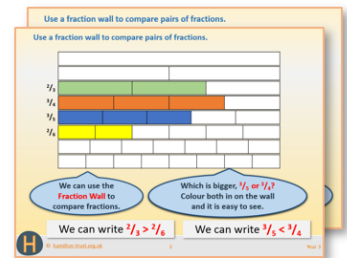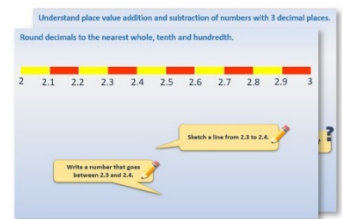# Week 6, Day 2
Division

Each day covers one maths topic. It should take you about 1 hour or just a little more.
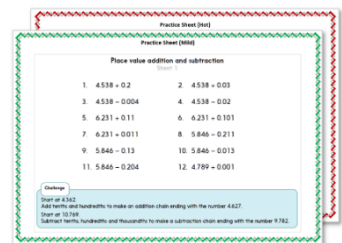
1. If possible, watch the **PowerPoint presentation** with a teacher or another grown-up.

   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.

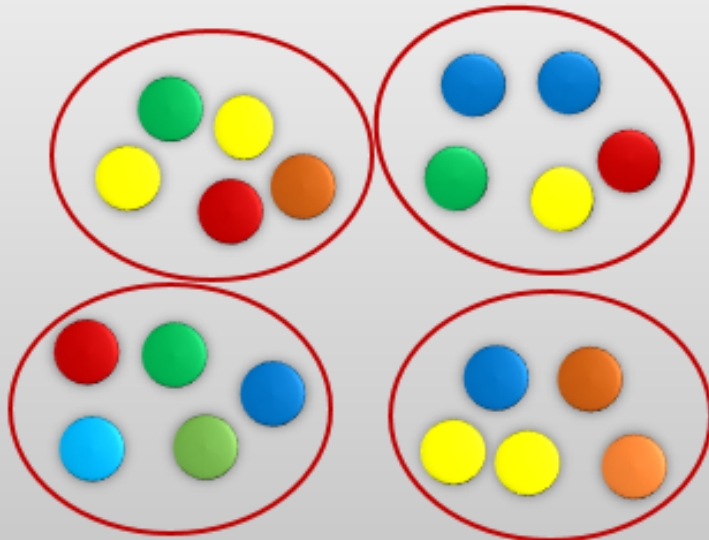3. Finding it tricky? That's OK… have a go with a grown-up at **A Bit Stuck?**

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

Learning Reminders

Understand grouping as one model of division.

How many groups of 5 can we make from these 20 counters?

Twenty grouped in 5s makes 4 groups. We can record the grouping like this:
$$20 \div 5 = 4$$

Learning Reminders

Understand grouping as one model of division; Begin to understand that there may be 'some left over' after division.

How many groups of 10 in this line of 23 counters?

We can make 2 groups, but we've got some left over. How many?

Learning Reminders

Understand grouping as one model of division; Begin to understand that there may be 'some left over' after division.

How many groups of 5 in this line of 23 counters?

Sometimes this happens when we want groups of 5 for PE, if we haven't got a multiple of 5, all the groups can't be 5s, we have some left over!

Practice Sheet Mild
How many groups?

Answer the following questions by making groups.
Write the corresponding division number sentence.

1. How many groups of 4 are in 24?

2. How many groups of 6 are in 30?

3. How many groups of 3 are in 15?

4. How many groups of 4 are in 32?

5. How many groups of 10 are in 90?

6. How many groups of 5 are in 45?

7. How many groups of 7 are in 35?

8. How many groups of 10 are in 33? How many are left over?

Challenge

Make up two more division questions of your own.

Practice Sheet Hot
How many groups?

Answer the following questions by making groups.
Write the corresponding division number sentence.
Which questions have some left over?

1. How many groups of 4 are in 32?

2. How many groups of 6 are in 30?

3. How many groups of 5 are in 35?

4. How many groups of 4 are in 44?

5. How many groups of 3 are in 16?
    How many left over?

6. How many groups of 10 are in 90?

7. How many groups of 5 are in 45?

8. How many groups of 3 are in 21?

9. How many groups of 4 are in 26?
    How many left over?

10. How many groups of 3 are in 27?

Challenge

Make up three more division questions of your own, including one with some left over.

