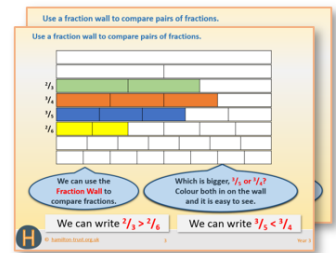


Week 10, Day 2

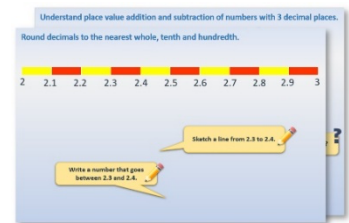
Use counting up (Frog) to calculate change (1)

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

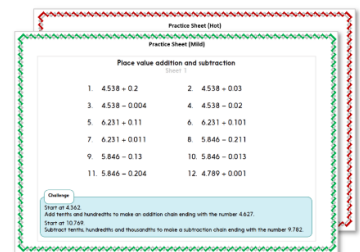
1. If possible, watch the **PowerPoint presentation** with a teacher or another grown-up.



OR start by carefully reading through the **Learning Reminders**.



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 counting up (Frog) to calculate change from £5.



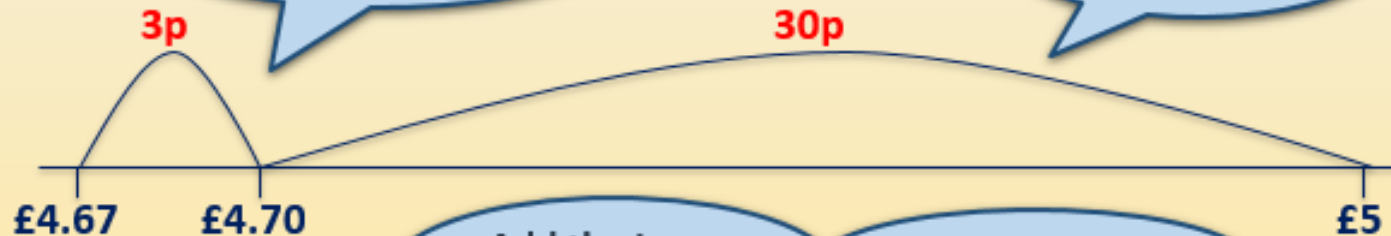
You've given the shopkeeper **£5**.
The Teddy costs **£4.67**.
How can the shopkeeper work out the change?

We can **count up**
on a number line!

Draw a line and mark **£4.67** on
the left and **£5** on the right.

Jump **3p** to the
next 10p.

... and then
30p to £5.



Add the jumps
 $30p + 3p = 33p$

33p change!

Learning Reminders

Use counting up (Frog) to calculate change from £10 .



Now someone is buying the Teddy bear but only has a £10 note!

We can draw a **bar model** to show the problem...

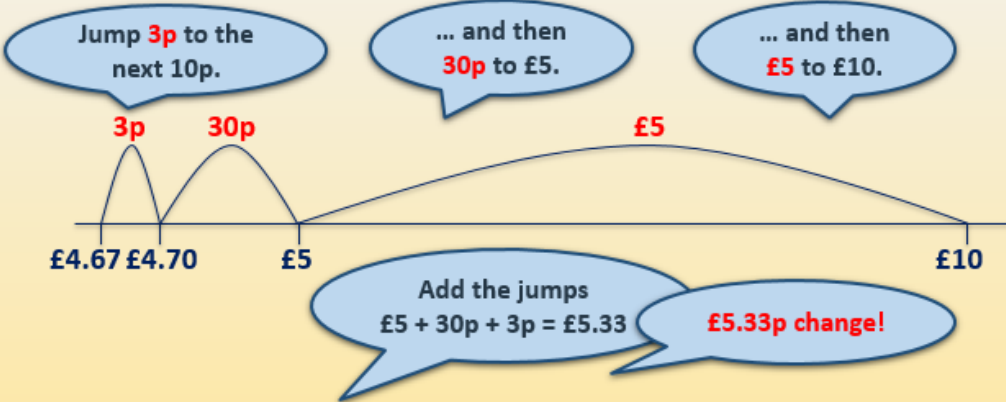
£10	
£4.67	?

Now let's use a **number line** to find the change...

Use counting up (Frog) to calculate change from £10.



Draw a line and mark **£4.67 on the left and £10 on the right.**



Learning Reminders

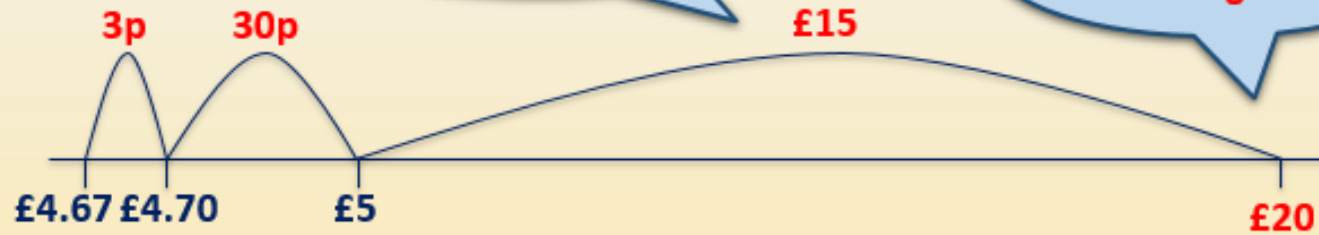
Use counting up (Frog) to calculate change from £20.



