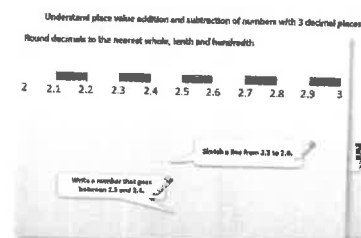


Year 5: Week 5, Day 1

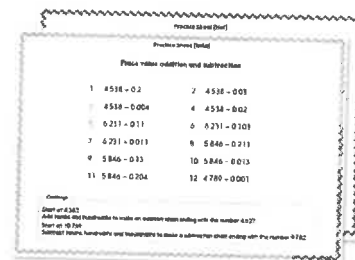
Addition and subtraction of numbers with 2 decimal places

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

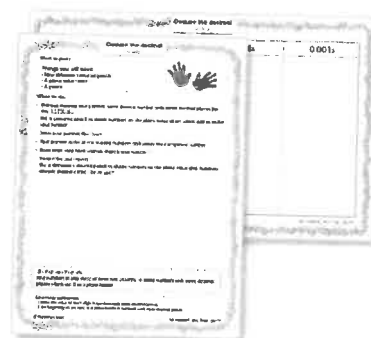
1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



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. Think you've cracked it? Whizzed through the Practice Sheets? Have a go at the **Investigation...**

Learning Reminders

Here is a 'Place Value' chart. It shows us how changing the PLACE of a digit in a number affects its VALUE. Remind yourself about the value of each row in the chart before having a go at the few questions below.

| hundredths | 0.01 | 0.02 | 0.03 | 0.04 | 0.05 | 0.06 | 0.07 | 0.08 | 0.09 |
|-------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| tenths | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 |
| ones | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| tens | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 |
| hundreds | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 |

So, the 4 in 0.4 is worth 4 tenths, the 9 in 0.09 is worth 9 hundredths and so on...

What values do the underlined digits have: **500** **2.7** **10.08** **0.63** **41.1**

Learning Reminders

Place value addition and subtraction of numbers with two decimal places.

Starting with 4.56 at the top
check what has been added or
subtracted each time.

4.56

4.57

4.77

3.77

3.73

3.33

Add one hundredth.

Add two tenths

Subtract one whole.

Subtract four hundredths.

Subtract four tenths.

That's four point five six
NOT four point fifty six!

That's three point three three
NOT three point thirty-three!

Learning Reminders

This time, have a go at filling in the answers, then check them at the bottom of the page.

Place value addition and subtraction of numbers with two decimal places.

Write 8.34 at the top of your page.

Which digit is in the hundredths place?
And the tenths?

Think carefully about which digits change as you add or subtract.

8.34

- + 0.3
- 0.2
- + 0.11
- + 0.05
- 1.1
- + 1.2

You should have 8.7 – check back through if you have a different answer!

Answers: 8.34 8.64 8.44 8.55 8.6 7.5 8.7

Practice Sheet Mild

Place value addition and subtraction

1. $4 + 0.53$

2. $6.07 + 0.5$

3. $5.78 - 0.08$

4. $8.64 - 0.6$

5. $8.23 + 0.1$

6. $4.56 + 0.01$

7. $8.47 - 0.01$

8. $9.35 - 0.1$

9. $6.21 + 0.2$

10. $9.34 - 0.2$

11. $8.25 + 0.03$

12. $7.38 - 0.03$

Practice Sheet Hot

Place value addition and subtraction

- | | |
|-------------------|-------------------|
| 1. $6.21 + 0.2$ | 2. $9.34 - 0.2$ |
| 3. $8.25 + 0.03$ | 4. $7.38 - 0.03$ |
| 5. $9.34 + 0.11$ | 6. $8.53 - 0.11$ |
| 7. $4.73 + 1.01$ | 8. $8.14 - 1.01$ |
| 9. $4.27 + 1.2$ | 10. $8.75 - 1.02$ |
| 11. $3.24 + 1.23$ | 12. $9.87 - 1.81$ |

Challenge

Start at 4.36. Add or subtract tenths and hundredths to make an addition and subtraction chain ending with the number 5.02.

Practice Sheets Answers

Place value addition and subtraction (mild)

- | | | |
|-------------------------|--------------------------|--------------------------|
| 1. $4 + 0.53 = 4.53$ | 2. $6.07 + 0.5 = 6.57$ | 3. $5.78 - 0.08 = 5.7$ |
| 4. $8.64 - 0.6 = 8.04$ | 5. $8.23 + 0.1 = 8.33$ | 6. $4.56 + 0.01 = 4.57$ |
| 7. $8.47 - 0.01 = 8.46$ | 8. $9.35 - 0.1 = 9.25$ | 9. $6.21 + 0.2 = 6.41$ |
| 10. $9.34 - 0.2 = 9.14$ | 11. $8.25 + 0.03 = 8.28$ | 12. $7.38 - 0.03 = 7.35$ |

Place value addition and subtraction (hot)

- | | | |
|--------------------------|--------------------------|--------------------------|
| 1. $6.21 + 0.2 = 6.41$ | 2. $9.34 - 0.2 = 9.14$ | 3. $8.25 + 0.03 = 8.28$ |
| 4. $7.38 - 0.03 = 7.35$ | 5. $9.34 + 0.11 = 9.45$ | 6. $8.53 - 0.11 = 8.42$ |
| 7. $4.73 + 1.01 = 5.74$ | 8. $8.14 - 1.01 = 7.13$ | 9. $4.27 + 1.2 = 5.47$ |
| 10. $8.75 - 1.02 = 7.73$ | 11. $3.24 + 1.23 = 4.47$ | 12. $9.87 - 1.81 = 8.06$ |

Challenge

Different answers are possible, e.g. $4.36 + 0.06 = 4.42$, $4.42 - 0.1 = 4.32$, $4.32 + 0.7 = 5.02$

A Bit Stuck?

Add and Subtract 0.1 and multiples of 0.1

Remember that moving one square to the right on this 0.1 to 10 grid adds 0.1, and to the left subtracts 0.1.

So, moving two squares right/ left will add/subtract 0.2, and so on...

| | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1 |
| 1.1 | 1.2 | 1.3 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 | 1.9 | 2 |
| 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 | 2.9 | 3 |
| 3.1 | 3.2 | 3.3 | 3.4 | 3.5 | 3.6 | 3.7 | 3.8 | 3.9 | 4 |
| 4.1 | 4.2 | 4.3 | 4.4 | 4.5 | 4.6 | 4.7 | 4.8 | 4.9 | 5 |
| 5.1 | 5.2 | 5.3 | 5.4 | 5.5 | 5.6 | 5.7 | 5.8 | 5.9 | 6 |
| 6.1 | 6.2 | 6.3 | 6.4 | 6.5 | 6.6 | 6.7 | 6.8 | 6.9 | 7 |
| 7.1 | 7.2 | 7.3 | 7.4 | 7.5 | 7.6 | 7.7 | 7.8 | 7.9 | 8 |
| 8.1 | 8.2 | 8.3 | 8.4 | 8.5 | 8.6 | 8.7 | 8.8 | 8.9 | 9 |
| 9.1 | 9.2 | 9.3 | 9.4 | 9.5 | 9.6 | 9.7 | 9.8 | 9.9 | 10 |

Use the grid to answer the following:

1. $1.5 + 0.1$
2. $2.2 - 0.1$
3. $5.9 + 0.1$
4. $4.7 - 0.1$
5. $8.4 + 0.2$
6. $5.6 - 0.3$
7. $9.7 - 1$ (carefull!)
8. $8.5 + 0.4$
9. $6.8 + 0.3$
10. $2.2 - 0.4$

Investigation Talisman Squares

A Talisman Square has consecutive numbers. This one has the numbers 0.1 to 1.6. The difference between any two neighbouring numbers is always more than one unit, so here it is always greater than one tenth or 0.1

| | | | |
|-----|-----|-----|-----|
| 0.1 | 0.5 | 0.3 | 0.7 |
| 0.9 | 1.1 | 1.3 | 1.5 |
| 0.2 | 0.6 | 0.4 | 0.8 |
| 1 | 1.2 | 1.4 | 1.6 |

- Find the difference between each pair of numbers along the top row of this square. So between 0.1 and 0.5, then between 0.5 and 0.3, then between 0.3 and 0.7, and so on.
- Repeat this for the second row, and the third and fourth rows.
- Now find the difference between each pair of numbers in the first column. So between 0.1 and 0.9, then between 0.9 and 0.2 and then between 0.2 and 1.
- Repeat this for the second, third and fourth columns.

$$0.5 - 0.1 = 0.4$$

$$0.5 - 0.3 =$$

What is the greatest difference?
What is the smallest difference?
Are all the differences greater than 0.1?

- Draw a 3 x 3 grid.
- Use the numbers: 0.1, 0.2, 0.3... up to 0.9.
- Can you arrange these on the grid to create a Talisman Square where all the neighbouring numbers have a difference greater than 0.1?

What do you notice?
Do you think this is possible?
Can you explain your answer?

Challenge

Create a new 4 x 4 grid, which is a Talisman Square using consecutive numbers. Remember that all the differences between neighbouring numbers must be greater than 0.1.

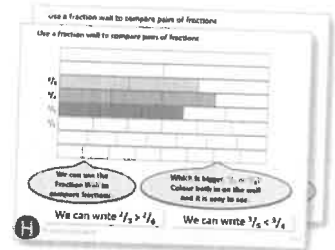
Year 5: Week 5, Day 2

Use written addition to add decimals

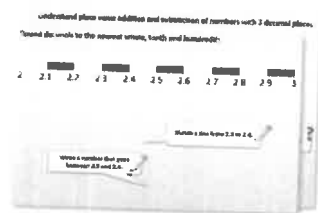
Use rounding to estimate totals

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

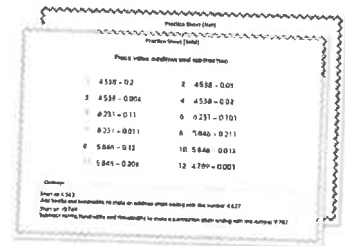
1. If possible, watch the **PowerPoint presentation** with a teacher or another grown-up.



OR start by carefully reading through the **Learning Reminders**.



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. Think you've cracked it? Whizzed through the Practice Sheets? Have a go at the **Investigation...**

Learning Reminders

Use written addition to add decimals; use rounding to estimate totals.

Round each number to the nearest whole and add to estimate the total.

$$2.68 + 6.25$$

$$3 + 6 = 9$$

Now let's find the exact total using column addition; or the 'expanded' method.

Remember to leave a blank row above the answer line.

Add the 0.01s, then the 0.1s, then the 1s.

$$\begin{array}{r} 2 \quad 0.6 \quad 0.08 \\ + \quad 6 \quad 0.2 \quad 0.05 \\ \hline \end{array}$$

$$\begin{array}{r} 2.68 \\ + 6.25 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \quad 0.9 \quad 0.03 \\ \hline 8.93 \end{array}$$

$$\begin{array}{r} 8.93 \\ \hline \end{array}$$

Close to our estimate!

Learning Reminders

Use written addition to add decimals; use rounding to estimate totals.

Round each number to the nearest whole and add to estimate the total.

$$22.3 + 6.83$$

$$22 + 7 = 29$$

Are you happy with this layout?

$$\begin{array}{r} 22.3 \\ + 6.83 \\ \hline \end{array}$$

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.

$$\begin{array}{r} 22.3 \\ + 6.83 \\ \hline 29.13 \end{array}$$

Learning Reminders

Use written addition to add decimals; use rounding to estimate totals.

Red ribbon: 2.23m
Green ribbon: 3.71m
Blue ribbon: 4.84m

Estimate the total length of the three ribbons by rounding each number to the nearest whole..

$$2 + 4 + 5 = 11$$

$$\begin{array}{r} 2.23\text{ m} \\ 3.71\text{ m} \\ 4.84\text{ m} \\ + \\ \hline 10.78\text{ m} \end{array}$$

It's just like adding two numbers but we just have a few more digits to add!

Practice Sheet Mild

Ribbon decimals

Ribbon lengths:

Red 2.23m

Orange 2.3m

Green 3.71m

Blue 4.84m

Indigo 1.25m

Violet 3.02m

Estimate first!

1. Find the total length of the red and yellow ribbons.
2. Find the total length of the green and blue ribbons.
3. Find the total length of the indigo and violet ribbons.
4. Find the total length of the orange and indigo ribbons.
5. Find the total length of the indigo, red and yellow ribbons.
6. Find the total length of the green, blue and violet ribbons.

Challenge

Find the two ribbons whose total length is the closest to 5m.

Practice Sheet Hot Ribbon decimals

Ribbon lengths:

Red 2.23m

Orange 2.3m

Green 3.71m

Blue 4.84m

Indigo 1.25m

Violet 3.02m

Estimate first!

1. Find the total length of the longest two ribbons.
2. Find the total length of the shortest two ribbons.
3. Find the total length of the indigo, red and yellow ribbons.
4. Find the total length of the gree, blue and violet ribbons.
5. Find the total length of the red, orange and yellow ribbons.
6. Find the total length of the blue, indigo and violet ribbons.

Challenge

Find the three ribbons whose total length is the closest to 8m.

Practice Sheets Answers

Ribbon decimals (mild)

1. 3.95m
2. 8.55m
3. 4.27m
4. 3.55m
5. 5.2m
6. 11.57m

Challenge

Green + Indigo = $3.71\text{m} + 1.25\text{m} = 4.96\text{m}$ Can you go

closer?!