Explore more Hamilton Trust Learning Materials at https://wrht.org.uk/hamilton

Practice Sheet Answers

How many groups? (mild)

1. How many groups of 4 are in 24? $24 \div 4 = 6$
2. How many groups of 6 are in 30? $30 \div 6 = 5$
3. How many groups of 3 are in 15? $15 \div 3 = 5$
4. How many groups of 4 are in 32? $32 \div 4 = 8$
5. How many groups of 10 are in 90? $90 \div 10 = 9$
6. How many groups of 5 are in 45? $45 \div 5 = 9$
7. How many groups of 7 are in 35? $35 \div 7 = 5$
8. How many groups of 10 are in 33? $33 \div 10 = 3$ and 3 left
   How many are left over?   over

Challenge

Accept any division questions following the same pattern as above.
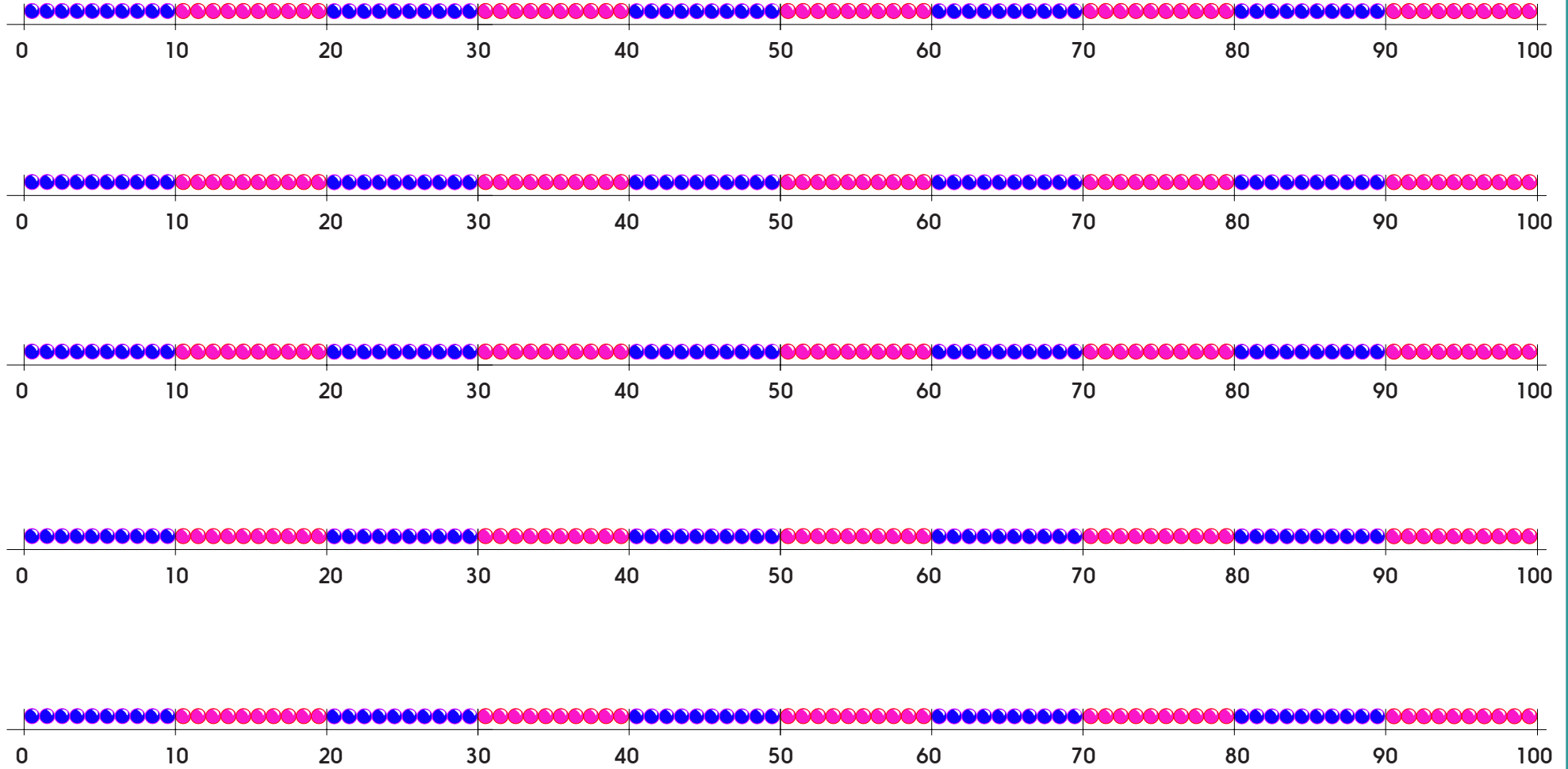
How many groups? (hot)