What if you paid with a £20 note instead? What would be the same? Different?

The last jump would be £15.

£20 would go on the right.



£15.33p change!

Practice Sheet Mild

Finding change from £5 and £10

You have **£5**. How much change will you get if you buy the following:

1. Cupcake £1.25
2. Ham sandwich £3.68
3. Bowl of soup £2.59
4. Yoghurt £1.16
5. Milkshake £4.82
6. Jacket potato £4.07

You have **£10**. How much change will you get if you buy the following:

7. Cheese on toast with salad £5.61
8. Ice cream sundae £4.55
9. Ploughman's lunch £7.99
10. Afternoon tea £8.88

Practice Sheet Hot

Finding change from £10 and £20

You have **£10**. How much change will you get if you buy the following:

1. Cheese and ham panini £5.29
2. Banana sundae £3.75
3. Soup and sandwich £6.49
4. Cream tea £5.68
5. Pancake stack £4.22

You have **£20**. How much change will you get if you buy the following:

6. Pizza £13.66
7. Spaghetti bolognaise £14.51
8. Burger and chips £11.79
9. Fish and chips £12.87
10. Chicken salad £9.28

Challenge

Choose any two items from the menus. How much change will you get from £20? Be careful not to spend more than £20.

Practice Sheet Answers

Practice Sheet (Mild)

1. $£5 - £1.25 = £3.75$
2. $£5 - £3.68 = £1.32$
3. $£5 - £2.59 = £2.41$
4. $£5 - £1.16 = £3.84$
5. $£5 - £4.82 = £0.18$
6. $£5 - £4.07 = £0.93$
7. $£10 - £5.61 = £4.39$
8. $£10 - £4.55 = £5.45$
9. $£10 - £7.99 = £2.01$
10. $£10 - £8.88 = £1.12$

Practice Sheet (Hot)

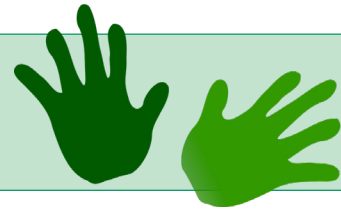
1. Cheese and ham panini £5.29 **£4.71**
2. Banana sundae £3.75 **£6.25**
3. Soup and sandwich £6.49 **£3.51**
4. Cream tea £5.68 **£4.32**
5. $£20 - £13.66 = £6.34$
6. $£20 - £14.51 = £5.49$
7. $£20 - £11.79 = £8.21$
8. $£20 - £12.87 = £7.13$
9. $£20 - £9.28 = £10.72$

A Bit Stuck? Read it

Work in pairs

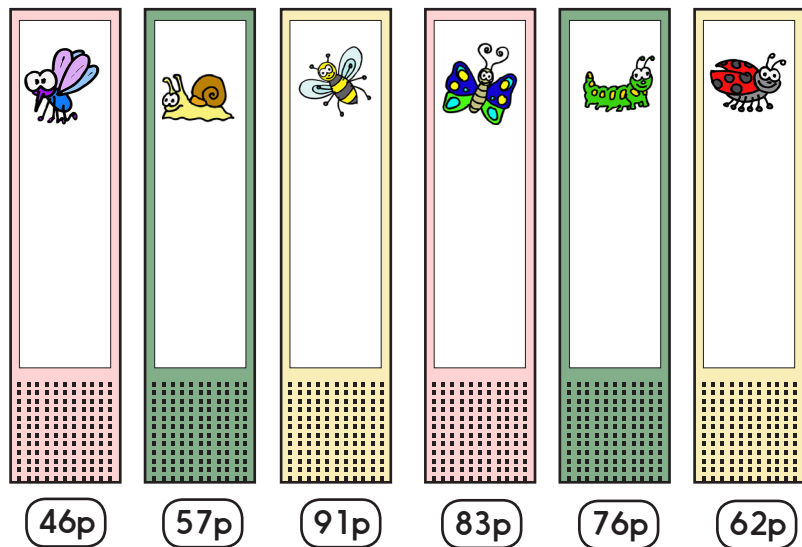
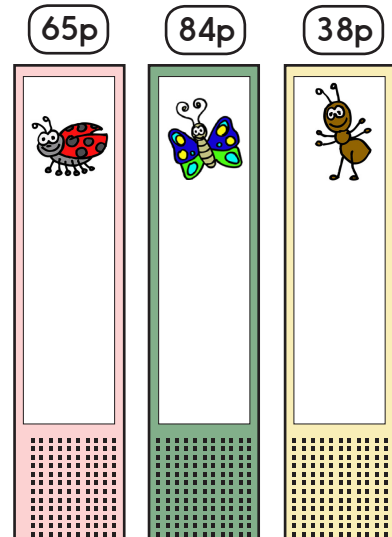
Things you will need:

- Money lines
- 1p and 2p coins



What to do:

- Here are Frog's bookmarks. Choose one. Use Frog on a money line to help you to work out the change from £1. Write a number sentence, e.g. $£1 - 45p = 55p$.
- If the change is an odd amount of money, collect a 1p coin. If the amount is even, collect a 2p coin.
- Repeat with different bookmarks.
- Can you collect more than 10p?



