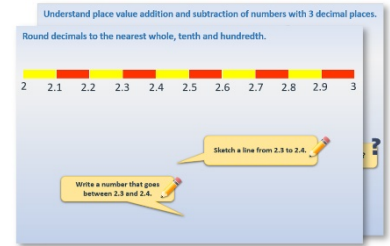


Week 1 Day 4

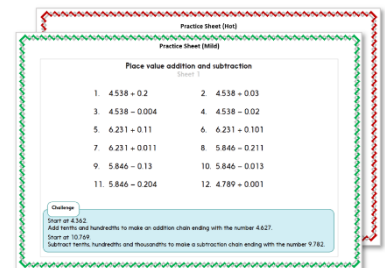
Adding Decimals

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

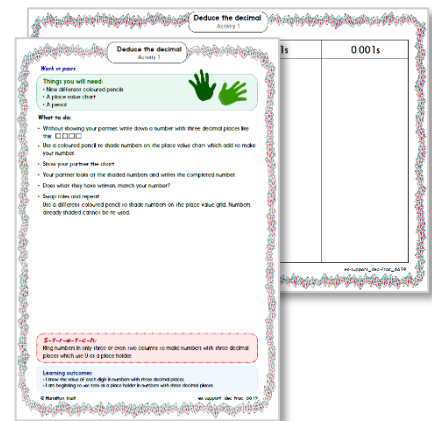
1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



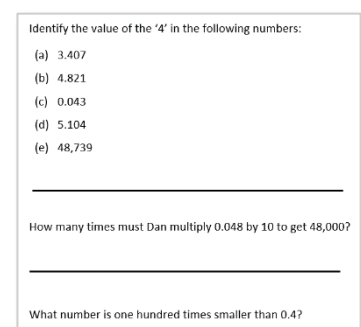
2. Tackle the questions on the **Practice Sheet**. There might be a choice of either **Mild** (easier) or **Hot** (harder)! Check the answers.



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

Use written addition to add numbers with 3 decimal places.

Use written addition to calculate $4.72 + 3.45$.

$$45.7 + 3.45$$

$$\begin{array}{r} 45.7 \\ + 3.45 \\ \hline \end{array}$$

What is wrong with this layout?

$$\begin{array}{r} 45.7 \\ + 3.45 \\ \hline 49.15 \end{array}$$

The columns need to be aligned correctly; we need to align tenths with tenths, etc. The easy way to do this is to align the decimal point in each number.

Learning Reminders

Use written addition to add numbers with 3 decimal places.

A young cat was 3.382kg and has gained 1.347kg.
How much does it now weigh?

$$\begin{array}{r} 3.382 \text{ kg} \\ + 1.347 \text{ kg} \\ \hline 4.729 \text{ kg} \end{array}$$

This is just the same as before but now we have an extra column for 0.001s.

Learning Reminders

Use written addition to add numbers with 3 decimal places.

A jogger ran 2.936km in the morning and 1.532km in the afternoon. How far did she run altogether?

$$\begin{array}{r} 2.936 \text{ km} \\ + 1.532 \text{ km} \\ \hline 4.468 \text{ km} \end{array}$$

0.9km + 0.5km = 1.4km

Now write the answer in km and m, then in metres only.



Practice Sheet

Adding measures

Part A

Find three pairs of distances with a total between 9 and 10 metres.

6.34m 2.26m 2.89m 4.75m 3.18m 6.68m 5.04m 4.2m

Part B

Find three pairs of masses/weights with a total of between 15 and 16 kilograms.

10.252kg 5.826kg 9.421kg 5.213kg 4.934kg 7.853kg 7.729kg

Part C

Find three pairs of capacities with a total of between 10 and 11 litres.

