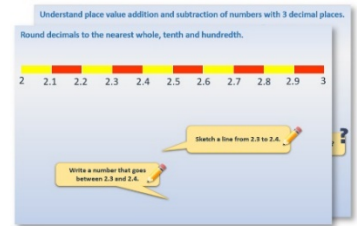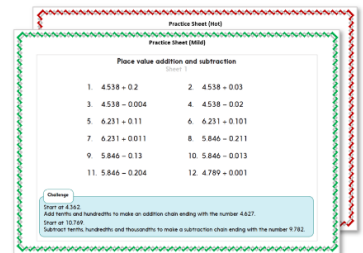# Week 12, Day 5
Place negative numbers on a line and order them
Each day covers one maths topic. It should take you about 1 hour or just a little more.
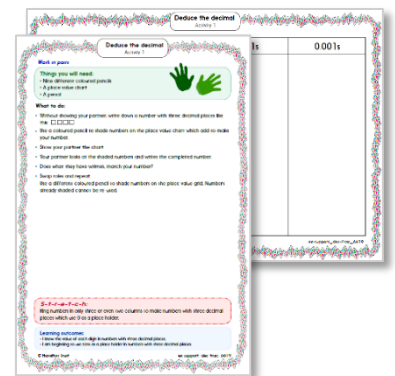
1. Start by reading through the **Learning Reminders**.
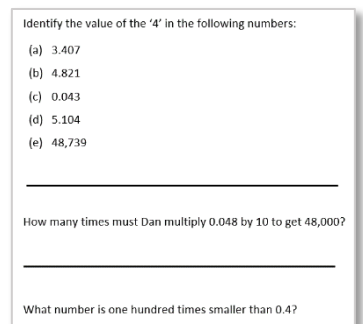   They come from our *PowerPoint* slides.

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?**
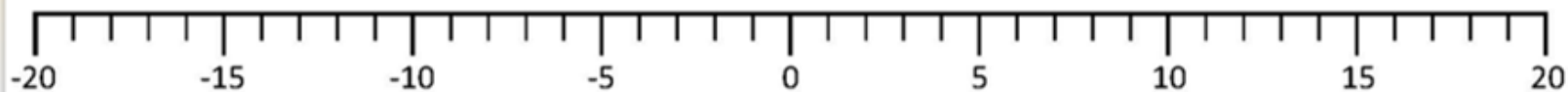
4. Have I mastered the topic? A few questions to
   Check your understanding.
   Fold the page to hide the answers!

Learning Reminders

Place negative numbers on a line. Order positive and negative numbers.

We can use this number line to practise counting from -20 to 20 and back again. Try it in 5s.

Now try it in 1s or 2s. You can mark the numbers on the line to help!

Learning Reminders

Place negative numbers on a line. Order positive and negative numbers.

Copy these pairs of numbers.
Which is the larger of each pair?
Put either < or > between each pair to complete the inequality.

3	-7
-9	8
6	2
-3	-1
0	-3

If you're not sure, you can always check on the number line.
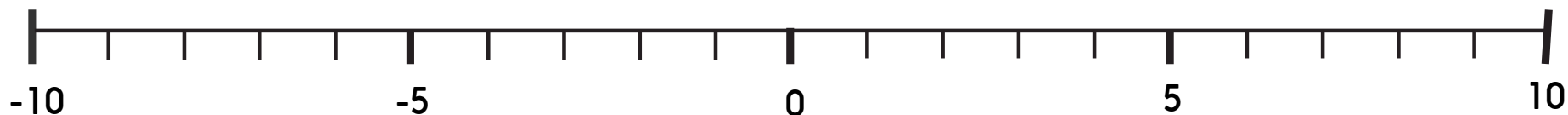
Answers

3 > -7
-9 < 8
6 > 2
-3 < -1
0 > -3

Positive and negative numbers

1. Fill in all numbers from -10 to 10 on this number line. Use your number line to help with questions 2, 3 and 4.

-10   -5   0   5   10

2. Write the number that goes between the numbers.

-2 [   ] 0   -10 [   ] -8   -1 [   ] 1   -6 [   ] -4

3. Write < or > between each pair of numbers.

-4   4   3   -1   -5   -2   -10   -6   3   -3   -8   2   0   -7

4. Write each group of numbers in order, smallest first.

-2, 2, 0   ___ ___ ___

4, -1, 6   ___ ___ ___

-10, 3, -5   ___ ___ ___

Practice Sheet Hot
Positive and negative numbers

1. Write the missing numbers in the boxes.

-10   -5   0   5   10

2. Write the number that goes between the numbers.

-2 [ ] 0   -10 [ ] -8   -1 [ ] 1   -6 [ ] -4

3. Write < or > between each pair of numbers.

-4   4   3   -1   -5   -2   -10   -6   3   -3   -8   2   0   -7

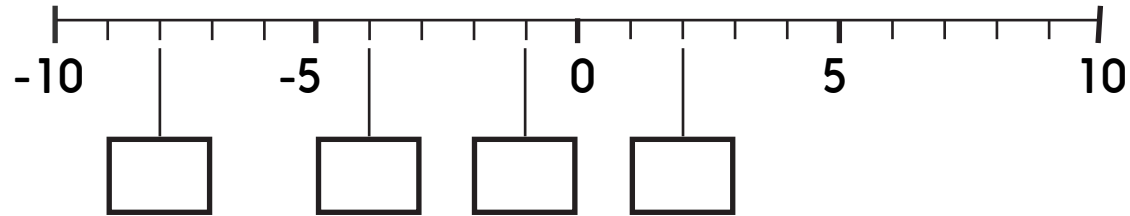4. Write each group of numbers in order, smallest first.

