## Year 3: Week 1, Day 2

## 3-digit numbers

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
Partition and represent 3-digit numbers using place value cards.


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## Practice Sheet Mild <br> Place value practice

Use the following digits to make 3-digit numbers as instructed:


1. A number with seven 100 s.

2. A number where the 10 s digit is four.

3. A number with a ls digit $<3$.

4. A number with more than six 10 s.
5. An even number between 200 and 300 .

6. An odd number $>800$.


Now order these numbers from smallest to largest:


## Challenge

How many numbers are there between (but not including) 100 and 200 that have a seven in them?

## Practice Sheet Hot <br> Place value practice

Use the following digits to make as many 3-digit numbers as you can. Now order them all from smallest to largest.

Start using these digits: $1,5,7,0,9,3$
$157,150,159 \ldots$

## Challenge

How many numbers are there between (but not including) 100 and 200 that do not have a seven in them?

## Practice Sheet Answers

## Place value practice (Mild)

1. e.g. 739
2. e.g. 243
3. e.g. 492
4. e.g. 374 or 294
5. e.g. 274
6. e.g. 927

## Challenge

There are 19 numbers:
1s digit is 7: 107, $117,127, \ldots 197$ (10 numbers).
10s digit is 7: 170, 171, 172, ... 179 (not counting 177 because it was in the list above, 9 numbers).

Place value practice (Hot)
e.g. 103, 197, 359, 301, 571, 509, etc.

## Challenge

There are 80 numbers between 100 and 200 without a seven in them.

## A Bit Stuck? Make the number

## Work in pairs

Things you will need:

- 100s, 10s and 1 s place value cards


## What to do:

- Take it in turns to choose a number.
- One person makes that number using place value cards.
- They then show the three cards in any order to their partner.
- They must write the number and say it aloud.
- Do you agree?
- Repeat this, taking turns to make the number.


## $\begin{array}{lllll}326 & 831 & 555 & 473 & 154\end{array}$ $617 \quad 282 \quad 736 \quad 962$

S-t-r-e-t-c-h:
Make the numbers 520 and 603 using place value cards.

## Learning outcomes:

- I can make 3-digit numbers using place value equipment (no zeros).
- I am beginning to make 3-digit numbers with a 0 in the 10 s or 1 s place using place value equipment.


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## Check your understanding: <br> Questions

Write numbers to make the sentences true:
a) $100<\square<110$
b) $304>\square>302$
c) $999>\square>888$
d) $0<101<$ $\square$
e) $459<$ $\square$ < 461

Write the value of the 5 digit in these numbers:
(i) 652
(ii) 591
(iii) 905

## Check your understanding:

## Answers

Write numbers to make the sentences true:
f) $100<\square<110$ Any number from 101 to 109 .
g) $304>\square>302303$.
h) $999>\square>888$ Any number from 889 to 998.
i) $0<101<\square$ Any number 102 or greater.
j) $459<\square<461460$.

Write the value of the 5 digit in these numbers:
(i) 65250 (or 5 tens).
(ii) 591500 (or 5 hundreds).
(iii) 9055 (or 5 ones).

- The digit 0 is used 18 times between 600 and 700. True, in the numbers 601 - 609 (9 times) and 610, 620 ... 690 (9 times).
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