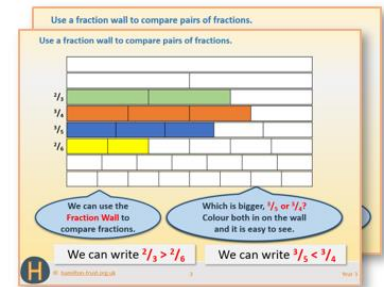


Week 13, Day 2

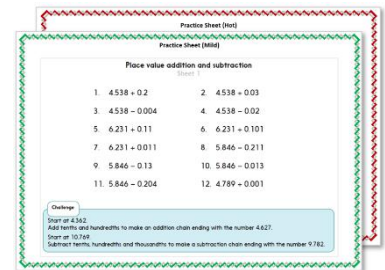
Mental strategies to add and subtract.

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

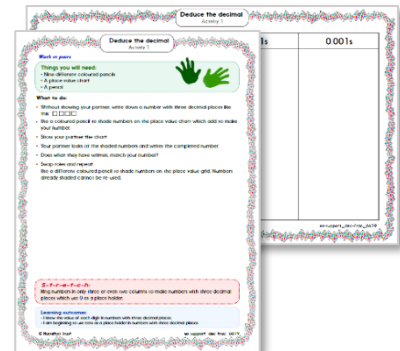
1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



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



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



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

Learning Reminders

Use pairs to 100, other facts and place value to mentally add and subtract, including decimal numbers and money.

All the calculations today can be worked out *mentally*!
No written column methods are allowed today!
Here are some examples.
Read the clues then try them out!

$2.77 - 0.78$

Notice that 0.78 is just a little more than 2.77.

$23.8 + 0.5$

Split 0.5 into 0.2 and 0.3.

$£3.65 + £2.35$

What do you know about 65 and 35?

Answers

93
24.3
1.99

Practice Sheet Mild

Mental addition and subtraction

Solve the following mentally:

1. $£2.70 + \square = £3$

2. $6.3 - 0.5 = \square$

3. $£1.98 + 32p = \square$

4. $7.9 + 0.8 = \square$

5. $\square - 1.1 = 6.7$

6. $0.45 + \square = 1$

7. $£3.62 + £1.28 = \square$

8. $\square - 26p = £2.99$

Practice Sheet Hot
Mental addition and subtraction

$$£2.68 + \square = £3$$

$$56,278 - 6070$$

$$45.7 + 0.6$$

$$12.5 - 0.7$$

$$6 - \square = 5.36$$

$$6.45 + 0.55$$

$$4.58 + \square = 5$$

$$\square - £2.67 = £2.33$$

$$43,020 + 408$$

$$£4.36 - 37p$$

$$\square + 0.48 = 1$$

$$\square + 31p = £5$$

$$\square - 0.47 = 0.53$$

$$3.25 - 0.26$$

$$£4.78 + 23p$$

$$£4.65 + £1.35$$

$$£10 - \square = £5.01$$

Practice Sheets Answers

Mental addition and subtraction (mild)

1. $£2.70 + 30p = £3$
2. $6.3 - 0.5 = 5.8$
3. $£1.98 + 32p = £2.30$
4. $7.9 + 0.8 = 8.7$
5. $7.8 - 1.1 = 6.7$
6. $0.45 + 0.55 = 1$
7. $£3.63 + £1.28 = £4.90$
8. $£3.25 - 26p = £2.99$

Mental addition and subtraction (hot)