1. How many groups of 4 are in 32? $32 \div 4 = 8$
2. How many groups of 6 are in 30? $30 \div 6 = 5$
3. How many groups of 5 are in 35? $38 \div 5 = 7$
4. How many groups of 4 are in 44? $44 \div 4 = 11$
5. How many groups of 3 are in 16? $16 \div 3 = 5$ and 1 left over
   How many left over?
6. How many groups of 10 are in 90? $90 \div 10 = 9$
7. How many groups of 5 are in 45? $45 \div 5 = 9$
8. How many groups of 3 are in 21? $21 \div 3 = 7$
9. How many groups of 4 are in 26? $26 \div 4 = 6$ and 2 left over
   How many left over?
10. How many groups of 3 are in 27? $27 \div 3 = 9$

Challenge

Accept any division questions following the same pattern as above.

Explore more Hamilton Trust Learning Materials at https://wrht.org.uk/hamilton
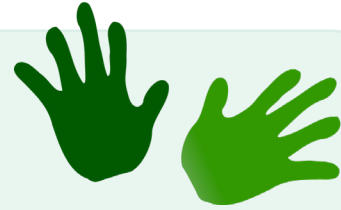
Practice Sheets Resource
How many groups?

Work in pairs

Things you will need:
• 0 to 50 beaded lines
• 1 to 10 cards
• A pencil

What to do:

• Shuffle a set of 1-10 cards.
  Place face down.

• Take the top card.
  Draw this number of hops of 5 on the beaded line.
  Fill in the number sentence.

• Repeat four more times.

• Score 5 points for each correct number sentence.

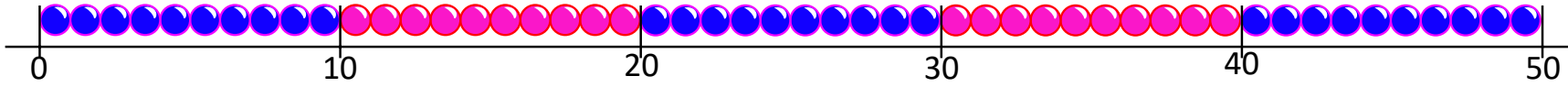• At the end, count in 5s to work out your final score.

S-t-r-e-t-c-h:
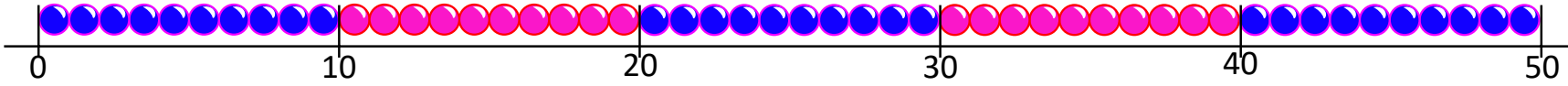Write your own number sentences using the x sign, e.g. 7 x 5 = 35.

Learning outcomes:
• I can use 'clever counting' in 5s.
• I can fill in matching multiplications.
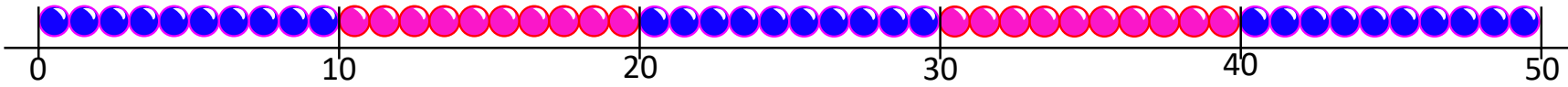• I am beginning to use the multiplication sign.