Ribbon decimals (hot)

1. 8.55m
2. 2.97m
3. 5.2m
4. 11.57m.

5. 6.25m

Challenge

Blue + Yellow + Indigo = $4.84\text{m} + 1.72\text{m} + 1.25\text{m} = 7.81\text{m}$ Can you go

closer?!

A Bit Stuck?

Decimal additions

What to do:

1. Complete the answers for these additions:

$$13.4 + 5.6$$

$$16 + 7.6$$

$$24.3 + 7.8$$

$$5.25 + 14.7$$

$$13.6 + 2.75$$

2. Now lay out and solve these additions for yourself:

$$15.8 + 6.5$$

$$2.7 + 1.25$$

$$16.4 + 5.8$$

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

Without solving them, can you say which of these additions will have an answer closer to 5?

$$3.4 + 2.8 \text{ or } 1.7 + 3.5$$

Investigation Four of the best

1. Copy this square.

| + | 0.7 | 0.2 | 1.1 | 1.8 |
|-----|-----|-----|-----|-----|
| 1.3 | | | | |
| 0.5 | | | | |
| 0.6 | | | | |
| 1 | | | | |

- Add the numbers in the top row and left column to complete the square.
- Choose a number on the square and circle it.
- Cross out all the numbers in the same row and column.
- Choose another number – one that is not crossed out – and circle it.
- Cross out all the numbers in the same row and column.
- Repeat this for the third time.
- Circle the remaining number.
- Add the four circled numbers.
- Now add the eight numbers round the outside of the square.
- Finally add the numbers in each diagonal.

| + | 0.7 | 0.2 | 1.1 | 1.8 |
|-----|-----|-----|-----|-----|
| 1.3 | 2 | 1.5 | | |
| 0.5 | 1.2 | 0.7 | | |
| 0.6 | 1.3 | | | |
| 1 | | | | |

| + | 0.7 | 0.2 | 1.1 | 1.8 |
|-----|----------------|----------------|----------------|----------------|
| 1.3 | 2 | <u>1.5</u> | 1.1 | 1.8 |
| 0.5 | 1.2 | 0.7 | <u>1.6</u> | 1.8 |
| 0.6 | <u>1.3</u> | 1.5 | 1.1 | 1.8 |
| 1 | 2 | 0.7 | 1.1 | <u>2.8</u> |

Try this again using the square below. What do you notice about the numbers here compared to those on the first square? Can you predict what may happen this time?

| + | 1.7 | 1.2 | 2.1 | 2.8 |
|-----|-----|-----|-----|-----|
| 2.3 | | | | |
| 1.5 | | | | |
| 1.6 | | | | |
| 2 | | | | |

Try this again, starting with the original square, but this time adding $\frac{1}{10}$ to each number.

Challenge

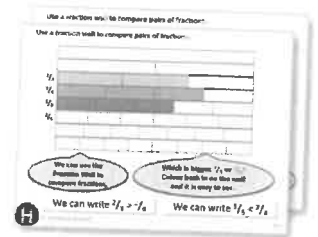
Use the original square to invent a new square where the same thing happens.

Year 5: Week 5, Day 3

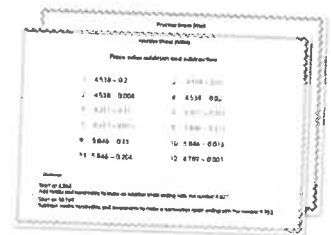
Subtract pairs of numbers with one decimal place

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.

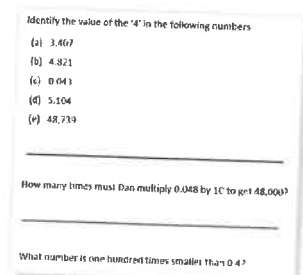


3. Finding it tricky? That's OK... have a go with a grown-up at **A Bit Stuck?**



4. Think you've cracked it? Whizzed through the Practice Sheets? Have a go at the **Investigation...**

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




Learning Reminders

Subtract pairs of 2-digit numbers with one decimal place.

We can use our strategies for subtracting whole numbers for subtracting decimals.

98 - 21 e.g. Subtract 20, then 1.

 So how could you solve $9.8 - 2.1$?


Subtract 2, then 0.1.

46 - 19 e.g. Count back to subtract 20, then adjust by adding 1.

 So how could you solve $4.6 - 1.9$?

Count back to subtract 2, then adjust by adding 0.1.

58 - 32 e.g. Count back to subtract 30, then another 2.

 So how could you solve $5.8 - 3.2$?

Count back to subtract 3, then another 0.2.

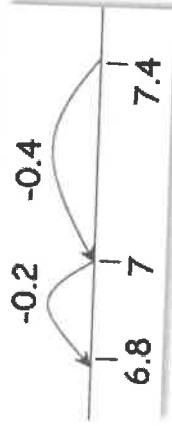
Learning Reminders

Subtract pairs of 2-digit numbers with one decimal place.

74 - 6

e.g. Count back to subtract 4, then another 2 to 'bridge' 70.

So how could you
solve $7.4 - 0.6$?

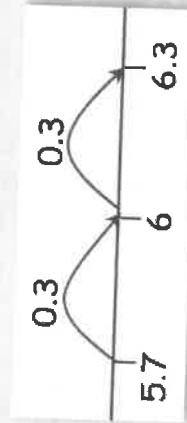


Count back to subtract 0.4, then another 0.2 to 'bridge' 7.

63 - 57

e.g. Count up using *Frog* from 57 to 60, then to 63.

So how could you
solve $6.3 - 5.7$?



Count up using *Frog* from 5.7 to 6, then to 6.3.

Learning Reminders

Subtract pairs of 2-digit numbers with one decimal place.

- So the strategies we learned to subtract pairs of 2-digit whole numbers can be used to subtract 2-digit numbers with one decimal place too.
- Look at the previous examples and think how you would solve each of these calculations:

$$8.2 - 6.7$$

$$6.5 - 2.2$$

$$9.2 - 0.8$$

- Now check our suggested strategies below...

Suggested strategies:
8.2 – 6.7 count up using ‘Frog’ (= 1.5) **6.5 – 2.2** count back 2, then another 0.2 (= 4.3) **9.2 – 0.8** count back 1, then add 0.2 to adjust (= 8.4)

Practice Sheet Mild

Decimal subtractions

Choose whether to count back or count up (Frog) to work out the answers to these subtractions.

- | | |
|----------------|-----------------|
| 1. $8.2 - 5.6$ | 7. $9.2 - 0.5$ |
| 2. $7.5 - 0.7$ | 8. $4.2 - 3.9$ |
| 3. $9.4 - 2.1$ | 9. $6.5 - 2.3$ |
| 4. $6.3 - 5.5$ | 10. $8.3 - 0.7$ |
| 5. $5.4 - 1.9$ | 11. $10 - 4.9$ |
| 6. $7.3 - 6.8$ | 12. $8.5 - 5.7$ |

Challenge

Now write two decimal subtractions where you would **count back** to find the answers.

Write two decimal subtractions where you would **count up** (Frog) to work out the answers.

Muddle them up and share with a partner. Can they say which subtractions you would work out using counting back and which you would work out using counting up?

Practice Sheet Hot

Decimal subtractions

Choose whether to count back or count up (Frog) to work out the answers to these subtractions.

1. $9.2 - 0.5$

7. $12.6 - 8.3$

2. $4.2 - 3.9$

8. $14.3 - 11.6$

3. $6.5 - 2.3$

9. $10.4 - 0.5$

4. $8.3 - 0.7$

10. $17.6 - 1.9$

5. $10 - 4.9$

11. $20 - 12.4$

6. $8.5 - 5.7$

12. $23.8 - 17.2$

Challenge

Now write two decimal subtractions where you would **count back** to find the answers.

Write two decimal subtractions where you would **count up** (Frog) to work out the answers.

Muddle them up and share with a partner. Can they say which subtractions you would work out using counting back and which you would work out using counting up?

Practice Sheet Answers

Decimal subtractions (mild)

1. $8.2 - 5.6 = 2.6$
2. $7.5 - 0.7 = 6.8$
3. $9.4 - 2.1 = 7.3$
4. $6.3 - 5.5 = 0.8$
5. $5.4 - 1.9 = 3.5$
6. $7.3 - 6.8 = 0.5$
7. $9.2 - 0.5 = 8.7$
8. $4.2 - 3.9 = 0.3$
9. $6.5 - 2.3 = 4.2$
10. $8.3 - 0.7 = 7.6$
11. $10 - 4.9 = 5.1$
12. $8.5 - 5.7 = 2.8$

Decimal subtractions (hot)

1. $9.2 - 0.5 = 8.7$
2. $4.2 - 3.9 = 0.3$
3. $6.5 - 2.3 = 4.2$
4. $8.3 - 0.7 = 7.6$
5. $10 - 4.9 = 5.1$
6. $8.5 - 5.7 = 2.8$
7. $12.6 - 8.3 = 4.3$
8. $14.3 - 11.6 = 2.7$
9. $10.4 - 0.5 = 9.9$
10. $17.6 - 1.9 = 15.7$
11. $20 - 12.4 = 7.6$
12. $23.8 - 17.2 = 6.6$

A Bit Stuck? Count back or Frog?

Things you will need:

- Two large pieces of card
- Scissors
- Subtraction cards



What to do:

- Write the headings 'Count back' and 'Frog' at the top of two large pieces of paper; one heading on each piece of paper.
- Cut out the eight Subtraction cards.
- Sort the subtractions according to which strategy you think would be the most efficient to use to find the answer. If unsure, try both strategies then discuss which you found most efficient.
- Solve all of the subtractions. Remember that there is no 'right' or 'wrong' strategy to solve a given calculation, just that we might find it is more efficiently solved using one method than another.

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

Use the blank cards to write at least one more question for each heading.

Learning outcomes:

- I can reason about my choice of strategy to solve subtractions.

A Bit Stuck?
Count back or Frog?

$$5.7 - 1.2$$

$$5.7 - 0.9$$

$$5.7 - 2.1$$

$$4.5 - 2.2$$

$$4.5 - 1.9$$

$$4.5 - 3.8$$

$$4.5 - 3.1$$

$$5.2 - 4.9$$

Investigation

Pence and pounds reversed

1. Write a two-digit amount of money with two-decimal places.
 2. Reverse the pounds and the pence to create a new amount.
 3. Find the difference between the two amounts.
 4. Check the answer to see if it is a multiple of 9.
- HINT: To see if a number is a multiple of 9, add its digits to see if they total a number in the 9x table.
5. Write a new amount and repeat this process.
 6. Do this at least ten times. Do you get some identical answers?

| | |
|--|----------|
| | |
| | £67.39 |
| | £39.67 |
| | |
| | £67.39 |
| | - £39.67 |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

What patterns do you notice?

Can you explain them?

What happens if you try a palindromic amount?

Check your understanding

Questions

Amit had a plank to make a shelf. It needed to be 4.6 metres long. However, it measures 5.25m at the moment. How much must he cut off?

Which of Anjeli's calculations is correct?

- (a) $4.35 + 0.03 = 4.65$
 - (b) $2.3 - 1.95 = 0.35$
 - (c) $6.3 + [\quad] = 9.8$ missing number = 3.3
 - (d) $7.72 + 12.3 = 8.95$
-

Write the missing number in each of the bar models:

| | |
|-----|---|
| 6.4 | |
| 2.7 | ? |

| | |
|-----|-----|
| 9.2 | |
| ? | 3.5 |

Check your understanding

Answers

Amit had a plank to make a shelf. It needed to be 4.6 metres.
However, it is 5.25m at the moment. How much must he cut off?

$5.25 - 4.6 = 0.65$ So he must cut off 0.65 of a metre.

Which of Anjeli's calculations is correct?

(a) $4.35 + 0.03 = 4.65$. wrong as $4.35 + 0.03 = 4.38$

(b) $2.3 - 1.95 = 0.35$. ✓

(c) $6.3 + [\quad] = 9.8$ missing number = 3.3 wrong. It's 3.5

(d) $7.72 + 12.3 = 8.95$ wrong $7.72 + 12.3 = 20.02$

Write the missing number in each of the bar models:

| | |
|-----|-----|
| 6.4 | |
| 2.7 | 3.7 |

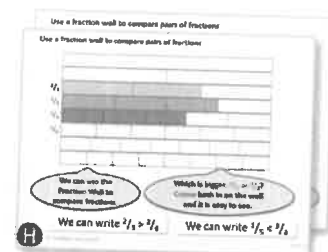
| | |
|-----|-----|
| 9.2 | |
| 5.7 | 3.5 |

Year 5: Week 5, Day 4

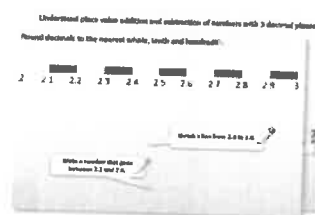
Identify, visualise, describe properties of 3-D shapes

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

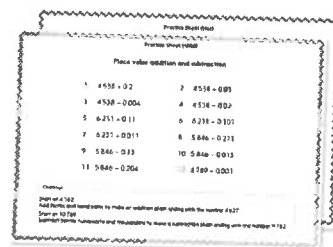
1. If possible, watch the PowerPoint presentation with a teacher or another grown-up.



OR start by carefully reading through the Learning Reminders.



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?



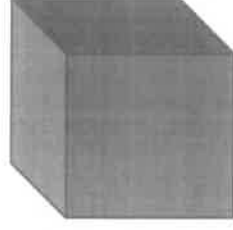
4. Think you've cracked it? Whizzed through the Practice Sheets? Have a go at the Investigation...