8.234 litres 4.872 litres 6.123 litres 1.836 litres 1.9 litres 5.67 litres 2.45 litres

Practice Sheet answers

Part A

$$6.34 + 2.89 = 9.23 \text{ m}$$

$$6.34 + 3.18 = 9.52 \text{ m}$$

$$2.89 + 6.68 = 9.57 \text{ m}$$

$$4.75 + 5.04 = 9.79 \text{ m}$$

Part C

$$8.234 + 1.836 = 10.07 \text{ litres}$$

$$8.234 + 1.9 = 10.134 \text{ litres}$$

$$8.234 + 2.45 = 10.684 \text{ litres}$$

$$4.872 + 6.123 = 10.995 \text{ litres}$$

$$4.872 + 5.67 = 10.542 \text{ litres}$$

Part B

$$10.252 + 5.213 = 15.465\text{kg}$$

$$10.252 + 4.934 = 15.186\text{kg}$$

$$5.826 + 9.421 = 15.247\text{kg}$$

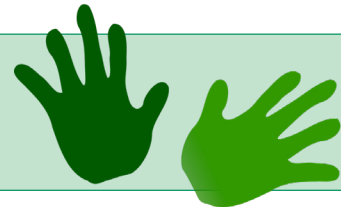
$$7.853 + 7.729 = 15.582\text{kg}$$

A Bit Stuck? Pyramid pile-up

Work in pairs

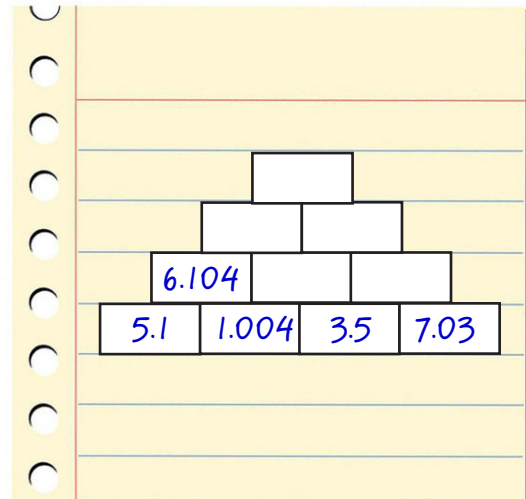
Things you will need:

- blank 'addition pyramids'



What to do:

- Take a blank pyramid, then choose any four of these numbers to place in any order along the bottom row: 3.05, 2.006, 5.1, 1.07, 4.002, 7.03, 3.5, 1.004.
- Add pairs of numbers, writing the sum in the block above, until you find the total in the top block.
- Discuss the addition strategies you have chosen (e.g. PV, counting on, partitioning, add and adjust, column...) with your partner.



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

Do you get the same total if you put your four numbers in different places on the bottom row?