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

Draw how the change might be given each time.

Learning outcomes:

- I can find the change from £1 using a money line.
- I am beginning to show how change might be given.

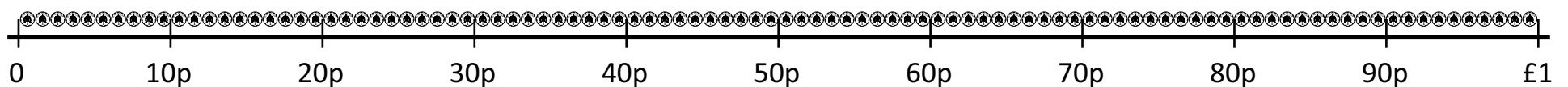
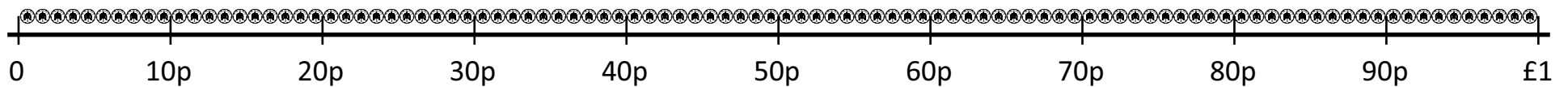
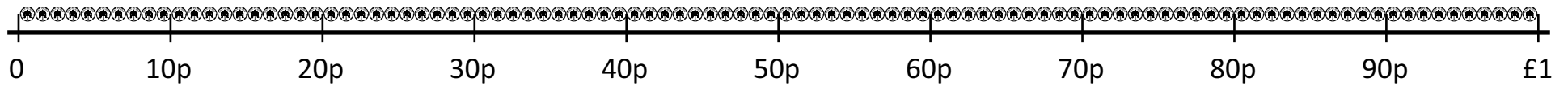
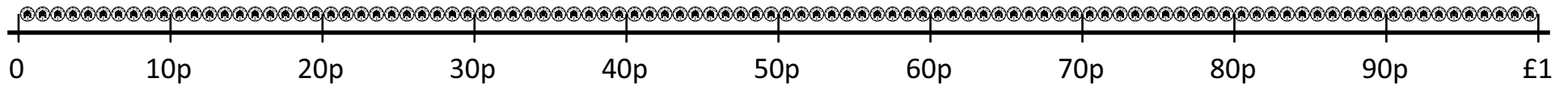
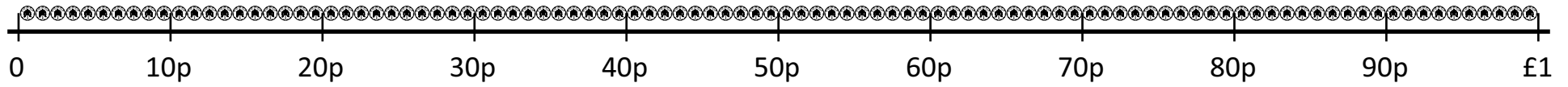
A Bit Stuck?
Read it

92p

79p

63p

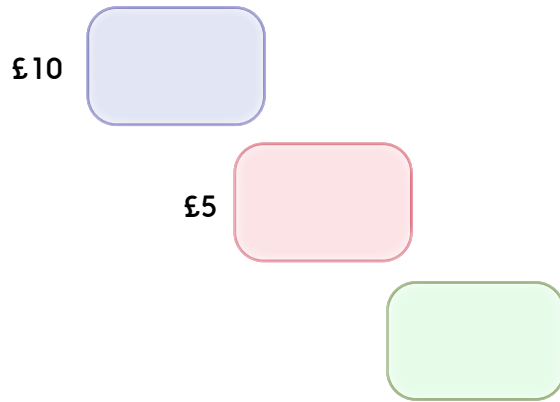
A Bit Stuck? Read it



Investigation

Step change

1. Copy the diagram on the right.
2. Write an amount greater than £5 in the top step on the diagram.
3. Find the change from £10. Write the answer in the second step.
4. Find the change from £5. Write the answer in the third step.
5. Compare the pence in the numbers on the top and third step.
6. Repeat this five times with different starting amounts.



Have you tried amounts with no 10ps?

How about amounts with no 1ps?

Why does this work?

Can you write an explanation?

£10		£6.05
£5		£3.95
		£1.05

Challenge

Try this with four steps – Change from £20, then change from £10, then change from £5. What happens to the pence now?
Try five steps, starting at change from £50!