Learning Reminders

Identify, visualise and describe properties of 3-D shapes; Sort 3-D shapes according to their properties.



**Look at the cube and cuboid.
What is the same about these
two shapes and what is different?**



e.g.

What is different?

The cuboid has some non-square rectangular faces, it is irregular.

The cube has all squares faces, it is regular.

What is the same?

Both have the same number of faces, vertices and edges.

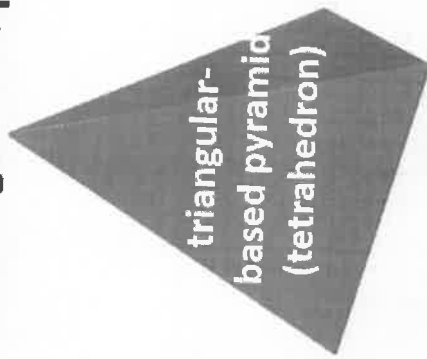
Both have all flat faces.

Both have 3 pairs of parallel faces.

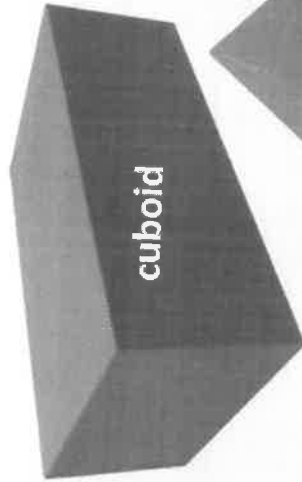
Learning Reminders

Identify, visualise and describe properties of 3-D shapes; Sort 3-D shapes according to their properties.

How many of these 3-D shapes could you name?



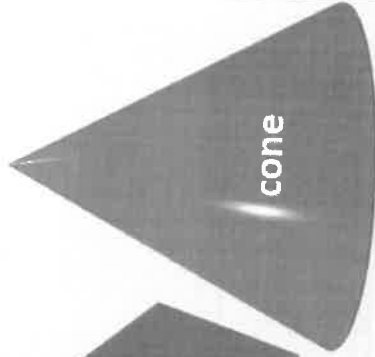
triangular-based pyramid (tetrahedron)



cuboid



square-based pyramid



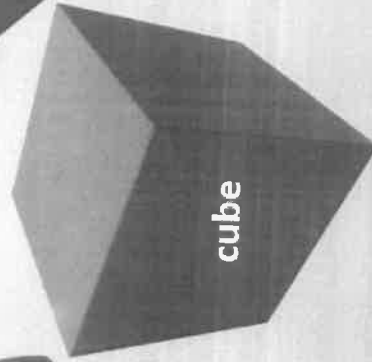
cone



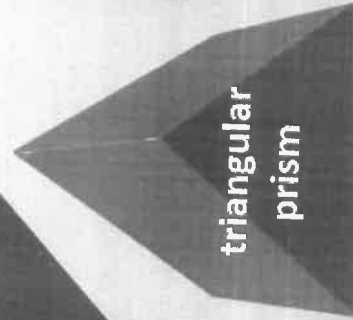
octahedron



hemisphere



cube



triangular prism



sphere

Learning Reminders

Identify, visualise and describe properties of 3-D shapes; Sort 3-D shapes according to their properties.

Carroll diagrams use two headings that are the opposite of one another (mutually exclusive), e.g. 'has at least one triangular face' and 'has no triangular faces'; 'is a prism' and 'is not a prism'; 'is regular' and 'is irregular', 'has at least one pair of parallel faces' and 'has no pairs of parallel faces'.

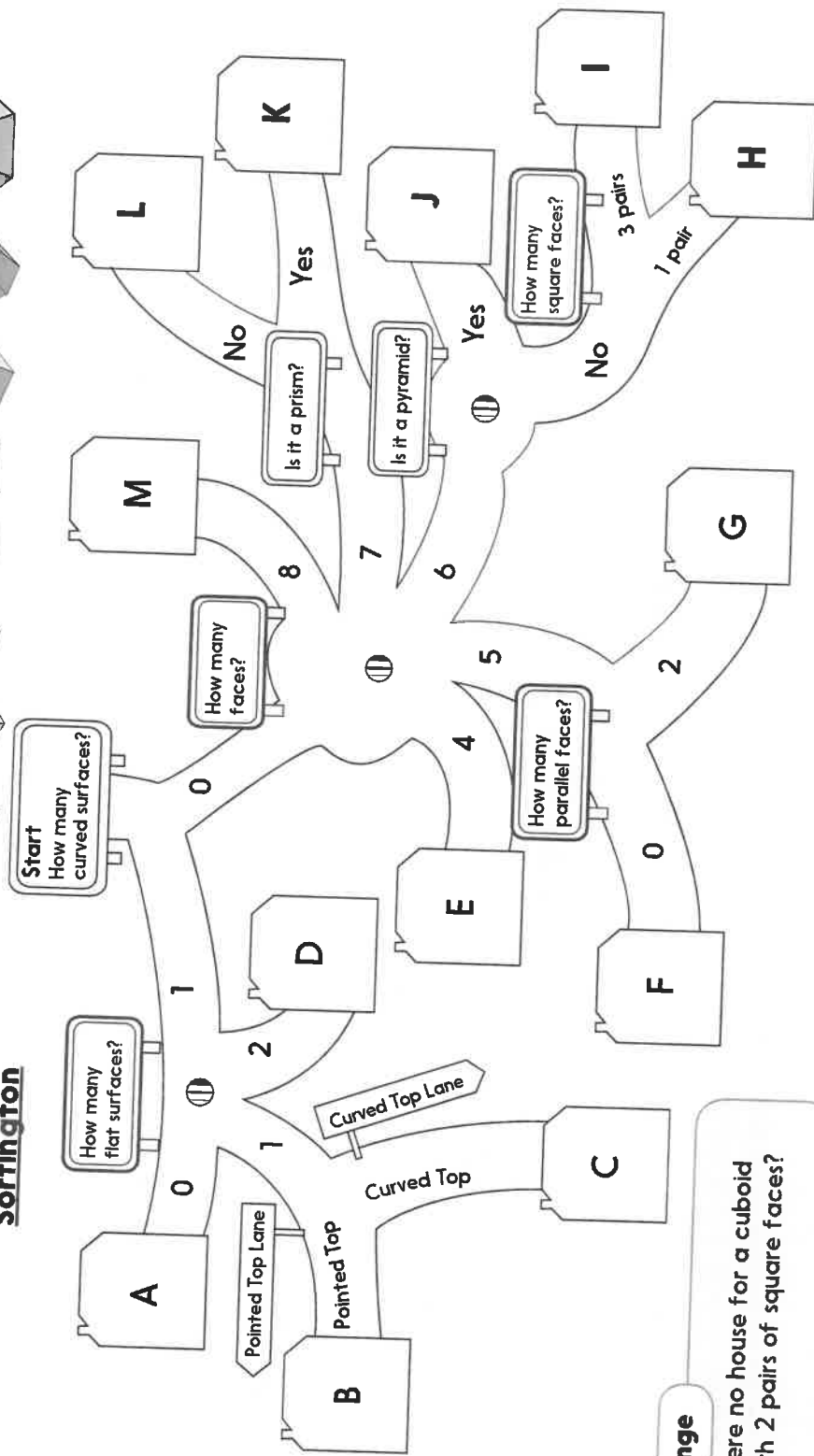
| Has at least one triangular face | Has no triangular faces |
|----------------------------------|-------------------------|
| | |

Remember that the faces are made from 2-D shapes (two dimensions) and solids are called 3-D shapes (three dimensions).

Could you sort the 9 shapes on the previous page into this diagram?

Sorting shapes

Sortington

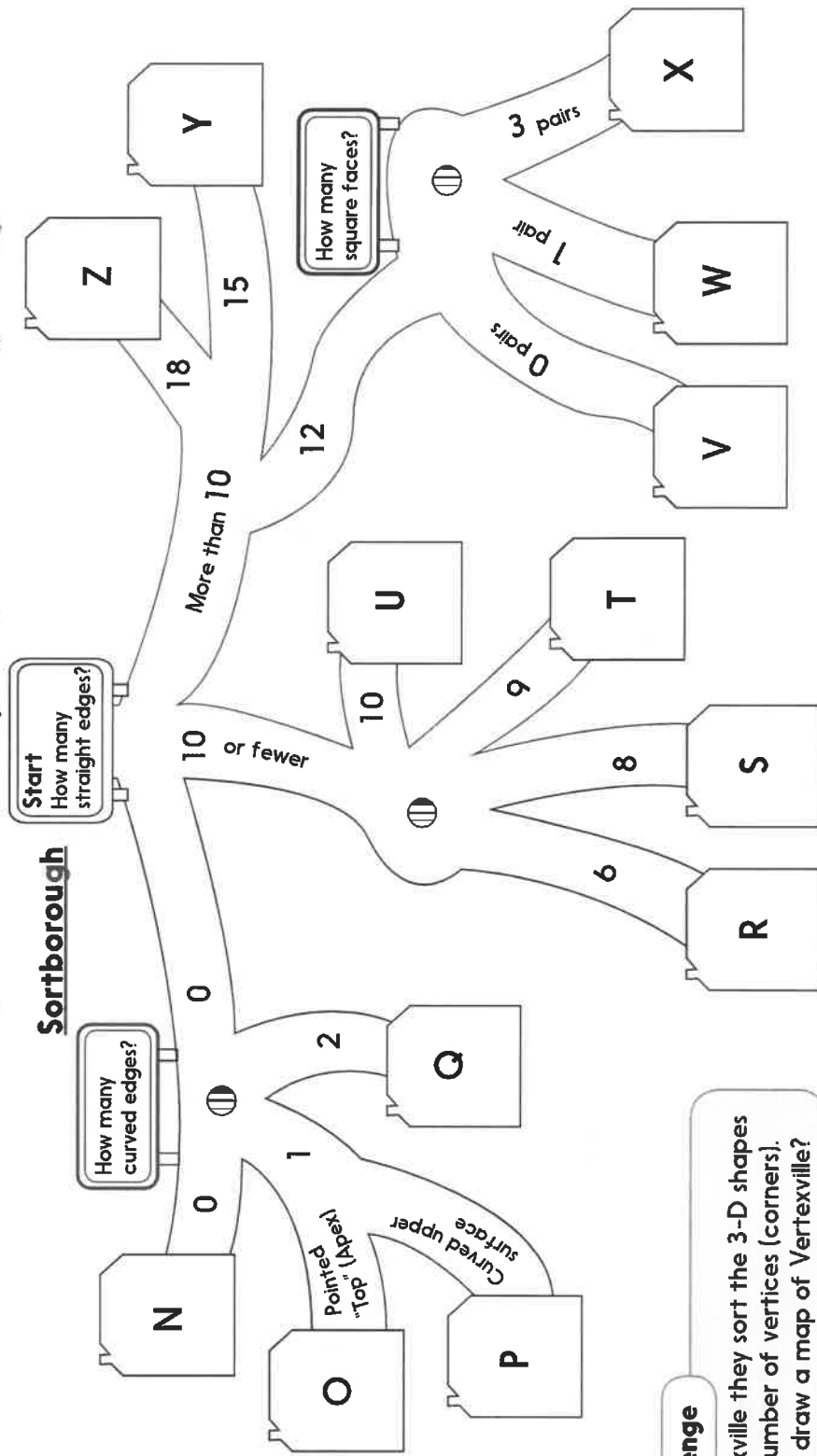
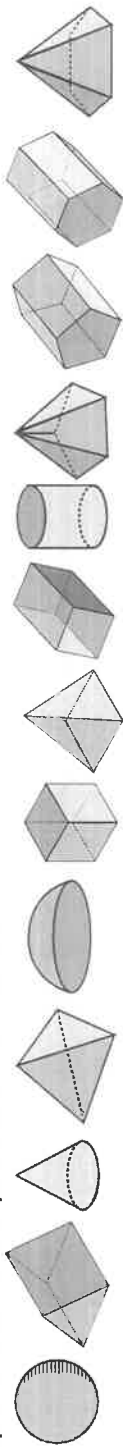


Challenge

Why is there no house for a cuboid shape with 2 pairs of square faces?

Practice Sheet Hot Sorting shapes

The 3-D shapes go on holiday to Sortborough! Work out which houses they all stay in.
Match each shape to a letter. Do you know their names?



Practice Sheets Answers

Sorting shapes (mild)

- A Sphere
- B Cone
- C Hemisphere
- D Cylinder
- E Tetrahedron / Triangle-based pyramid
- F Square-based pyramid
- G Triangular prism
- H Cuboid
- I Cube
- J Pentagon-based pyramid
- K Pentagonal prism
- L Hexagon-based pyramid
- M Hexagonal prism

Challenge

There is no house for a cuboid shape with 2 pairs of square faces because if a cuboid shape had 2 pairs of square faces the third pair of faces would also have to be square. It would then be sorted into house I.

