

Explain how you know.

• **Odd one out.**



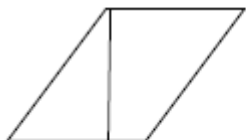
Explain why it is the odd one out using the correct vocabulary for its properties.

• **The clock only has one hand.**
What time could the clock show?
Explain your choice carefully.



• **True or False**

This shape is split into two equal halves



Explain your reasoning.

• **Circle and explain the mistakes in the sequences below.**

• $\frac{1}{10}$, $\frac{2}{10}$, $\frac{4}{10}$, $\frac{5}{10}$, $\frac{6}{10}$

• $\frac{9}{10}$, $\frac{8}{10}$, $\frac{8}{10}$, $\frac{7}{10}$, $\frac{6}{10}$