$$£2.68 + 32p = £3$$

$$56,278 - 6070 = 50,208$$

$$12.5 - 0.7 = 11.8$$

$$6 - 0.64 = 5.36$$

$$45.7 + 0.6 = 46.3$$

$$4.58 + 0.42 = 5$$

$$£5 - £2.67 = £2.33$$

$$6.45 + 0.55 = 7$$

$$43,020 + 408 = 43,428$$

$$£4.36 - 37p = £3.99$$

$$£4.69 + 31p = £5$$

$$1 - 0.47 = 0.53$$

$$0.52 + 0.48 = 1$$

$$3.25 - 0.26 = 2.99$$

$$£4.78 + 23p = £5.01$$

$$£4.65 + £1.35 = £6$$

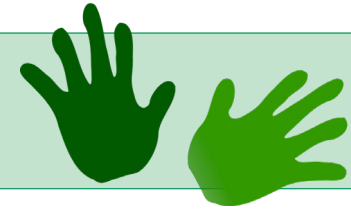
$$£10 - £4.99 = £5.01$$

A Bit Stuck? Pick 'n' mix

Work in pairs

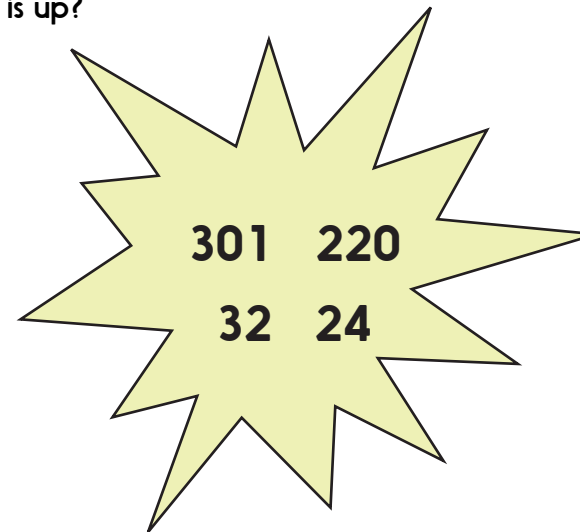
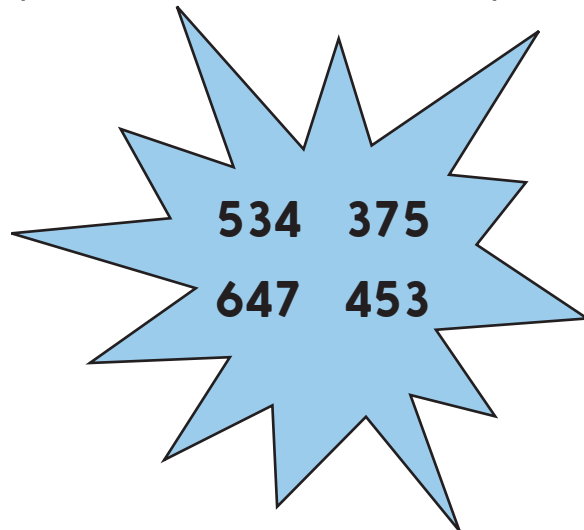
Things you will need:

- A pencil



What to do:

- Choose a pair of numbers, one from each star, that are easy to add. What is it about the numbers that makes them 'easy' to add?
- Write the addition and calculate the answer.
- Repeat at least two more times.
- Now choose a pair of numbers which are easy to subtract. Work out the answer.
- Repeat at least twice.
- How many additions and subtractions can you work out before time is up?



S-t-r-e-t-c-h:

Sort these four additions into those you would work out using a written method and those you would work out mentally:

$635 + 287$, $734 + 203$, $527 + 310$ and $478 + 259$.

Learning outcomes:

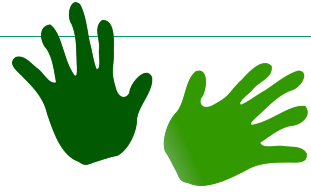
- I can use place value to add and subtract to/from 3-digit numbers (changing two digits).
- I am beginning to choose mental or written methods.

Investigation

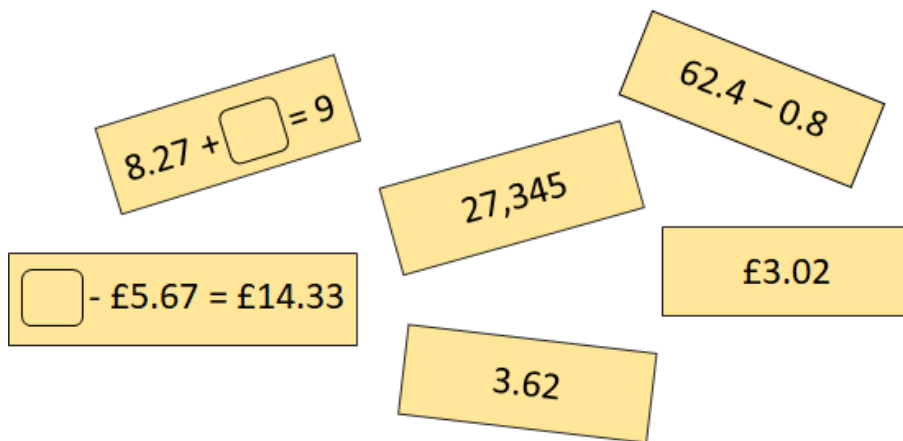
Quick calculations

Things you will need:

- Mental addition and subtraction cards



- To prepare for this challenge cut up and shuffle both sets of 'Mental addition and subtraction cards' (questions **and** answers) then spread them **all** out, face up, on a table.



- There are 21 questions! Predict how many questions and answers you can match in 5 minutes!
- Using a clock/watch/timer to check, match as many questions and answers as you can in 5 minutes.
- How close was your prediction?
- Repeat. Can you match them all this time, or beat your previous time if you matched them all first time?
- Are there any that you find tricky? Put those aside and see if you can find all of the others in 5 minutes. Think about what strategies help with these questions before trying again with the tricky ones.



Challenge

Write six more of your own questions which use pairs to 100, including £1 (e.g. 27p + 73p) and 1 (e.g. 0.41 + 0.59). Include examples with empty boxes in the first and second positions, e.g.

$$\square + 27\text{p} = \text{£}1$$

$$1 = 0.41 + \square$$

Investigation
Mental addition and subtraction cards



$$8.27 + \square = 9$$

$$45,703 - 5003$$

$$£6.48 + \square = £10$$

$$62.4 - 0.8$$

$$\square + 0.47 = 1$$

$$£5 - \square = £3.79$$

$$45,703 - 5700$$

$$\square - 0.46 = 2.54$$

$$7.34 + \square = 10$$

$$£2.75 + 27p$$

$$£8.35 - 37p$$

$$£10 - \square = £5.31$$

$$20,305 + 7040$$

$$23.6 + 0.7$$

$$3.7 + \square = 4.3$$

$$\square - £5.67 = £14.33$$

$$\square + 0.38 = 4$$

$$2.78 + 0.23$$


$$8.54 - 0.55$$

$$43,241 + 20,005$$

$$34,030 + \square = 34,738$$



Investigation
Mental addition and subtraction cards



| | | |
|--------|--------|-------|
| 2.66 | 3.62 | 24.3 |
| 0.6 | 0.73 | 0.53 |
| £7.98 | 27,345 | 7.99 |
| 40,700 | £20 | £3.52 |
| 63,246 | 40,003 | 708 |
| 61.6 | 3 | £1.21 |
| £3.02 | £4.69 | 3.01 |