Sorting shapes (hot)

- N Sphere
- O Cone
- P Hemisphere
- Q Cylinder
- R Triangle-based pyramid
- S Square-based pyramid
- T Triangular prism
- U Pentagon-based pyramid
- V Hexagon-based pyramid
- W Cuboid
- X Cube
- Y Pentagonal prism
- Z Hexagonal prism

Challenge

The map should reflect the shapes having the following number of vertices:

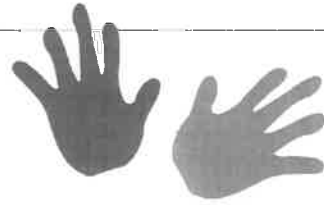
| Shape | Number of vertices | Shape | Number of vertices |
|------------------------|--------------------|------------------------|--------------------|
| Sphere | 0 | Cuboid | 8 |
| Triangular prism | 6 | Cylinder | 0 |
| Cone | 1 | Pentagon-based pyramid | 6 |
| Triangle-based pyramid | 4 | Pentagonal prism | 10 |
| Hemisphere | 0 | Hexagonal prism | 12 |
| Cube | 8 | Hexagon-based pyramid | 7 |
| Square-based pyramid | 5 | | |

A Bit Stuck? What's special?

Work in pairs

Things you will need:

- A sheet of triangles
- Scissors
- Ruler
- Right angle measurer (e.g. the corner of a piece of paper or book)
- A Carroll diagram sheet
- Glue stick
- A pencil



What to do:

- Cut out the triangles.
- Take one and discuss where it belongs in the diagram.
- Once you are agreed, stick it in the correct place on the sheet.
- Repeat with each triangle, one at a time.

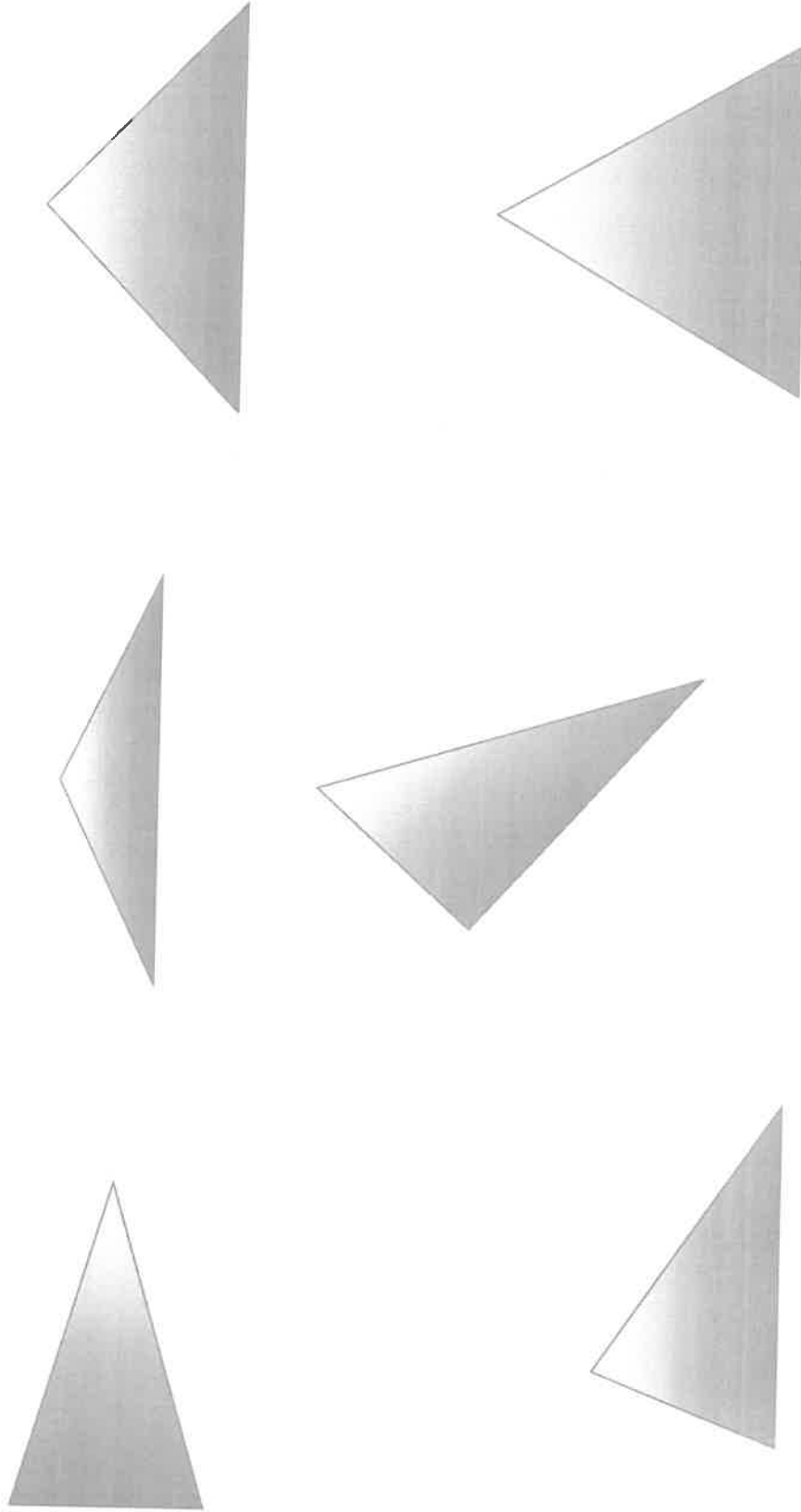
S-t-r-e-t-c-h:

Choose a different way to sort the triangles.

Learning outcomes:

- I can identify and describe properties of triangles.
- I can sort triangles according to their properties.
- I am beginning to find my own way to sort triangles.

A Bit Stuck?
What's special?

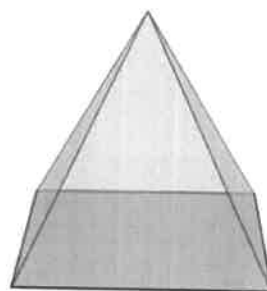
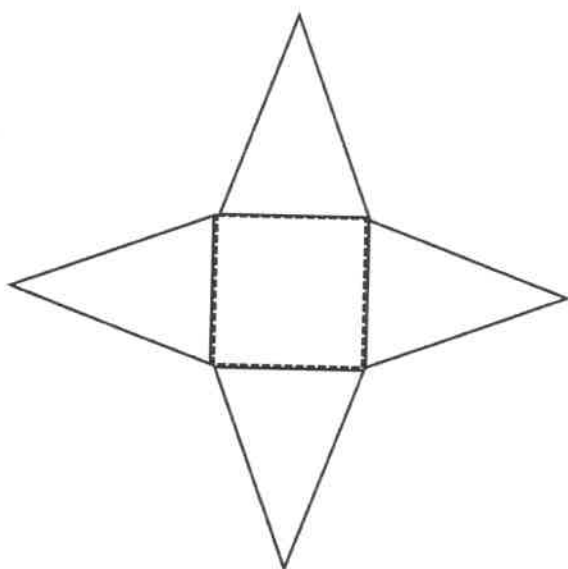


**A Bit Stuck?
What's special?**

| | Symmetrical | Not symmetrical |
|-----------------------------|-------------|-----------------|
| Has a right angle | | |
| Does not have a right angle | | |

Investigation Pyramid net

This is the net for a square-based pyramid:



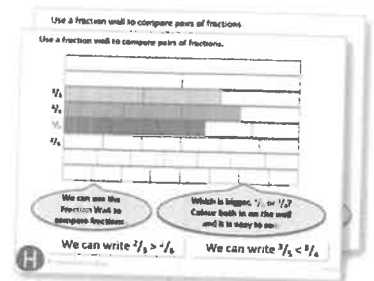
Can you visualise and draw any other different nets that fold to give the same pyramid?

Year 5: Week 5, Day 5

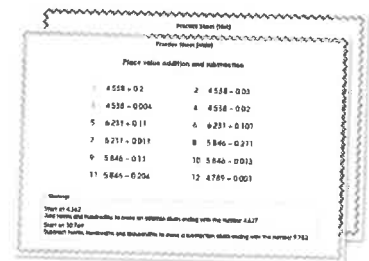
Describe properties of prisms and pyramids.

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.



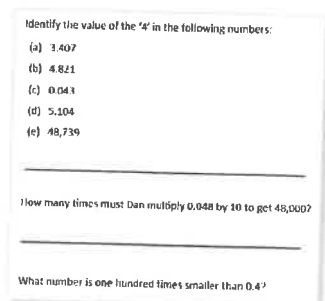
2. Tackle the questions on the **Practice Sheet**. There might be a choice of either Mild (easier) or Hot (harder)! Check the answers.



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



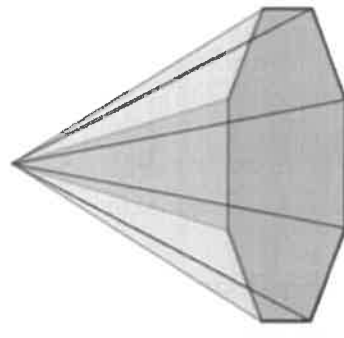
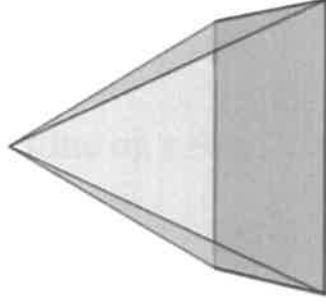
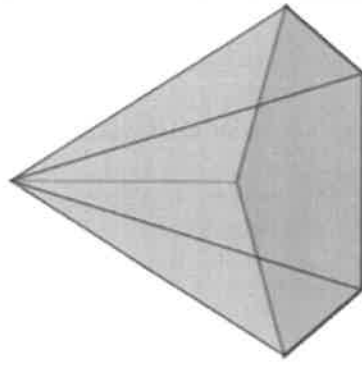
4. Have I mastered the topic? A few questions to **Check your understanding**. Fold the page to hide the answers!



Learning Reminders

Describe properties of prisms and pyramids.

There are lots of types of *pyramid*, with different 2-D shapes on their bases.



What do pyramids have in common?

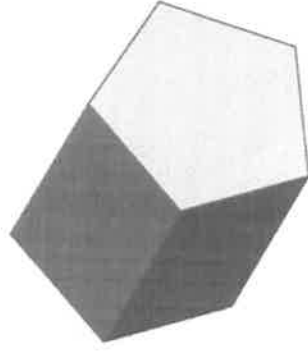
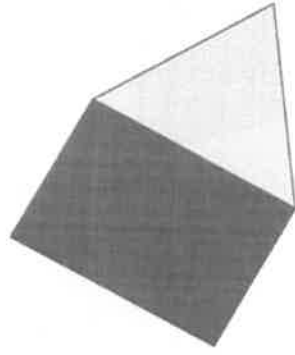
They have a polygon as one face, and triangles as the other faces.

So a cone (circular base) is not a pyramid!

Learning Reminders

Describe properties of prisms and pyramids.

There are lots of types of *prisms*, with different 2-D shapes at each 'end'.



What do prisms have
in common?

The two faces on either end are the
same type of polygon (they have
straight sides).
These faces are joined by rectangles
(which could include squares).

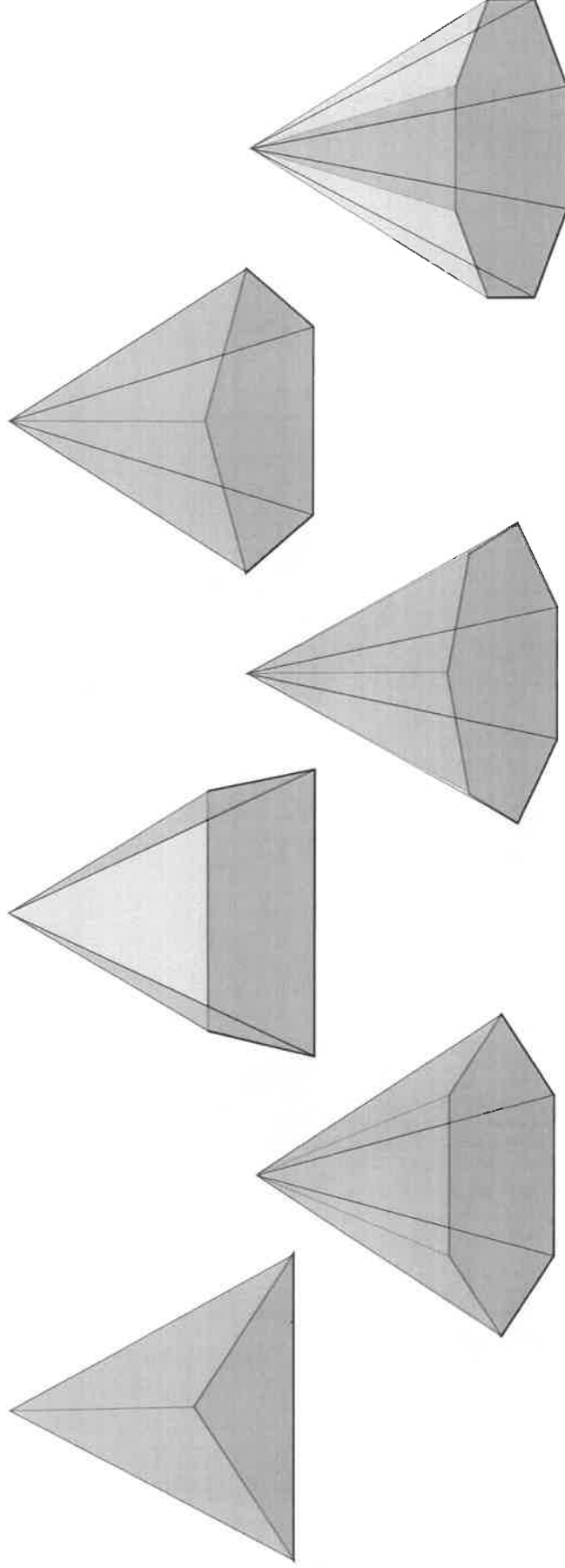
So a cylinder is not a
prism!

