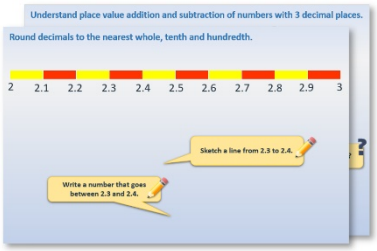
Week 13, Day 2
Written addition (2)

Each day covers one maths topic. It should take you about 1 hour or just a little more.

1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



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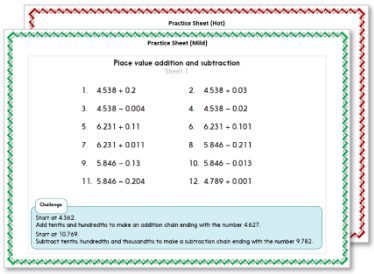
2. Tackle the questions on the **Practice Sheet**. There might be a choice of either Mild (easier) or Hot (harder)! Check the answers.



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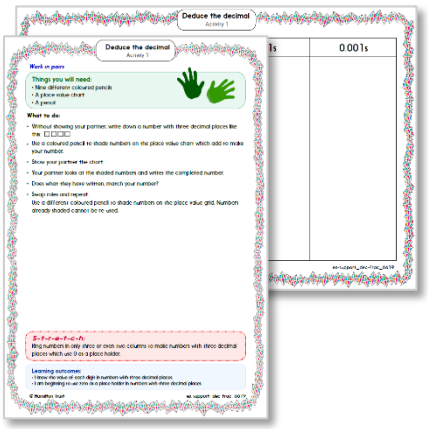
3. Finding it tricky? That's OK… have a go with a grown-up at **A Bit Stuck?**



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4. Think you've cracked it? Whizzed through the Practice Sheets? Have a go at the **Investigation**…

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Learning Reminders

Use compact addition to add pairs of 3-digit numbers; Estimate totals.

426 + 217 = ?

742 + 276 = ?

587 + 278 = ?

We can round each of these to the **nearest 100** to **estimate** the total.

400 + 200 = 600

700 + 300 = 1000

600 + 300 = 900

We can also round each of these to the **nearest 10** to **estimate** the total, that might be closer!

430 + 220 = 650

740 + 280 = 1020

590 + 280 = 870

Now choose one and use **compact addition** to work out the exact answer. Compare with our estimates.

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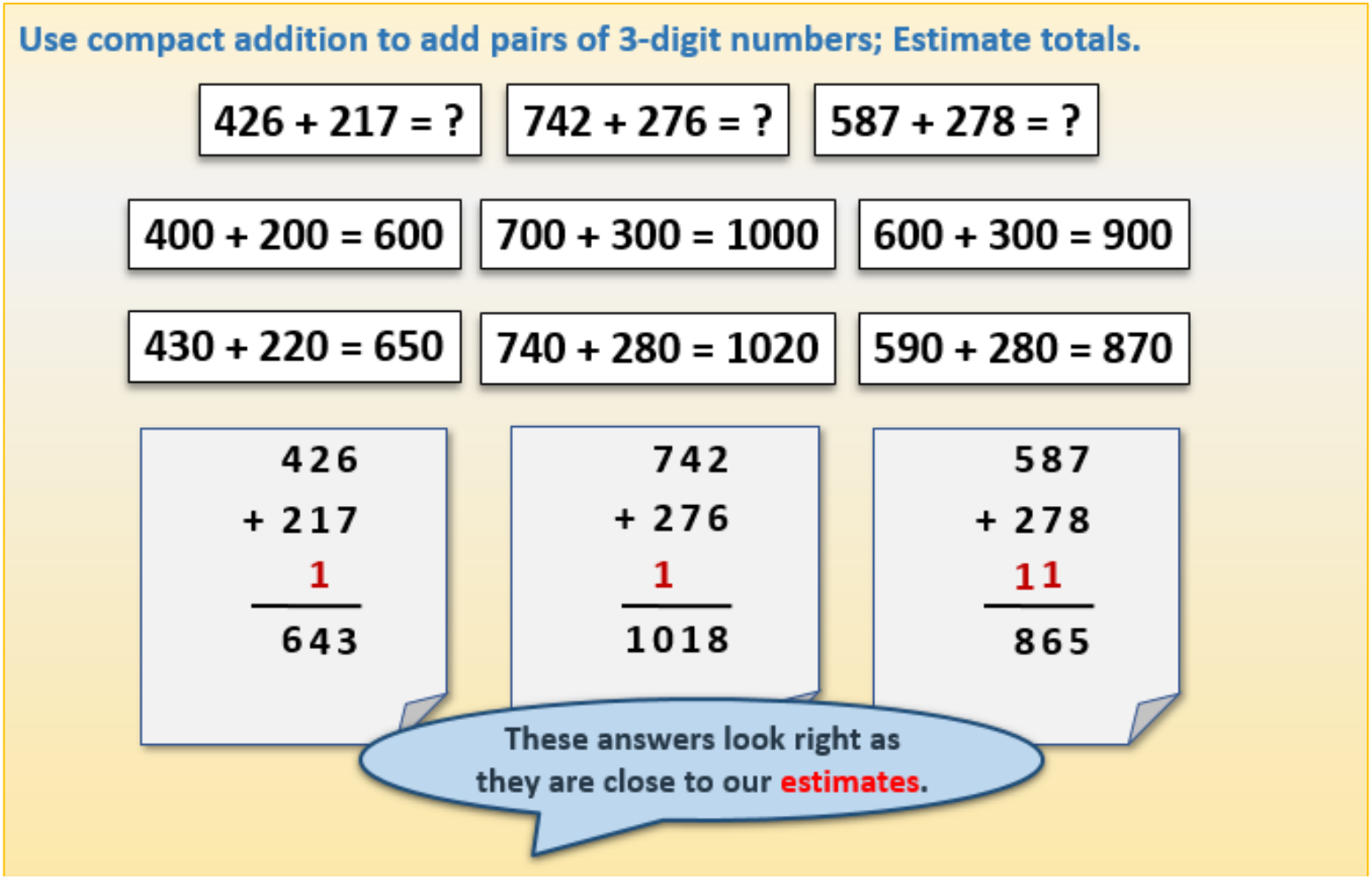
Learning Reminders