-2, 2, 0   ____ ____ ____

4, -1, 6   ____ ____ ____

-10, 3, -5   ____ ____ ____

4, -3, -1   ____ ____ ____

-5, -9, -2   ____ ____ ____

3, 0, -6   ____ ____ ____

Challenge

The year this year is _____ .
What year was it 2050 years ago?

5. Write three numbers between -10 and -3.

Practice Sheets Answers

Positive and negative numbers (hot)

2.

-2 -1 0   -10 -9 -8   -1 0 1   -6 -5 -4

3.

-4 < 4   3 > -1   -5 < -2   -10 < -6   3 > -3   -8 < 2   0 > -7

4.   Write each group of numbers in order, smallest first.

-2, 2, 0   -2 0 2

4, -1, 6   -1 4 6

-10, 3, -5   -10 -5 3

Positive and negative numbers (hot)

1.

-10   -5   0   5   10

-8   -4   -1   2

2.

-2 -1 0   -10 -9 -8   -1 0 1   -6 -5 -4

3.
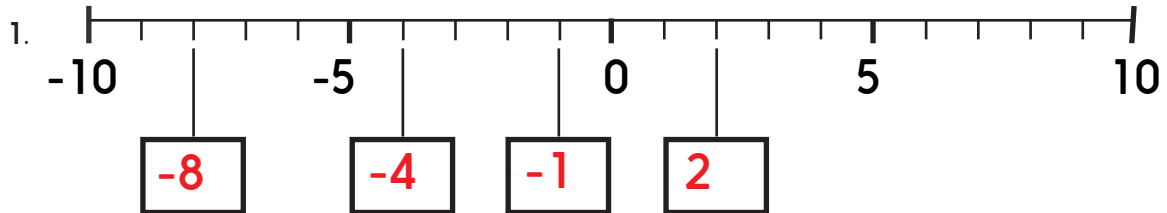
-4 < 4   3 > -1   -5 < -2   -10 < -6   3 > -3   -8 < 2   0 > -7

4.   Write each group of numbers in order, smallest first.

-2, 2, 0   -2 0 2

4, -1, 6   -1 4 6

-10, 3, -5   -10 -5 3

4, -3, -1   -3 -1 4

-5, -9, -2   -9 -5 -2

3, 0, -6   -6 0 3

5.   Write three numbers between -10 and -3.
Accept three of the following:
-9, -8, -7, -6, -5 or -4

Challenge

Do children give the year in terms of a negative number, e.g. -31' for 2019?
Of course, we count back past the 'year zero' in positive numbers 'BCE' (Before Common Era), so 2050 years before 2019 was 31 BCE.
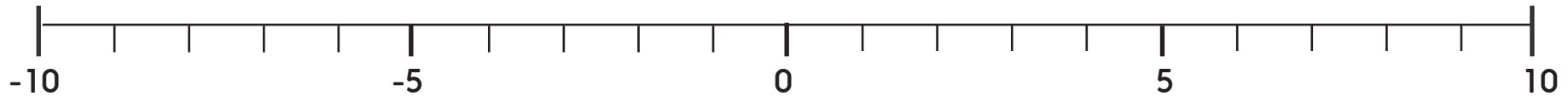
You will need:
- -10 to 10 cards

What to do:

- Carefully cut out the –10 to 10 cards. Shuffle the cards, then order them in a line, smallest to largest. Repeat this activity several times.

- When you are confident with ordering, write the numbers on the number line below:

-10   -5   0   5   10

- Now shuffle the cards and choose one. What number comes before and what number after?
  Record like this: I chose -3.   -4, -3, -2.
  Check whether you are correct by using your number line.
  Repeat for at least five different cards.

- Now choose two cards.
  Write < or > between the numbers to complete inequalities, e.g. choose 3 and -7 record: 3 > -7.
  Repeat several times using the number line to check.

-10°C	-9°C	-8°C
-7°C	-6°C	-5°C
-4°C	-3°C	-2°C
-1°C	0°C	1°C

2°C	3°C	4°C
5°C	6°C	7°C
8°C	9°C	10°C

Check your understanding
Questions

Put these temperatures in order, starting with the lowest:

        19°C   -9°C   -18°C   0°C   21°C

What temperature is 10 degrees less than 4°C?

Alfie says '20 degrees higher than -5°C is 25°C'. Do you agree with him?

Fold here to hide answers

Check your understanding
Answers

Put these temperatures in order, starting with the lowest:

        19°C   -9°C   -18°C   0°C   21°C

-18°C, -9°C, 0°C, 19°C, 21°C.   Don't ignore the negative sign; some children may reverse the first two since 9 is smaller than 18.

What temperature is 10 degrees less than 4°C?
-6°C (check on a number line using 0 as a 'bridge').

Alfie says '20 degrees higher than -5°C is 25°C'. Do you agree with him?
No, it is 15°C. Again check on a number line.