What type of prism
is a cuboid?
Is a cube a prism?

Practice Sheet Mild

Pyramids

- For each pyramid, record, in a table, the name of the base shape, the number of faces and the number of vertices.
- Do you notice any patterns in the lists of numbers? Describe them...
- Can you explain the patterns?
[HINT – compare the number of faces to the number of sides of the 2-D 'base' shape.]

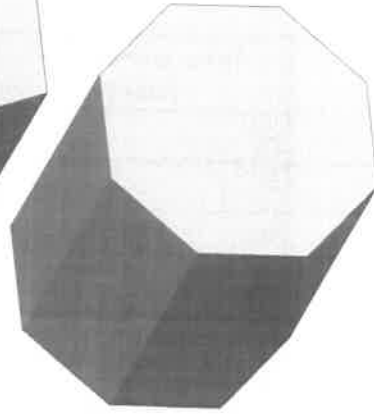
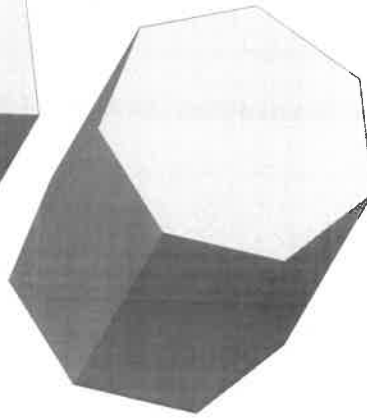
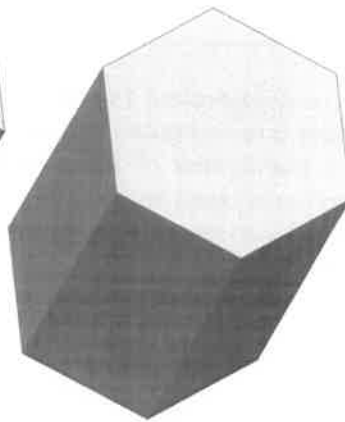
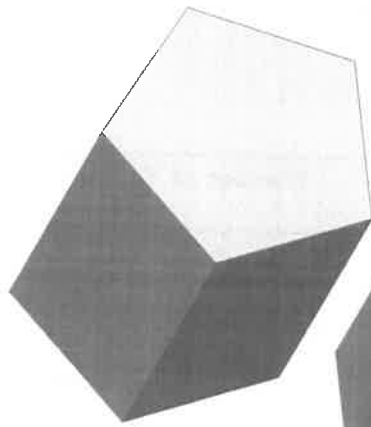
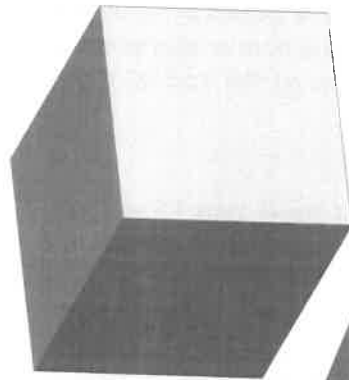
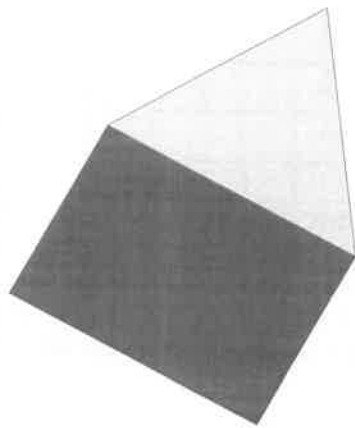


Challenge

Can you predict the number of faces and vertices for a pyramid with a 10-sided base?

Practice Sheet Hot Prisms

- Draw and complete a table for each 3-D shape, showing the shape of the two 'end' faces, the total number of faces, and the number of vertices.
- Do you notice any patterns in the lists of numbers? Describe them...
- Can you explain the patterns?



Challenge

Can you predict the number of faces and vertices for a prism with 9-sided 'end' faces? 10-sided 'end' faces? 100-sided 'end' faces?

Practice Sheets Answers

Pyramids (mild)

| Base shape | Total number of Faces | Number of Vertices |
|------------|-----------------------|--------------------|
| Triangle | 4 | 4 |
| Square | 5 | 5 |
| Pentagon | 6 | 6 |
| Hexagon | 7 | 7 |
| Heptagon | 8 | 8 |
| Octagon | 9 | 9 |

The number of faces is equivalent to the number of sides of the 2-D non-triangular face, plus 1. This is because a triangular face is attached to each side of the non-triangular face. So, for example, the square-based pyramid has four triangular faces plus the 1 square base. The number of vertices is equivalent to the number of vertices on the 2-D base shape, plus the vertex at the 'top' of the pyramid (the apex).

Challenge

A pyramid with a 10-sided base will have 11 faces and 11 vertices.

Prisms (hot)

| 'End' shape | Total number of Faces | Number of Vertices |
|-------------|-----------------------|--------------------|
| Triangle | 5 | 6 |
| Square | 6 | 8 |
| Pentagon | 7 | 10 |
| Hexagon | 8 | 12 |
| Heptagon | 9 | 14 |
| Octagon | 10 | 16 |

The number of faces is equivalent to the number of sides of the 2-D shape at each end, plus 2. This is because a rectangular face joins the corresponding sides of the 2-D shapes at each end, so it is the number of those rectangles plus the 2 'end' faces. The number of vertices is twice the number of sides of the 2-D shape at each end. The vertices of the 3-D shape can be seen as being double the number of vertices of the 2-D shape at each end.

Prisms (hot) continued

Challenge

A shape with 9-sided 'end' faces has 11 faces and 18 vertices; a shape with 10-sided 'end' faces has 12 faces and 20 vertices; a shape with 100-sided 'end' faces has 102 faces and 200 vertices.

We could make generalisations, using some letters to represent numbers, as follows:

| 'End' shape | Number of sides on 'end' shape | Total number of Faces | Number of Vertices |
|-----------------|--------------------------------|-----------------------|----------------------------------|
| e.g. triangle | 3 | 5 | 6 |
| e.g. square | 4 | 6 | 8 |
| n-sided polygon | n | $n + 2$ | double n or $2 \times n$ or $2n$ |

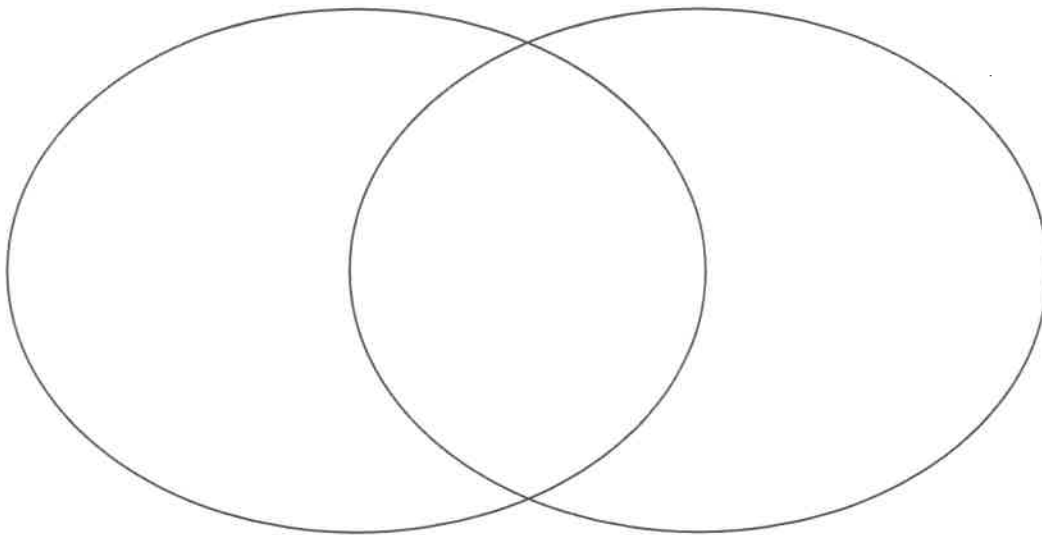
A Bit Stuck? Sorting 3-D shapes

Write the shape names in the right place in each Venn diagram.

1.

flat faces

can roll



sphere



cube



cylinder

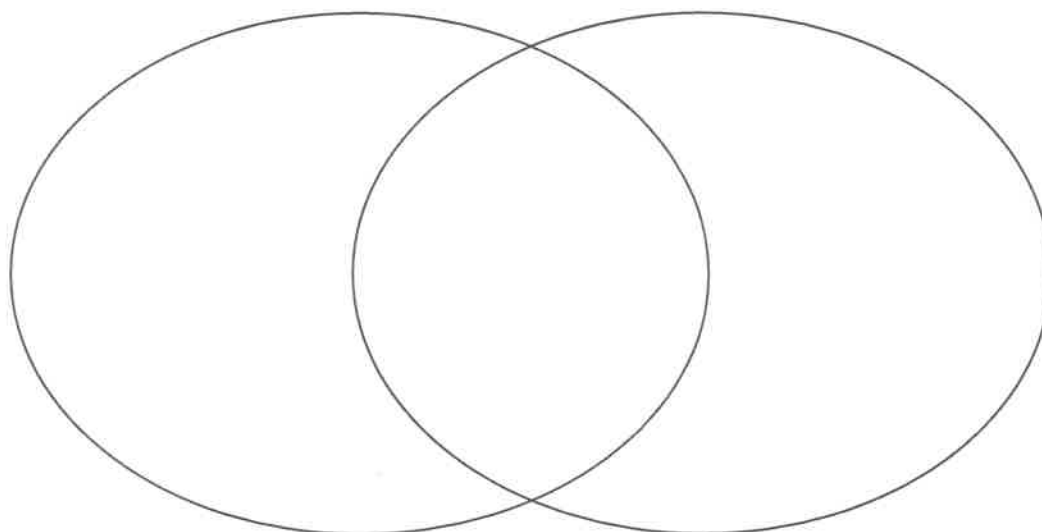


cone

2.

square faces

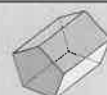
rectangle faces



cube



cuboid



pentagonal prism



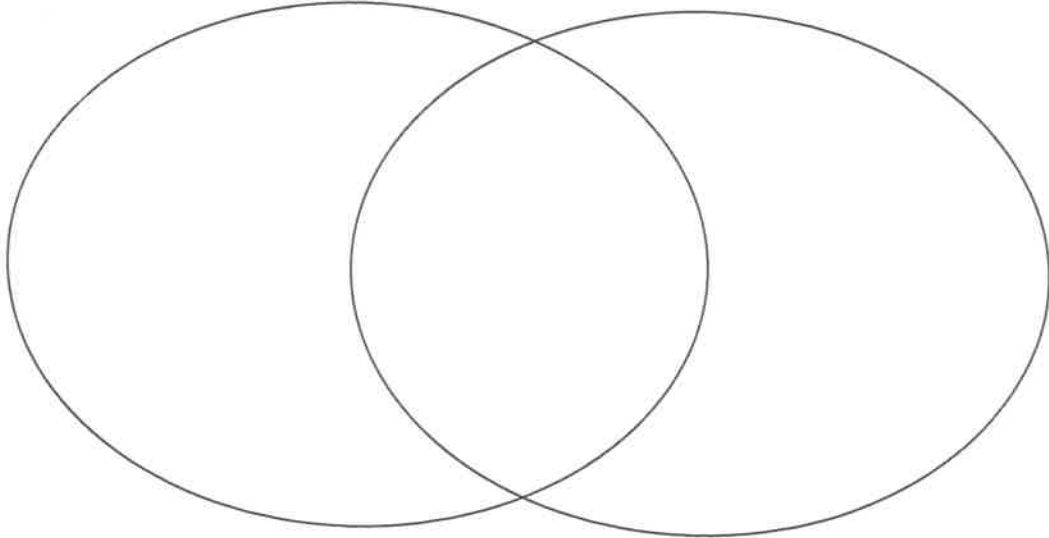
square-based pyramid

A Bit Stuck? Sorting 3-D shapes

3.

rectangle faces

6 faces



hexagonal prism



cuboid



triangular prism



cube

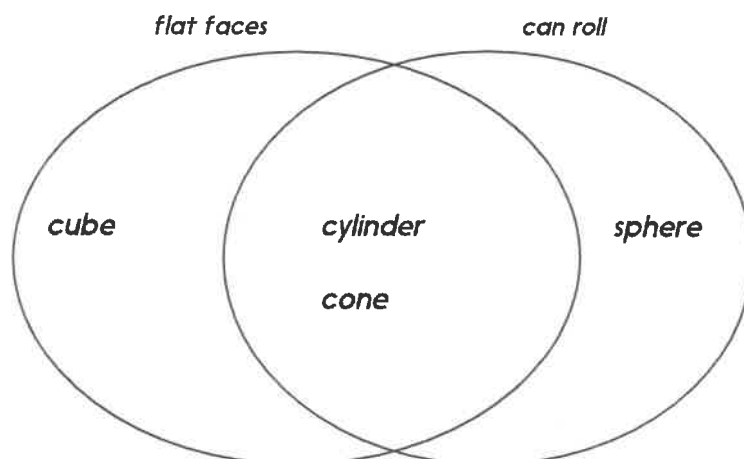
Challenge

Create your own Venn diagram to sort these shapes: cone, cylinder, sphere, hemisphere.