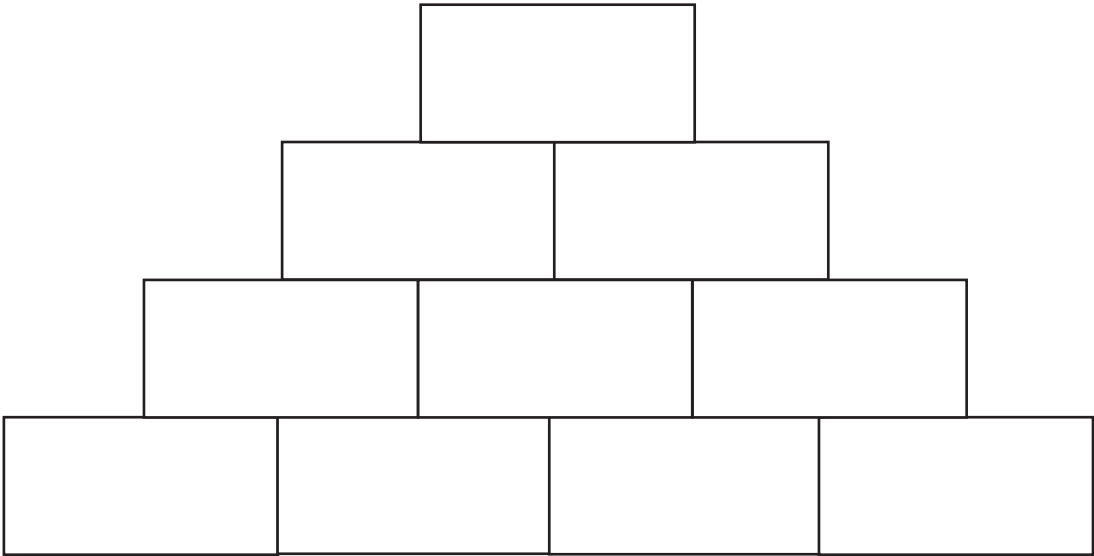
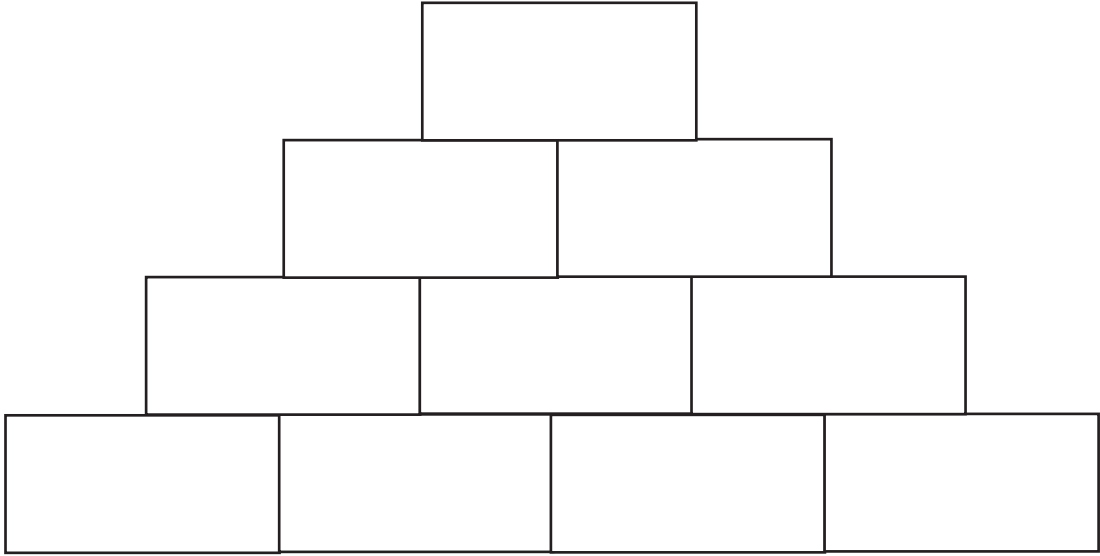
Given these eight numbers to choose from, what is the smallest possible total at the top of the pyramid?

And the largest possible total at the top of the pyramid?

Learning outcomes:

- I can add any pair of numbers with up to three decimal places.
- I can choose an appropriate method for addition to make calculation efficient and error-proof.

A Bit Stuck?
Pyramid pile-up



Check your understanding Questions

Add 3.21 and 32.1

Add 4.32 and 43.2

Add 5.43 and 54.3

BEFORE doing the addition, can you predict the answer to 6.54 and 65.4?

Write the missing digits in this addition calculation:

$$\begin{array}{r} \square . 6 \square 8 \\ + 26 . \square 5 6 \\ \hline \square 1 . 3 9 \square \end{array}$$

Fold here to hide answers:

Check your understanding Answers

Add 3.21 and 32.1 **35.31**

Add 4.32 and 43.2 **47.52**

Add 5.43 and 54.3 **59.73**

BEFORE doing the addition, can you predict the answer to 6.54 and 65.4? **71.94 - The answers increase by 12.21 each time.**

If children are setting out in columns, a common error is a mis-aligning of the digits.

Write the missing digits in this addition calculation:

$$\begin{array}{r} 4.638 \\ + 26.756 \\ \hline 11 \quad 1 \\ \hline 31.394 \end{array}$$

As well as the missing digits, children should be recording the extra 1s digits when the digits in a column total more than 10.