Week 1 Day 1 **Understanding decimals**

Each day covers one maths topic. It should take you about 1 hour or just a little more.

- Start by reading through the Learning Reminders. They come from our *PowerPoint* slides. 2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 Sketch a line from 2.3 to 2.4. Write a number that goes
- Tackle the questions on the **Practice Sheet**. 2. There might be a choice of either Mild (easier) or Hot (harder)! Check the answers.

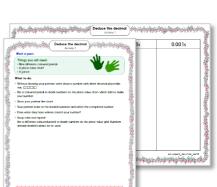
Finding it tricky? That's OK... have a go with a 3. grown-up at A Bit Stuck?

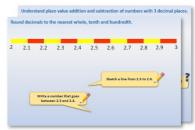
Have I mastered the topic? A few questions to 4. Check your understanding. Fold the page to hide the answers!

1.



Iden	tify 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	r many times must Dan multiply 0.048 by 10 to get 48,000?





4538+0.2

4.538 - 0.00

5. 6.231 + 0.11

6.231 + 0.011

5.846 - 0.13

11 5846 - 0.20

2 4538 + 0.0

4. 4.538 - 0.02

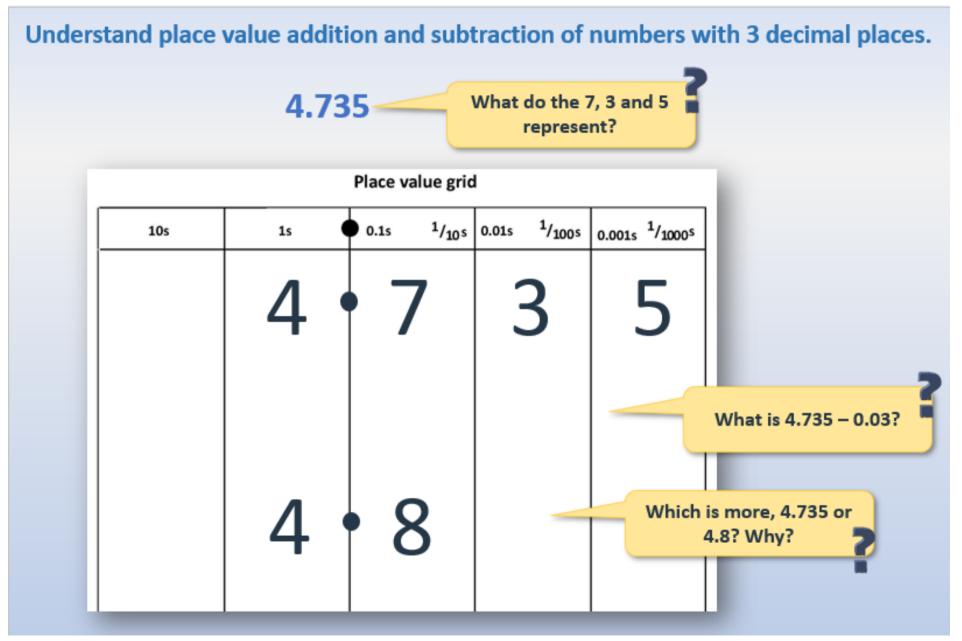
6. 6.231 + 0.10

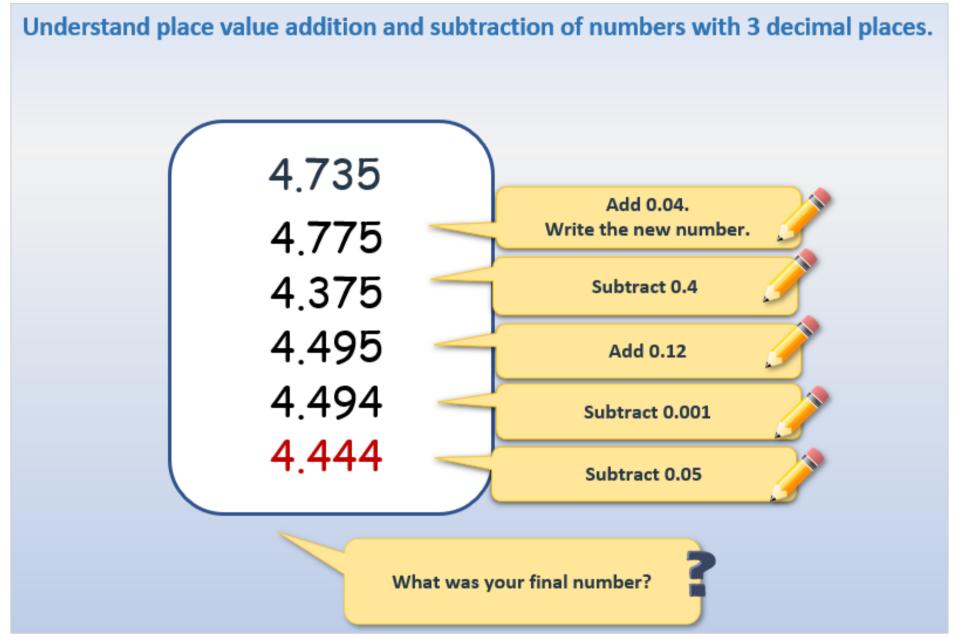
5.846 - 0.211

10. 5.846 - 0.013

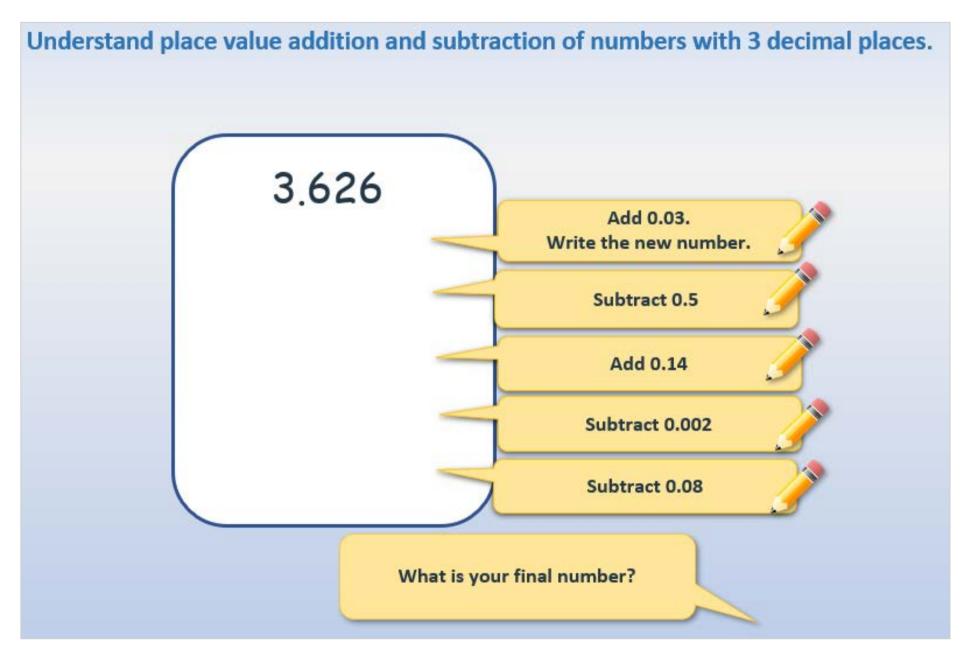
12 4780 . 0.0

Learning Reminders





Learning Reminders





Practice Sheet 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.

Practice Sheet answers

