# Week 1 Day 1 <br> Understanding decimals 

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

## Understand place value addition and subtraction of numbers with $\mathbf{3}$ decimal places.



## Learning Reminders

Understand place value addition and subtraction of numbers with 3 decimal places.
4.735
4.775
4.375
4.495
4.494
4.444

## Add 0.04.



What was your final number?

## Learning Reminders

Understand place value addition and subtraction of numbers with 3 decimal places.


## Practice Sheet <br> Place value addition and subtraction

| 1. | $4.538+0.2$ | 2. | $4.538+0.03$ |
| :--- | :--- | :--- | :--- |
| 3. | $4.538-0.004$ | 4. | $4.538-0.02$ |
| 5. | $6.231+0.11$ | 6. | $6.231+0.101$ |
| 7. | $6.231+0.011$ | 8. | $5.846-0.211$ |
| 9. | $5.846-0.13$ | 10. $5.846-0.013$ |  |
| 11. | $5.846-0.204$ | 12. $4.789+0.001$ |  |
| 13. $4.408+2.222$ | 14. $0.725+1.001$ |  |  |
| 15. $1.903+1.107$ |  |  |  |

## Challenge

Start at 4.362.
Add tenths and hundredths to make an addition chain ending with the number 4.627.
Start at 10.769.
Subtract tenths, hundredths and thousandths to make a subtraction chain ending with the number 9.782.
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## Practice Sheet answers

1. $4.538+0.2=4.738$
2. $4.538+0.03=4.568$
3. $4.538-0.004=4.534$
4. $\quad 4.538-0.02=4.518$
5. $6.231+0.11=6.341$
6. $\quad 6.231+0.101=6.332$
7. $\quad 6.231+0.011=6.242$
8. $5.846-0.211=5.635$
9. $5.846-0.13=5.716$
10. $5.846-0.013=5.833$
11. $5.846-0.204=5.642$
12. $4.789+0.001=4.79$
13. $4.408+2.222=6.63$
14. $0.725+1.001=1.726$
15. $1.903+1.107=3.01$

## Challenge

Accept answers where children have added both tenths and hundredths to reach the answer, e.g. $4.362+0.2+0.065=4.627$ or $4.362+0.18+0.085=4.647$

Accept answers where children have subtracted tenths, hundredths and thousandths to reach the answer, e.g. $10.769-0.9-0.08-0.007=9.782$

## A Bit Stuck? Deduce the decimal

## Work in pairs

Things you will need:

- Nine different coloured pencils
- A place value chart
- A pencil



## What to do:

- Without showing your partner, write down a number with three decimal places like this: $\qquad$ $\square$
- Use a coloured pencil to shade numbers on the place value chart which add 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.

Use a different coloured pencil to shade numbers on the place value grid. Numbers already shaded cannot be re-used.

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

Ring numbers in only three or even two columns to make numbers with three decimal places which use 0 as a place holder.

## Learning outcomes:

- I know the value of each digit in numbers with three decimal places.
- I am beginning to use zero as a place holder in numbers with three decimal places.

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## A Bit Stuck? <br> Deduce the decimal

Place value chart

| 1 | 0.1 | 0.01 | 0.001 |
| :--- | :--- | :--- | :--- |
| 2 | 0.2 | 0.02 | 0.002 |
| 3 | 0.3 | 0.03 | 0.003 |
| 4 | 0.4 | 0.04 | 0.004 |
| 5 | 0.5 | 0.05 | 0.005 |
| 6 | 0.6 | 0.06 | 0.006 |
| 7 | 0.7 | 0.07 | 0.007 |
| 8 | 0.8 | 0.08 | 0.008 |
| 9 | 0.9 | 0.09 | 0.009 |

## Check your understanding Questions

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

## Check your understanding Answers

Identify the value of the ' 4 ' in the following numbers:
(a) 3.4074 tenths
(b) 4.8214 or 4 ones
(c) 0.0434 hundredths
(d) 5.1044 thousandths
(e) 48,739 40 thousand