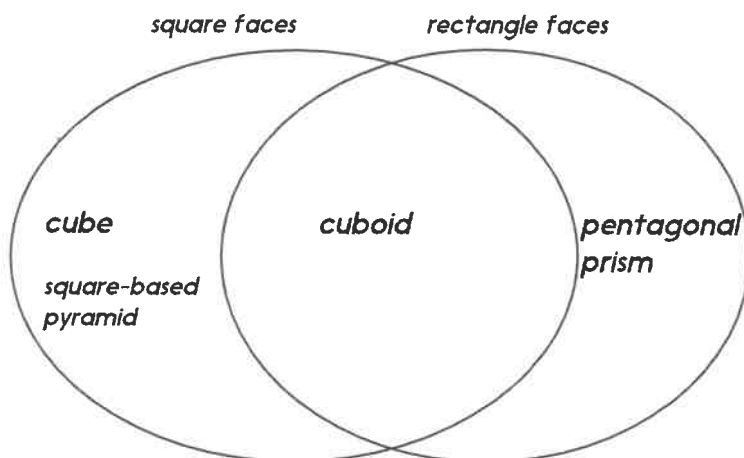
A Bit Stuck? Answers

Sorting 3-D shapes

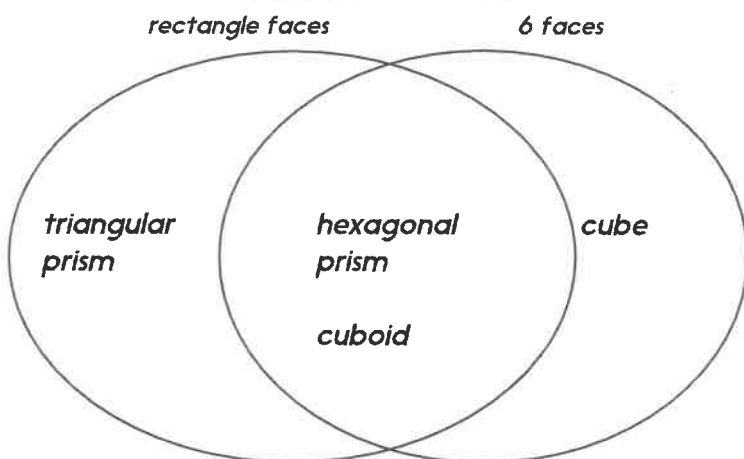
1.



2.



3.



Check your understanding Questions

Always true, sometimes true or false?

- A cube is a type of cuboid
 - Pyramids have 5 faces
 - Prisms have a cross-section that is always the same, so a cylinder is a prism
 - Cubes and cuboids have the same number of vertices
-

How many edges has a...

- (a) Cuboid?
- (b) Square-based pyramid?
- (c) Cylinder?
- (d) Triangular prism?

Fold here to hide answers

Check your understanding Answers

Always true, sometimes true or false?

- A cube is a type of cuboid

True: it is a special case of a cuboid where all faces are squares.

- Pyramids have 5 faces

Sometimes, if it is square-based. Other pyramids can have fewer (a tetrahedron) or more (e.g. a pentagon-based pyramid) faces.

- Prisms have a cross-section that is always the same, so a cylinder is a prism

False - since a prism must have all flat faces.

- Cubes and cuboids have the same number of vertices

True, see the first statement above.

How many edges has a...

- (a) Cuboid? 12
- (b) Square-based pyramid? 8
- (c) Cylinder? 2
- (d) Triangular prism? 9

If struggling to visualise these, children could check by referring to, or constructing, the 3-D shapes.

What to do today

IMPORTANT Parent or Carer – Read this page with your child and check that you are happy with what they have to do and any weblinks or use of internet.

1. Read and watch a poem

- Read *What do you want to be?* Can you find its rhythm as you read? Try reading in your head and then out loud.
- Now watch the poet perform his poem:
<https://www.youtube.com/watch?v=GGXCSuIVamo>
- Did the poem sound like you expected to? What did you notice about Wilf Merttens' performance?

2. Think about the poem

- Read the *Poetry Questions* and think about your answers.
- Write your answers in clear sentences.

3. Now for some writing

- Write a *Letter to Wilf Merttens*. Tell him about the poem – what you liked about it (and what you disliked), ask him any questions that you have and tell him about what you want to be.

Try the Fun-Time Extra

- Read this article about unusual jobs.
<https://www.independent.co.uk/news/business/news/the-unusual-jobs-you-didnt-know-existed-a6743331.html>
- Which of these jobs would best suit you? Which would best suit someone in your family? Why?

What do you want to be?

What do you want to *be*?

What do *you* want to be?

What do you want to be?

Hey listen kid, you don't have to tell me—

I'm just here to read some poetry.

You can leave now if you want.

You're completely free, you see.

But, before you go, let me tell you

I'm not here to tell you about birds and bees
and trees

and bananas and farmers and poetry things.

This poem is a question,

and I'm asking what you dream and feel and things.



You see, maybe you want to be famous.

Maybe you want to be an astronaut and explore Uranus.

Maybe you want to be the craziest stunt lady Hollywood's ever seen.

Maybe you want to buy some flashy mansion
and spend all your time keeping it clean.

Maybe you're a dancer and Bollywood's more your scene.

Maybe you're a natural,

Maybe you're going to have work hard at it.

Maybe you're a punk singer and you want to smash...it...up.

Maybe you like nice stuff.

Maybe to get it you're going to act all tough.

Maybe you're going to be sweet.

Maybe you're going to meet and greet.

Maybe you just want to help people.

Or maybe you want to be a success, like prove that you're the best.

Maybe you want to be a celebrity, or an important politician,
shake the hands of the mayor.
Then again, maybe you just don't care.
Maybe you're in it for the money.
Now *that's* a sweet honey.
People don't find anything funny when they're racing to be rich.
Maybe you want to be surrounded by iPhones and quick fixes,
Maybe your heart tremors and twitches round diamond rings and bling.
Maybe you want to see all the precious things that eBay can bring,
Or wear so many jewels you look like a King.
Maybe you just want to sing in the shower
and that's what makes you feel free.
Maybe all you need is the moon and a tree to feel happy.
Maybe you're a natural.
Maybe you're a doctor, a tinker, a tailor, an architect of bad behaviour.
You could be a soldier or a spy.
You could be the kind of guy who wonders why
the world is just as it is
Or how the plane can stay in the sky.
Maybe you're an expert at stopping a baby crying.
Maybe you'll be found frying a rich man's breakfast
in a gourmet restaurant.
Maybe you're a killer chef or an amazing painter.
You don't have to know now;
you can find out later what it is you really want to be.
Because maybe you just want to see the world.
Maybe you want to travel around and live out of a backpack.
Maybe you want to be a goth, wearing nothing but black
'cos maybe being blue just ain't you.
Maybe you just have to find out what's true and what's a lie in the
newspaper.
Maybe you'd make a kiss-ass journalist.
Then again maybe all that writing would turn you mentalist.

Maybe you want to make your own zombie movies,
spray ketchup all over your mate's face for fake blood,
Maybe you want to be a dirt biker all covered in mud,
or a rescue woman saving people in a flood.
Maybe you want to be a boxer, landing punches with a thud.
Maybe you want to do very little,
live life quietly up a mountain someplace,
stay up all night staring into space.
Maybe you want to raise a family.
Maybe you want to devote your life to a god.
Maybe you want to live in a caravan on the sea, serving cod and chips.
Maybe you'll be eternally swell if you can just kiss a sweet pair of lips

Whatever your dream, I'm just here to remind you that you can be whatever
you want to be and you can have *anything*, you see.
Now if you're like me you're going to want it all for free.
But like me and like lots of other people like me,
in the end you're going to see
that if you want to be what you want to be
then you are going to have believe
and work real hard.
Unless you just want to be a nobody, which is real easy.
But don't worry, 'cos this crazy game is not a race,
and it's not up to me or school or TV to tell you your place.
We don't know your dream, or even what you really mean
when you say what you want to be.
It's up to you.
You've got to decide for yourself you see.
Now, tell me - what do you want to be?

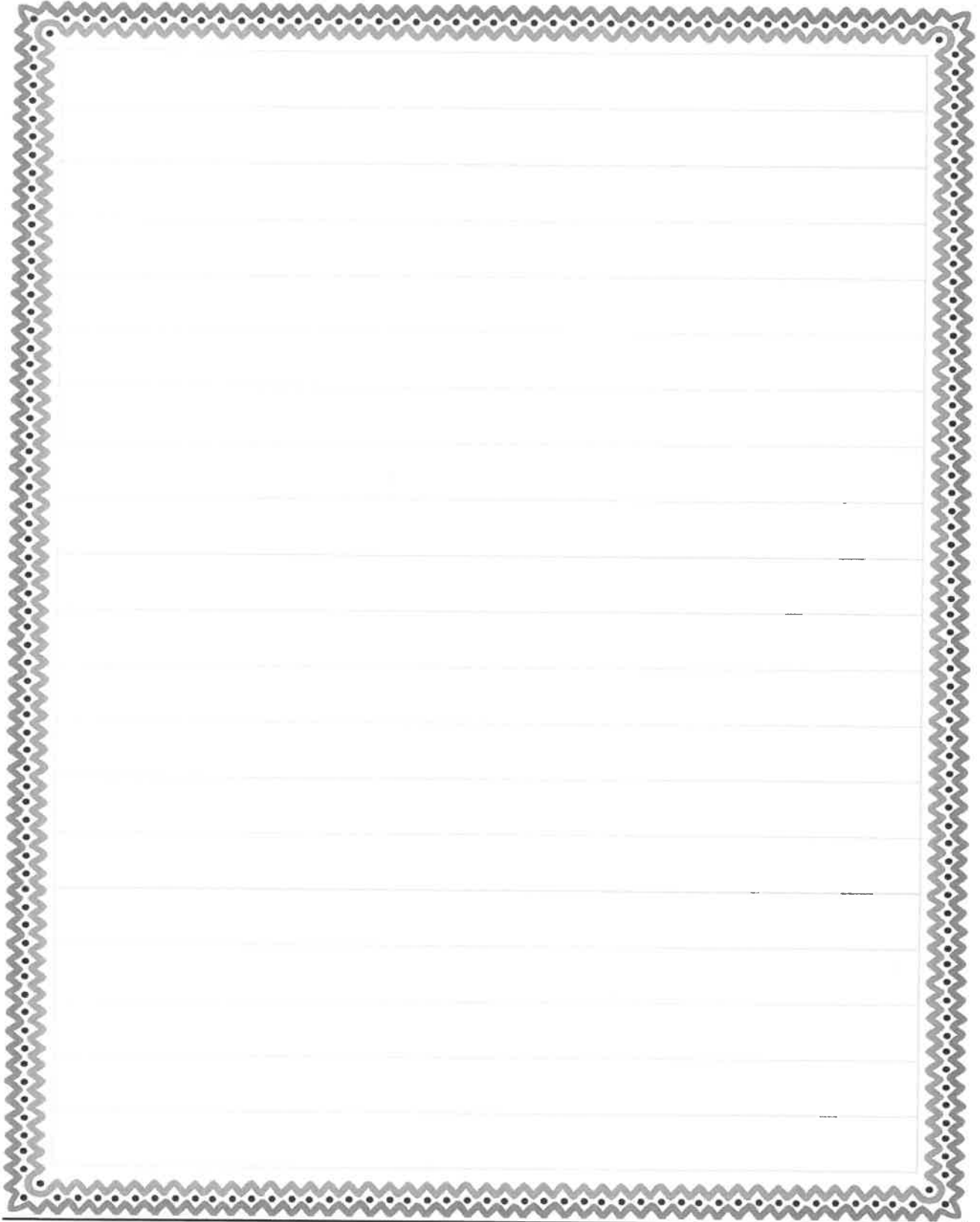
Wilf Merttens

Poetry Questions

| | |
|--|---|
| <p>What do you like about this poem? Is there anything that you dislike why?</p> | <p>What are some of the messages of this poem?</p> |
| <p>What patterns can you find in this poem? Are there rhymes or alliteration? Is there assonance? What can you say about the rhythm of the poem?</p> | <p>What puzzles or questions does this poem give you?</p> |

Letter to Wilf Merttens

Write a letter to Wilf Merttens. Tell him what you thought of his poem, ask any questions and tell him what you would like to be.

A large rectangular area with a decorative border and horizontal lines for writing a letter. The border is a repeating pattern of small dots and zig-zags. The interior is filled with horizontal lines, providing a space for writing.



What to do today

IMPORTANT Parent or Carer – Read this page with your child and check that you are happy with what they have to do and any weblinks or use of internet.

1. Read a poem

- Read the poem: *Mother to Son*. What message is there in the poem?
- Listen to the poem being performed. Does it sound like you expected?

<https://www.youtube.com/watch?v=NX9tHul7zVo>

2. Answer questions about poems

- Read *Keep on Keepin On* and answer the *Questions*.
- Challenge yourself to read *Don't Quit* and to answer its *Questions*.

Well done! Share your answers with a grown-up. Look at the poems together and explain your answers to them.

3. Choose some quotations

- Go through the three poems and choose your favourite lines. Underline these.
- Choose one of your favourite lines and make it into a poster to inspire you or somebody in your family.

