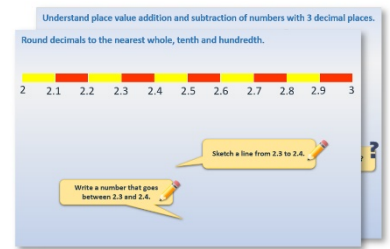


Year 3: Week 1, Day 2

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.

Practice Sheet (Hard)

Place value addition and subtraction
Sheet 1

1. $4538 + 02$ 2. $4538 - 0004$ 5. $6231 + 011$ 6. $6231 + 0011$ 9. $5846 - 013$ 11. $5846 - 0204$	2. $4538 + 003$ 4. $4538 - 002$ 6. $6231 + 0101$ 8. $5846 - 0211$ 10. $5846 - 0013$ 12. $4789 + 0001$
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Challenge
 Start at 4362.
 Add tens and hundreds to make an addition chain ending with the number 4827.
 Stop at 10349.
 Subtract tens, hundreds and thousands to make a subtraction chain ending with the number 9762.

3. Finding it tricky? That's OK... have a go with a grown-up at [A Bit Stuck?](#)

Deduce the decimal

(Student)

Work in pairs

Things you will need:

- Three different coloured pencils
- A place value chart
- A partner

What to do:

- Without showing your partner write down a number with three decimal places like 0.123.
- We'll exchange pencil so I make numbers on the place value chart which add up to make your number!
- Show your partner the chart.
- Your partner looks at the shaded numbers and writes the completed number.
- Does what they have written match your number?
- Swap roles and repeat.

Note: all numbers shown/pencil in shade number on the place value chart. Number already shaded cannot be re-used.

	15
	0.0015

an_supper_nice_time_15.15

It's time to play!

Using numbers in only three or more two columns to make numbers with three decimal places which are 0.9 in a place holder.

Learning outcome:

When the value of nine digits is written with three decimal places, the handwriting can be used to make numbers with their decimal places.

Worksheet link:

[We support our Year 5...](#)

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

Identify the value of the '4' in the following numbers:

- (a) 3.407
- (b) 4.821
- (c) 0.043
- (d) 5.104
- (e) 48,739

How many times must Dan multiply 0.048 by 10 to get 48,000?

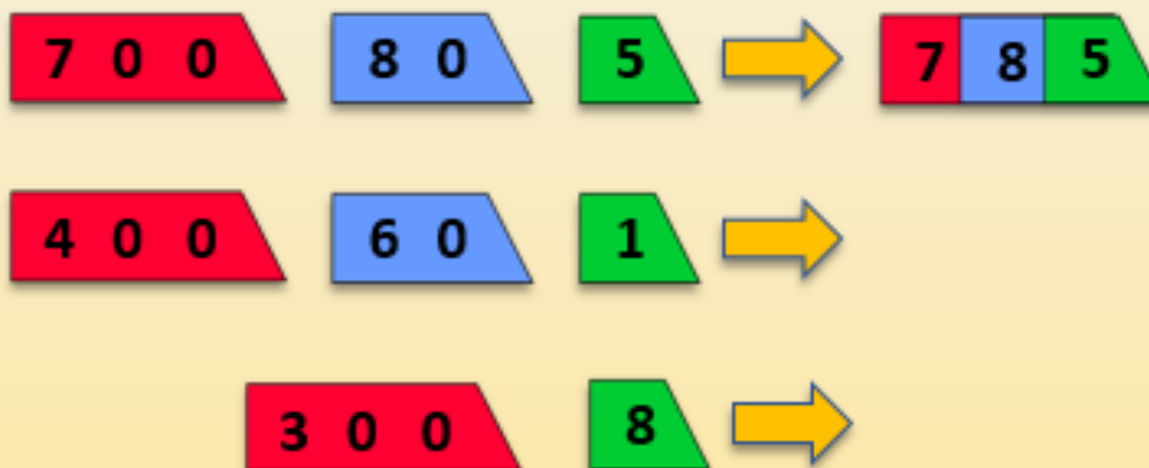
What number is one hundred times smaller than 0.4?

Learning Reminders

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

100	200	300	400	500	600	700	800	900
10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9

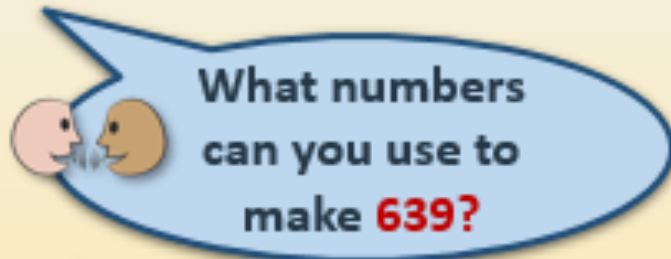
Find the total of
the numbers.