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Practice Sheet Mild

Adding numbers to reach a target

Using your estimation skills select two of the numbers below that you think will add up to make a number close to the target numbers. Calculate the answers to check!

Choose two from these numbers:

283 521 349 378 452 217 146 354

Try to make these target numbers:

Challenge

Which three numbers give a total closest to 1000?

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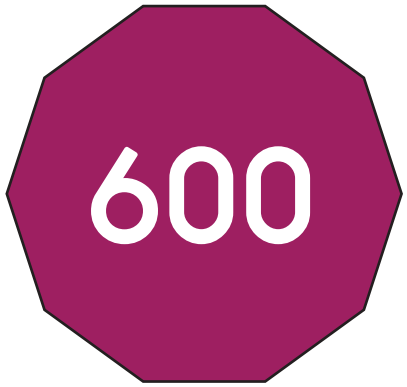
Practice Sheet Hot

Target 600!



- Choose six different digit cards.
- Use them to create a pair of 3-digit numbers.
- You are aiming to make a total as close to 600 as possible.
- Repeat lots of times.
- Which pair of numbers was closest?

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Practice Sheet Answers

Practice Sheet (Mild)

e.g 283 + 217 = 500 (Target 500)
e.g. 378 + 217 = 595 (Target 600)
e.g. 349 + 354 = 703 (Target 700)
e.g. 521 + 283 = 806 (Target 800)

Challenge

Target 1000, e.g. 283 + 349 + 378 = 1010

Practice Sheet (Hot)

There are many different answers, e.g.
402 + 198 = 600 and 314 + 286.

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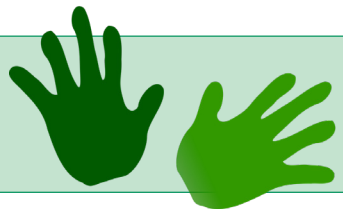
A Bit Stuck?
Totally investigative

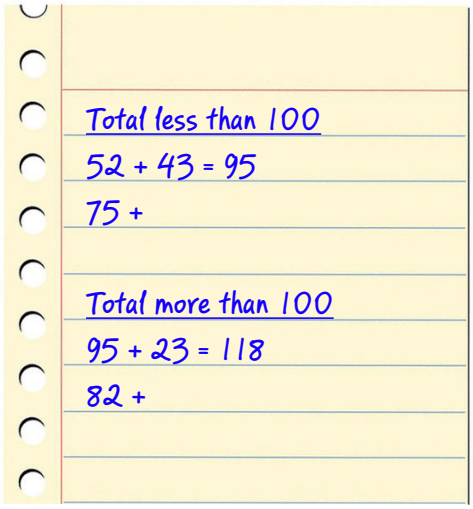
Work in pairs

Things you will need:
- A set of 10s and 1s place value cards
- A pencil



What to do:

- Spread out the 10s cards and 1s cards.
- Work together to investigate how many pairs of 2-digit numbers with totals less than 100 you can make. Each card can only be used once.
- To work out the total, either:
    - collect the 10s, collect the 1s and combine your totals, **or**
    - draw a jotting to help.
- Repeat, but this time make totals greater than 100.



S-t-r-e-t-c-h:
Also investigate how many pairs of numbers with a total of exactly 100 you can make.

Learning outcomes:
- I can add any pair of 2-digit numbers.
- I am beginning to use my skills in adding pairs of 2-digit numbers to find pairs of numbers with a total of 100.

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A Bit Stuck?
Totally investigative

10	60	1
20	70	2
30	80	3
40	90	4
50		5

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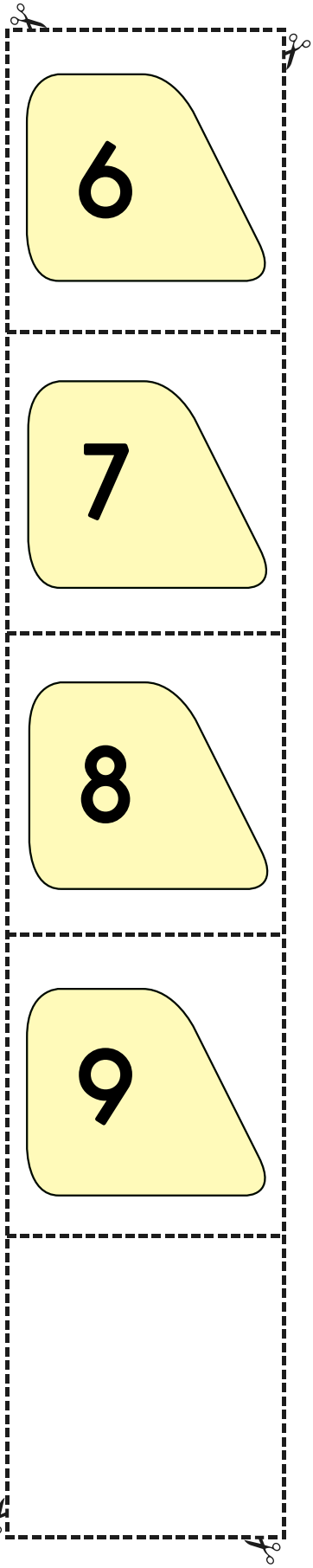
A Bit Stuck?
Totally investigative



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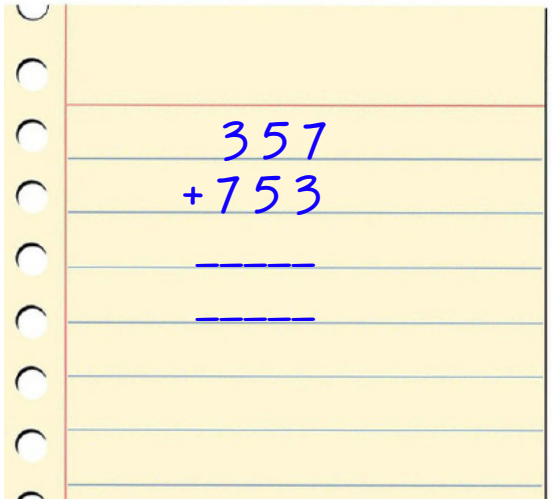
Investigation
Step Reversals

- Write a 3-digit number obeying this rule.
- The digits must go up in twos – e.g. 468 or 357.
- Write the number with the same digits in reverse order.
- Add the two numbers using column addition.
- Circle the answer.
- Repeat this four times.
- Do you notice any pattern in the answers?
- Predict what might happen if you add numbers which 'step up' in threes, e.g. 147 or 258 or 369.
- Try these three.
- How about if they go up in fours? (There is only one!)



Challenge

Suppose the numbers go up in ones? 567 + 765, or 789 + 987, or 345 + 543, etc.

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