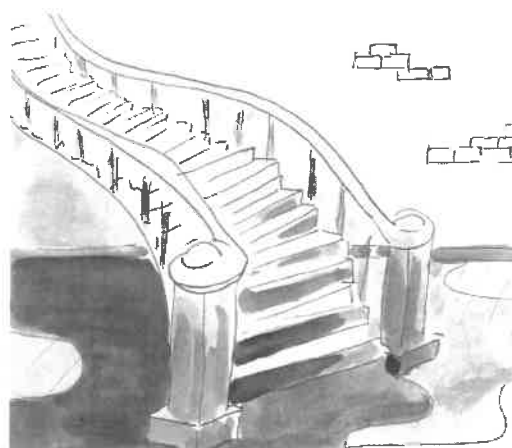
Try the Fun-Time Extras

- Find out more about Langston Hughes. What can you learn about him or his poems?
- Send an inspirational line of poetry or a copy of a whole poem to somebody that you haven't seen recently. Write to them to explain why you have chosen it for them.

Mother to Son

Well, son, I'll tell you:
Life for me ain't been no crystal stair.
It's had tacks in it,
And splinters,
And boards torn up,
And places with no carpet on the floor—
Bare.

But all the time
I've been a-climbin' on,
And reachin' landin's,
And turnin' corners,
And sometimes goin' in the dark
Where there ain't been no light.
So boy, don't you turn back.
Don't you set down on the steps
'Cause you finds it's kinder hard.
Don't you fall now—
For I've still goin', honey,
I've still climbin',
And life for me ain't been no crystal stair.



Langston Hughes,
The Collected Poems of Langston Hughes,
Vintage, 1995

Keep On Keeping On

We've all had times when the going gets tough
The smooth ride suddenly feels bumpy and rough
The good times are gone, it's all rather gruff
You let out a sigh and exclaim– "I've had enough"

We are all entitled at times, to gripe and to moan
What's happened to my life, you say with a groan?
My backpack seems weighed down by a very big stone
How do I move away from this miserable zone?

When a curved ball hits you, through a trick or a con
Remember the good days, when the sun always shone
Go forward with the belief that you already have won
The best advice I can give is to keep on—keeping on

Michael Sage



Questions about Keep On Keeping On

1. What does *gruff* (line 3) mean?
2. There is no sentence-end punctuation at the finish of the line in verse 1 which closes, ...*I've had enough*. Which sentence-end punctuation do you think might work best here? Why do you think that?
3. Quote the line in the poem that suggests that, from time to time, everybody has the right to moan about things that are frustrating them.
4. In verse 2 the poet talks of a backpack *weighed down by a very big stone*. What do you think the poet means by this?
5. Can you give an example of the kind of thing that the poet might be suggesting is *a very big stone*?
6. Would you say the overall mood of the poem is optimistic or pessimistic? Why do you think that?
7. In your own words, say what you think Michael Sage's main message in the poem is.

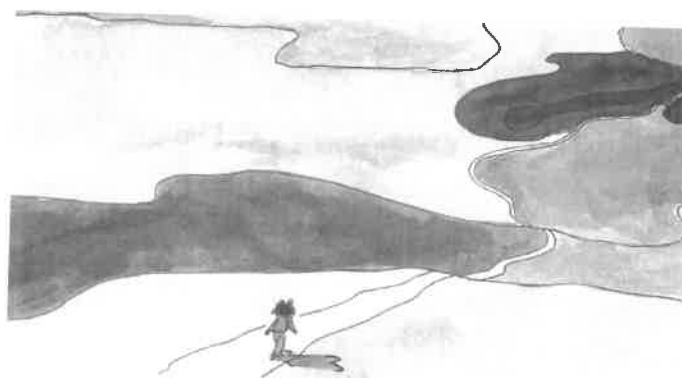
Don't Quit

When things go wrong, as they sometimes will,
When the road you're trudging seems all uphill,
When the funds are low and debts are high,
And you want to smile but have to sigh,
When care is pressing you down a bit,
Rest, if you must, but don't you quit.

Life is queer with its twists and turns,
As everyone of us sometimes learns,
And many a failure turns about,
When he might have won if he'd stuck it out,
Don't give up though the pace seems slow,
You might succeed with another blow.

Often the struggler has given up,
When he might have captured the victor's cup.
And he learned too late, when the night slipped down,
How close he was to the golden crown,

Success is failure turned inside out,
The silver tint of clouds of doubt,
And you never can tell how close you are,
It may be near when it seems afar,
So stick to the fight when you're hardest hit,
It's when things seem worst that you mustn't quit.



Anon,
<http://www.all-creatures.org/poetry/dontquit.html>

Questions about Don't Quit

1. The poet uses the verb *trudging* on line 2: can you suggest a synonym for this verb?
2. Quote the two lines in verse 2 which suggest that, when faced with a problem, you should never give up just because nothing seems to be happening, as you may find that with your very next try, things completely change.
3. Judging from the poem, which of these words best sums up the way the poet thinks we should be in the face of problems—*reckless*, *undaunted* or *despondent*? What in the poem tells you this?
4. Explain in your own words what the poet means by the lines: *Often the struggler has given up,
When he might have captured the victor's cup.*
5. Imagine a person or a group of people to whom this poem would be really good advice and say why you think it might help them.
6. No-one is sure who wrote *Don't Quit*. What kind of person do you think they would have been and why?

What to do today

IMPORTANT Parent or Carer – Read this page with your child and check that you are happy with what they have to do and any weblinks or use of internet.

1. Read a poem

- Read **Hold Fast to Dreams**. What is the message of this poem?
- Re-read it, really thinking about each line.
- What do you like about this poem? Is there anything that you dislike? What patterns can you spot?

2. Revise metaphors

- Use the *Revision Card* to remind yourself about metaphors and similes.
- Write a sentence to remind yourself what a metaphor is and a sentence to remind yourself what a simile is.

3. Plan and write a Poem.

- Plan a poem called, 'Life Without Dreams'.
- On the *Planning Frame* write metaphors for a life without dreams and verbs that could show dreams ending. Use the *Ideas Sheets* or think of your own ideas.
- Now try turning your ideas into a poem. Choose your favourite ideas and see how they could fit and flow together.

Well done. Share your poems with a grown-up. Show them the verbs that you have chosen and the metaphors that you have used.

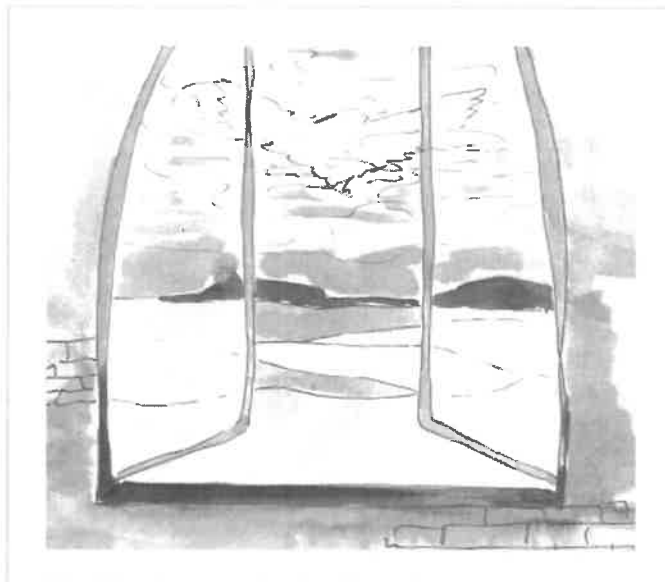
Try the Fun-Time Extras

- Share your poem with somebody else. Send it to them or make a recording so they can hear you or watch you.
- Make an illustration for your poem.
- Read Langston Hughes's Poem – *A Dream Deferred*. What do you think deferred must mean?

Hold Fast to Dreams

Hold fast to dreams
For if dreams die
Life is a broken-winged bird
That cannot fly.

Hold fast to dreams
For when dreams go
Life is a barren field
Frozen with snow.



Langston Hughes,
The Collected Poems of Langston Hughes,
Vintage, 1995

REVISION CARD: Metaphors

A metaphor is a comparison in which a place, person or thing is described as if it was another entirely different but similar thing.

Ben is a greedy pig.

Ben is not actually a pig - he's a boy - but the comparison to a greedy pig is very effective in telling us that Ben obviously tucks into his food like a farm animal at meal times!

Metaphors very often contain the verbs is or are, was or were.

The stars were jewels in the night sky.

Life is a journey.

The children in my class are a dream.

He was a big baby, moaning about the weather like that.

Metaphors are different to similes

Similes describe people, places, situations or things by comparing them to something that they are like.

Similes either contain the word like or the phrase as...as...

Ben ate like a snuffling pig.

Ben was as greedy as a pig.

In Hold Fast to Dreams, Langston Hughes uses two metaphors to describe a life without dreams as if it is something else.

a broken-winged bird
a barren field, frozen with snow

Planning Frame

| <u>Verbs for dreams ending</u> | <u>Metaphors for a life without dreams</u> |
|--------------------------------|--|
| | |

Ideas Sheet

Possible verbs

wither decay bleed break shatter rupture implode
collapse break apart shrivel fracture crack fade
empty dry up blanch ossify calcify darken close
shut down evaporate disperse scatter are extinguished

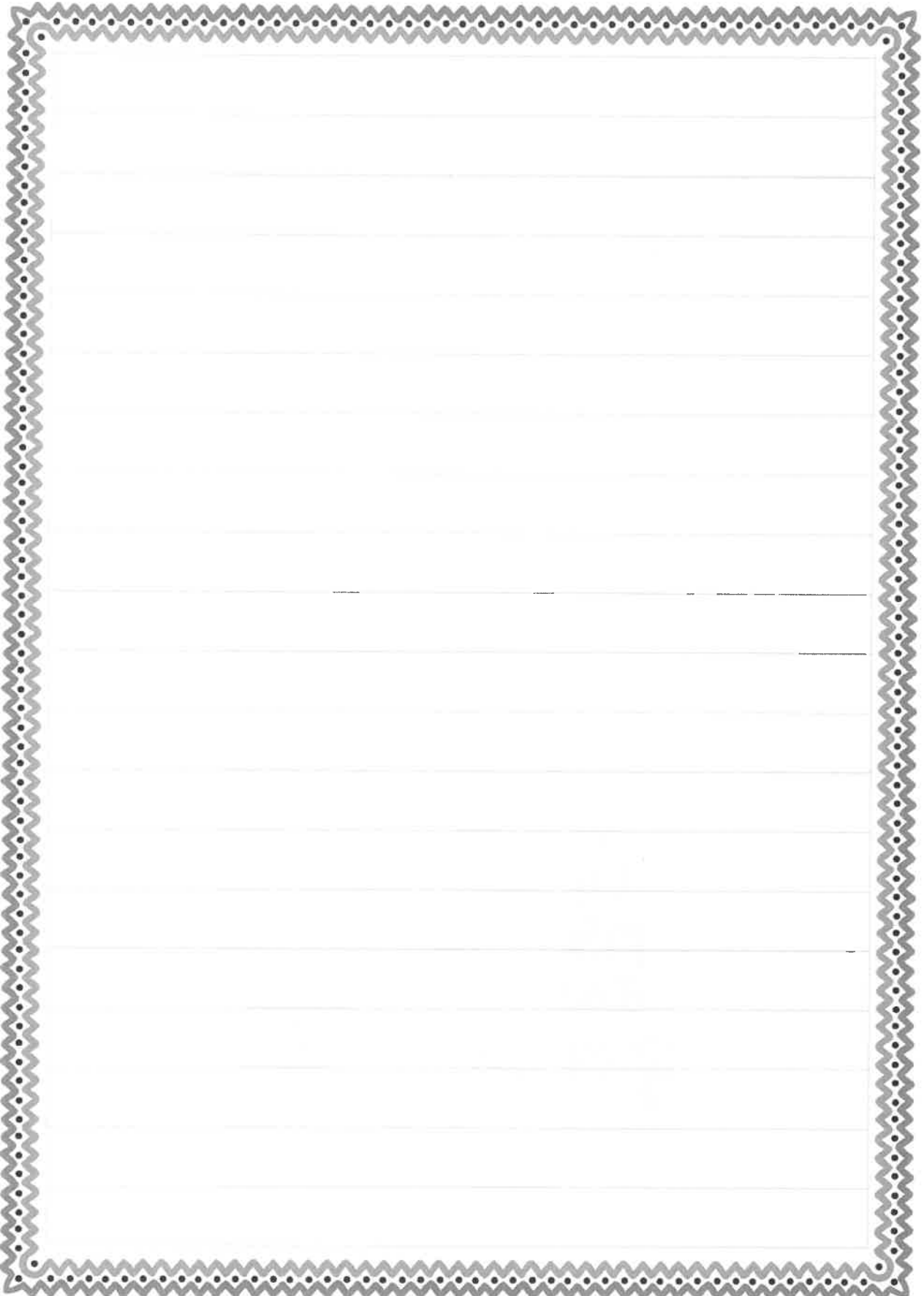
Possible metaphors

Something...

deserted poisoned abandoned shuttered broken
cracked homeless leafless sunless empty splintered
unloved cheerless unfinished lost smashed snuffed
out frozen buried



Life Without Dreams

A large rectangular area with a decorative border and horizontal lines for writing. The border is a grey zigzag line with small black dots at the peaks and valleys. Inside the border, there are 20 horizontal grey lines, creating 19 rows of space for writing.

A Dream Deferred (Harlem)

What happens to a dream deferred?

Does it dry up

Like a raisin in the sun?

Or fester like a sore—

And then run?

Does it stink like rotten meat?

Or crust and sugar over

Like a syrupy sweet?

Maybe it just sags like a heavy load.

Or does it explode?