⬜ lots of 5 is ⬜

0   10   20   30   40   50
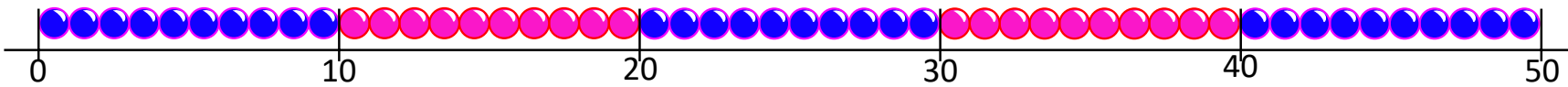
⬜ lots of 5 is ⬜

0   10   20   30   40   50

⬜ lots of 5 is ⬜

0   10   20   30   40   50

⬜ lots of 5 is ⬜

0   10   20   30   40   50

⬜ lots of 5 is ⬜

0   10   20   30   40   50

0   10   20   30   40   50

0   10   20   30   40   50

0   10   20   30   40   50

0   10   20   30   40   50
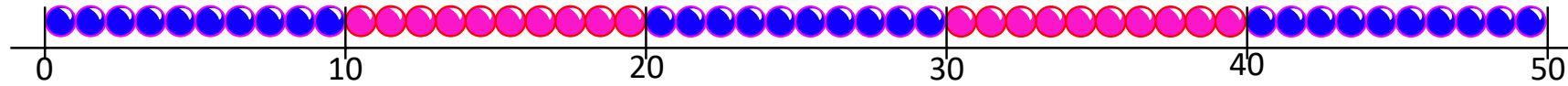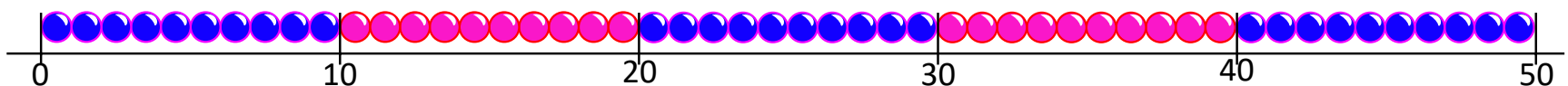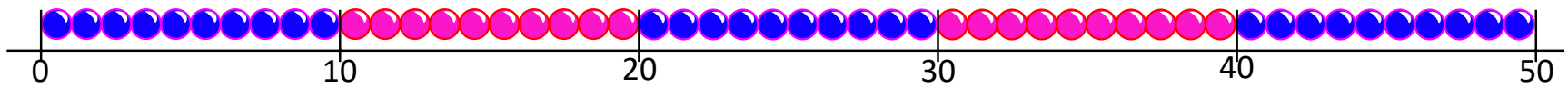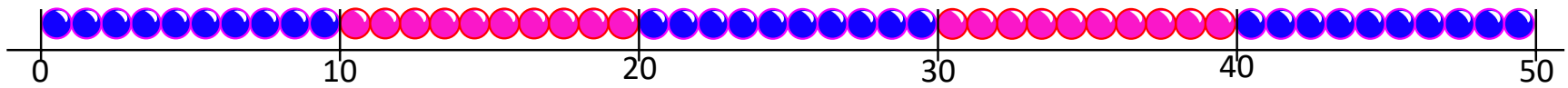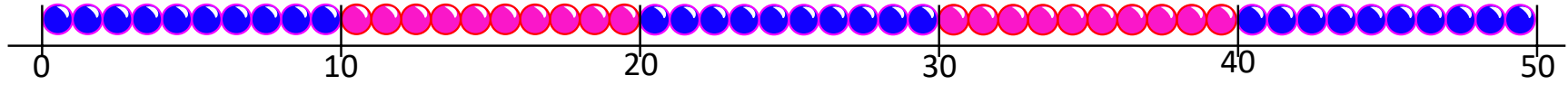
Hopping maths

1	2	3	4	5
6	7	8	9	10

Investigation
Left Overs Anyone?

5

12

2

Find a whole number less than 20...

It must:
- leave 1 left over when you divide it by 2
- AND leave 1 left over when you divide it by 5
- AND leave 1 left over when you divide it by 10.

7

Now use what you've learned to find other numbers, less than 50, which leave 1 left over when divided by 2, 5 and 10...

Can you explain what this family of numbers all have in common?

Lottie thinks that 99 will be in this family of numbers. Is she correct?

19

15