Learning Reminders

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

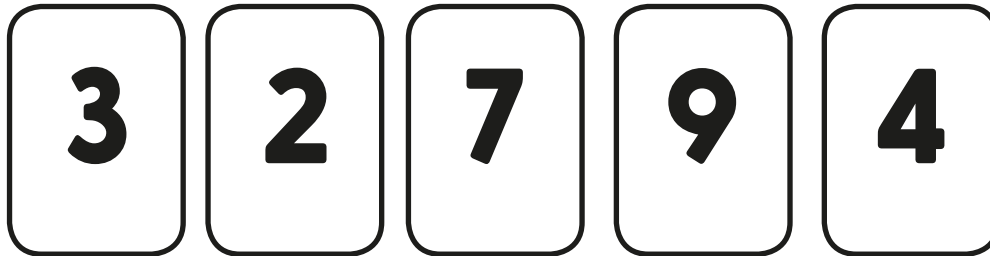
100	200	300	400	500	600	700	800	900
10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9



Practice Sheet Mild

Place value practice

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



1. A number with seven 100s.

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

3. A number with a 1s digit < 3 .

4. A number with more than six 10s.

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

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...

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, ... 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.

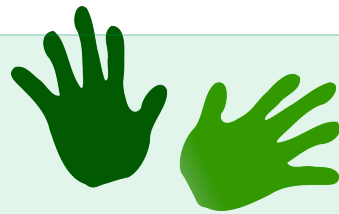
A Bit Stuck?

Make the number

Work in pairs

Things you will need:

- 100s, 10s and 1s 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.

326 831 555 473 154

617 282 736 962

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 10s or 1s place using place value equipment.

1 0 0

6 0 0

2 0 0

7 0 0

3 0 0

8 0 0

4 0 0

9 0 0

5 0 0

1 0

6 0

1

2 0

7 0

2

3 0

8 0

3

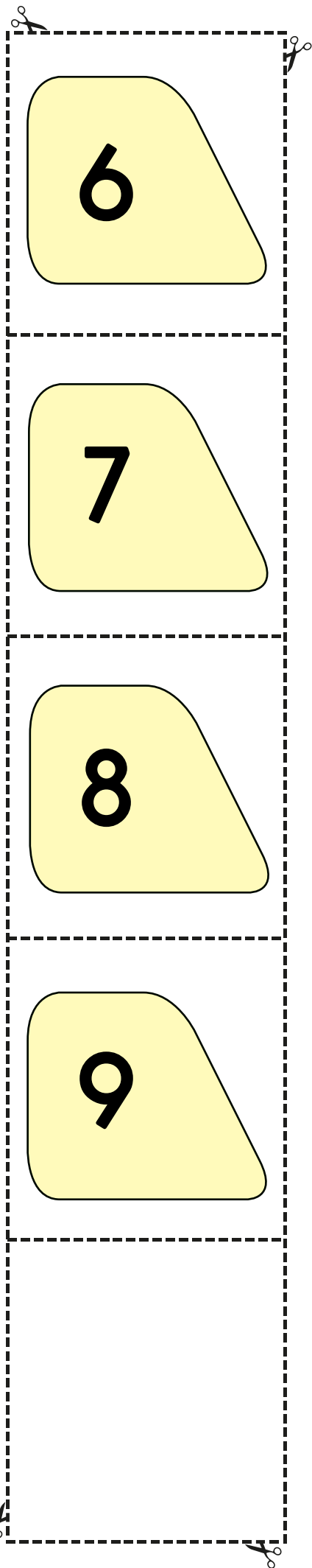
4 0

9 0

4

5 0

5



Check your understanding:

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

Fold here to hide answers:

Check your understanding:

Answers

Write numbers to make the sentences true:

f) $100 < \square < 110$ Any number from 101 to 109.

g) $304 > \square > 302$ 303.

h) $999 > \square > 888$ Any number from 889 to 998.

i) $0 < 101 < \square$ Any number 102 or greater.

j) $459 < \square < 461$ 460.

Write the value of the 5 digit in these numbers:

(i) 652 50 (or 5 tens).

(ii) 591 500 (or 5 hundreds).

(iii) 905 5 (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).