Langston Hughes,
The Collected Poems of Langston Hughes,
Vintage, 1995

What to do today

IMPORTANT Parent or Carer – Read this page with your child and check that you are happy with what they have to do and any weblinks or use of internet.

1. Re-read and watch a poem

- Watch Wilf Merttens perform his poem:
<https://www.youtube.com/watch?v=GGXCSuIVamo>
- What does Wilf Merttens do when he performs his poem? Make a note of three things that you spot.
- If you haven't read the poem, re-read it.

2. Revise modal verbs

- Use the **PowerPoint on modal verbs** and listen to the teaching. If this is not possible, remind yourself using the *Revision Card*.
- Go through the poem: *What do you want to be?* and see if you can spot and highlight any modal verbs. There are only a few examples so look carefully.

3. Now for some writing

- Write *Sets of Three*. Write about your future using different modal verbs to show how certain you are.

Well done. Share your sentences with a grown-up and explain the modal verbs that you have chosen to use.

Try the Fun-Time Extras

- Practise performing *What do you want to be?* Try using some of the techniques that you saw Wilf Merttens use. Can you start to learn any of the poem off by heart?
- Share your performance with somebody else.

What do you want to be?

What do you want to *be*?

What do *you* want to be?

What do you want to be?

Hey listen kid, you don't have to tell me—

I'm just here to read some poetry.

You can leave now if you want.

You're completely free, you see.

But, before you go, let me tell you

I'm not here to tell you about birds and bees
and trees

and bananas and farmers and poetry things.

This poem is a question,

and I'm asking what you dream and feel and things.

You see, maybe you want to be famous.

Maybe you want to be an astronaut and explore Uranus.

Maybe you want to be the craziest stunt lady Hollywood's ever seen.

Maybe you want to buy some flashy mansion

and spend all your time keeping it clean.

Maybe you're a dancer and Bollywood's more your scene.

Maybe you're a natural,

Maybe you're going to have work hard at it.

Maybe you're a punk singer and you want to smash...it...up.

Maybe you like nice stuff.

Maybe to get it you're going to act all tough.

Maybe you're going to be sweet.

Maybe you're going to meet and greet.

Maybe you just want to help people.

Or maybe you want to be a success, like prove that you're the best.

Maybe you want to be a celebrity, or an important politician,
shake the hands of the mayor.
Then again, maybe you just don't care.
Maybe you're in it for the money.
Now *that's* a sweet honey.
People don't find anything funny when they're racing to be rich.
Maybe you want to be surrounded by iPhones and quick fixes,
Maybe your heart tremors and twitches round diamond rings and bling.
Maybe you want to see all the precious things that eBay can bring,
Or wear so many jewels you look like a King.
Maybe you just want to sing in the shower
and that's what makes you feel free.
Maybe all you need is the moon and a tree to feel happy.
Maybe you're a natural.
Maybe you're a doctor, a tinker, a tailor, an architect of bad behaviour.
You could be a soldier or a spy.
You could be the kind of guy who wonders why
the world is just as it is
Or how the plane can stay in the sky.
Maybe you're an expert at stopping a baby crying.
Maybe you'll be found frying a rich man's breakfast
in a gourmet restaurant.
Maybe you're a killer chef or an amazing painter.
You don't have to know now;
you can find out later what it is you really want to be.
Because maybe you just want to see the world.
Maybe you want to travel around and live out of a backpack.
Maybe you want to be a goth, wearing nothing but black
'cos maybe being blue just ain't you.
Maybe you just have to find out what's true and what's a lie in the
newspaper.
Maybe you'd make a kiss-ass journalist.
Then again maybe all that writing would turn you mentalist.

Maybe you want to make your own zombie movies,
spray ketchup all over your mate's face for fake blood,
Maybe you want to be a dirt biker all covered in mud,
or a rescue woman saving people in a flood.
Maybe you want to be a boxer, landing punches with a thud.
Maybe you want to do very little,
live life quietly up a mountain someplace,
stay up all night staring into space.
Maybe you want to raise a family.
Maybe you want to devote your life to a god.
Maybe you want to live in a caravan on the sea, serving cod and chips.
Maybe you'll be eternally swell if you can just kiss a sweet pair of lips

Whatever your dream, I'm just here to remind you that you can be whatever
you want to be and you can have *anything*, you see.
Now if you're like me you're going to want it all for free.
But like me and like lots of other people like me,
in the end you're going to see
that if you want to be what you want to be
then you are going to have believe
and work real hard.
Unless you just want to be a nobody, which is real easy.
But don't worry, 'cos this crazy game is not a race,
and it's not up to me or school or TV to tell you your place.
We don't know your dream, or even what you really mean
when you say what you want to be.
It's up to you.
You've got to decide for yourself you see.
Now, tell me - what do you want to be?

Wilf Merttens

Revision Card – Modal Verbs

Modal Verbs

We can use modal verbs to help us express how likely something is.

I might become a teacher.

I could learn to play an instrument.

The opportunities available to me may be different in the future.

I will choose the things that I do.

Modal Verbs

Modal verbs are placed before the verb they are **modifying**.



The opportunities available may **change**.

Indicating Degrees of Certainty using Modal Verbs



I might **play** for Manchester United.

I could **play** professionally.

I will **play** the best I can always. ✓

Which sentence is most *certain*?

Using Modal Verbs negatively



I might not live in this city.

I cannot live in this city.

I will not live in this city.

I may not live in this city.

Sets of Three

Write sentences about your future using different modal verbs.

| | Possible | Possible | Certain |
|--------------------------------|------------------------------------|-----------------------------------|--|
| What job you will do | e.g. I might play for Southampton. | e.g. I could play professionally. | e.g. I will always make time for football. |
| What hobby you will have | | | |
| The place you will live | | | |
| Your greatest achievement | | | |
| The kind of person you will be | | | |

What do you want to be? – Modal Verbs

Answers

What do you want to *be*?

What do *you* want to be?

What do you want to be?

Hey listen kid, you don't have to tell me—

I'm just here to read some poetry.

You can leave now if you want.

You're completely free, you see.

But, before you go, let me tell you

I'm not here to tell you about birds and bees
and trees

and bananas and farmers and poetry things.

This poem is a question,

and I'm asking what you dream and feel and things.

You see, maybe you want to be famous.

Maybe you want to be an astronaut and explore Uranus.

Maybe you want to be the craziest stunt lady Hollywood's ever seen.

Maybe you want to buy some flashy mansion

and spend all your time keeping it clean.

Maybe you're a dancer and Bollywood's more your scene.

Maybe you're a natural,

Maybe you're going to have work hard at it.

Maybe you're a punk singer and you want to smash...it...up.

Maybe you like nice stuff.

Maybe to get it you're going to act all tough.

Maybe you're going to be sweet.

Maybe you're going to meet and greet.

Maybe you just want to help people.

Or maybe you want to be a success, like prove that you're the best.

Maybe you want to be a celebrity, or an important politician,

shake the hands of the mayor.
Then again, maybe you just don't care.
Maybe you're in it for the money.
Now *that's* a sweet honey.
People don't find anything funny when they're racing to be rich.
Maybe you want to be surrounded by iPhones and quick fixes,
Maybe your heart tremors and twitches round diamond rings and bling.
Maybe you want to see all the precious things that eBay can bring,
Or wear so many jewels you look like a King.
Maybe you just want to sing in the shower
and that's what makes you feel free.
Maybe all you need is the moon and a tree to feel happy.
Maybe you're a natural.
Maybe you're a doctor, a tinker, a tailor, an architect of bad behaviour.
You could be a soldier or a spy.
You could be the kind of guy who wonders why
the world is just as it is
Or how the plane can stay in the sky.
Maybe you're an expert at stopping a baby crying.
Maybe you'll be found frying a rich man's breakfast
in a gourmet restaurant.
Maybe you're a killer chef or an amazing painter.
You don't have to know now;
you can find out later what it is you really want to be.
Because maybe you just want to see the world.
Maybe you want to travel around and live out of a backpack.
Maybe you want to be a goth, wearing nothing but black
'cos maybe being blue just ain't you.
Maybe you just have to find out what's true and what's a lie in the newspaper.
Maybe you'd make a kiss-ass journalist.

This is a shortened form of: Maybe you would make a kiss-ass journalist

Then again maybe all that writing would turn you mentalist.
Maybe you want to make your own zombie movies,
spray ketchup all over your mate's face for fake blood,

Maybe you want to be a dirt biker all covered in mud,
or a rescue woman saving people in a flood.
Maybe you want to be a boxer, landing punches with a thud.
Maybe you want to do very little,
live life quietly up a mountain someplace,
stay up all night staring into space.
Maybe you want to raise a family.
Maybe you want to devote your life to a god.
Maybe you want to live in a caravan on the sea, serving cod and chips.
Maybe you'll be eternally swell if you can just kiss a sweet pair of lips
This is a shortened form of 'Maybe you will be eternally swell...'

Whatever your dream, I'm just here to remind you that you can be
whatever you want to be and you can have *anything*, you see.
Now if you're like me you're going to want it all for free.
But like me and like lots of other people like me,
in the end you're going to see
that if you want to be what you want to be
then you are going to have believe
and work real hard.
Unless you just want to be a nobody, which is real easy.
But don't worry, 'cos this crazy game is not a race,
and it's not up to me or school or TV to tell you your place.
We don't know your dream, or even what you really mean
when you say what you want to be.
It's up to you.
You've got to decide for yourself you see.
Now, tell me - what do you want to be?

Wilf Merttens

What to do today

IMPORTANT Parent or Carer – Read this page with your child and check that you are happy with what they have to do and any weblinks or use of internet.

1. Watch and join in with a poem.

- Watch Wilf Merttens perform his poem and try to join in, now that you know it so well. *You should have studied it earlier this week. (Days 1&4)*
<https://www.youtube.com/watch?v=GGXCSuIVamo>
- Which part of the poem do you find it easiest to speak out loud? Which are the trickiest parts?

2. Plan and write a poem

- Use the *Poem Planner* to help you think of ideas for a new version of the poem. Read the prompts and note your ideas down.
- Write your poem out.

3. Practise a performance

- Practise performing your new poem. Think about the speed that you read, the rhythm of your poem, your expression and any actions.

Well done. Now share your performance with somebody else. What do they notice and like best about your poem?

Try the Fun-Time Extras

- Highlight the lines in your poem that you think could best have a matching picture and then make your illustrations.
- Record your performance of your poem and share it with somebody else.

What do you want to be?

What do you want to *be*?
What do *you* want to be?
What do you want to be?

Hey listen kid, you don't have to tell me—
I'm just here to read some poetry.
You can leave now if you want.
You're completely free, you see.
But, before you go, let me tell you
I'm not here to tell you about birds and bees
and trees
and bananas and farmers and poetry things.
This poem is a question,
and I'm asking what you dream and feel and things.

You see, maybe you want to be famous.
Maybe you want to be an astronaut and explore Uranus.
Maybe you want to be the craziest stunt lady Hollywood's ever seen.
Maybe you want to buy some flashy mansion
and spend all your time keeping it clean.
Maybe you're a dancer and Bollywood's more your scene.
Maybe you're a natural,
Maybe you're going to have work hard at it.
Maybe you're a punk singer and you want to smash...it...up.
Maybe you like nice stuff.
Maybe to get it you're going to act all tough.
Maybe you're going to be sweet.
Maybe you're going to meet and greet.
Maybe you just want to help people.
Or maybe you want to be a success, like prove that you're the best.
Maybe you want to be a celebrity, or an important politician,

shake the hands of the mayor.
Then again, maybe you just don't care.
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and it's not up to me or school or TV to tell you your place.
We don't know your dream, or even what you really mean
when you say what you want to be.
It's up to you.
You've got to decide for yourself you see.
Now, tell me - what do you want to be?

Wilf Merttens

Poem Planner

| <p>Checklist</p> <p><i>In my poem I need to...</i></p> | <p><i>My ideas and plans</i></p> |
|--|---|
| <p>Compose an intro line like <i>What do YOU want to be?</i></p> | |
| <p>Section 1</p> <p>Compose 6 high quality <i>Maybe you...</i> lines, detailing the jobs or things someone might want to do</p> <p>Alliterate a profession and its descriptive adjective in two of the lines (<i>Maybe you want to be an <u>audacious</u> actor, Maybe you want total control of a Massey Ferguson tractor</i>)</p> <p>Consider including superheroes, impressive and not so impressive: Wonder Woman...but also Odd Socks Matching Up Woman, etc.</p> <p>Rhyme at least two pairs of your 3 pairs of lines <i>Maybe you want to reach up, up and out to the stars</i> <i>Or maybe you want to lovingly smooth the dents out of vintage cars</i></p> | |

| | | |
|-----------|---|--|
| Section 2 | <p>Compose a line like, <i>But whatever you do, you've got to dream big, because life without dreams is...</i></p> <p>Write 2 powerful lines describing life without dreams using metaphors (...<i>a broken bottle, its precious contents spilt upon the step</i>)</p> | |
| Section 3 | <p><i>Some people say...</i></p> <p>Use the modal verbs of obligation in sentences saying what parents or teachers might tell someone they had to do:</p> <p>You should... You ought to... You must...</p> <p><i>But don't worry about what others tell you to do:</i></p> <p>Use the modal verbs of ability</p> <p>Instead, You can You could You might</p> | |
| | Compose an outro line like, <i>Remember you're free to choose - what do YOU want to be?</i> | |

A New Poem

Write your poem here.

A large rectangular box with a decorative border of small dots and a wavy line. Inside the box are horizontal lines for writing a poem.