1.	4.538 + 0.2 = <mark>4.738</mark>	2.	4.538 + 0.03 = <mark>4.568</mark>
3.	4.538 - 0.004 = <mark>4.534</mark>	4.	4.538 - 0.02 = <mark>4.518</mark>
5.	6.231 + 0.11 = <mark>6.341</mark>	6.	6.231 + 0.101 = <mark>6.332</mark>
7.	6.231 + 0.011 = <mark>6.242</mark>	8.	5.846 - 0.211 = <mark>5.635</mark>
9.	5.846 - 0.13 = <mark>5.716</mark>	10.	5.846 - 0.013 = <mark>5.833</mark>
11.	5.846 - 0.204 = <mark>5.642</mark>	12.	4.789 + 0.001 = 4 .79
13.	4.408 + 2.222 = <mark>6.63</mark>	14.	0.725 + 1.001 = <mark>1.726</mark>
15.	1.903 + 1.107 = <mark>3.01</mark>		

 \wedge

 \bigcirc

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

© Hamilton Trust

 \wedge

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:
- 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.



ls •	0.1s	0.01s	0.001s
Hamilton Trust			

A Bit Stuck? Deduce the decimal

Place value chart

0.1 0.010.001 0.2 0.02 0.002 2 0.3 0.003 0.03 3 0.4 0.04 0.004 4 5 0.5 0.05 0.005 0.6 0.06 0.006 6 0.7 0.07 0.007 7 0.8 0.008 8 0.08 0.9 0.09 0.009 9

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

Fold here to hide answers:

Check your understanding Answers

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

- (a) 3.407 4 tenths
- (b) 4.821 4 or 4 ones
- (c) 0.043 4 hundredths
- (d) 5.104 4 thousandths
- (e) 48,739 40 thousand