A programme of additional sessions for children in upper Key Stage 2 not meeting age-related expectations

Focuses on strong re-teaching of key maths topics using an active, practical approach

Suitable for delivery by non-specialists

This 12-week programme includes pre- and post-assessments, familiarization activities and 48 step-by-step sessions across 5 key areas: Number and place value, Adding and subtracting, Multiplying and dividing, Fractions, and Working with fractions, decimals and percentages.

This booklet provides a sample session and accompanying photocopy masters from each of the five Big Ideas to allow you to see how it could benefit your struggling learners in Years 6 and 7/P7-S1.
Educational context

This session builds upon the context of a music concert from the previous session. Here the focus is on gaining a feel for the size of a number and how it relates to others by ordering and comparing.

Prior learning

- Compare and order 3-digit numbers up to 1000
- Read and write 3-digit numbers up to 1000 in numerals and words
- Recognize the place value of each digit in a 3-digit number
- Recognize zero as a place holder
- Reduce a column value to zero by taking away from that column

Making connections

In Unit 2, Session 1, pupils draw, describe and visualize place value and zero as a place holder. This develops an understanding that numbers can be expressed in different ways, e.g. one thousand is the same as ten hundred.

Objectives

- To understand the quantity and column value of digits in numbers between 1000 and 100 000.
- To recognize the place value of each digit in 5-digit numbers.
- To order and compare numbers up to 100 000.

Vocabulary

column, place value, base-ten, column value, 5-digit number, ascending

Have ready

Base-ten apparatus
Sticky notes
Counters
Spinner with 0–9 Overlay (PCM 36)

Place Value Arrow Cards (cut from PCMs 30a–30d)
Place Value Frame – TThThHTO (PCM 32)
Written Assessment
Question Unit 2, 2 (PCM 5a)

Main learning

Step 1

Remind pupils of the music concert scenario in Session 1, where the lower tier of the stadium can seat 3576 people and the upper tier seats 1842 people.

Ask pupils to use base-ten to model these numbers (e.g. 1).

Work together to record these maximum capacity numbers on the place value frame, so that pupils can keep referring back to them.

Ask pupils: Which tier holds more people? (the lower tier) How do you know?

The lower tier can hold more people, because it seats more than 3000 people while the upper tier seats fewer than 2000.

Step 2

Say that on each of the seven evenings in one week, the lower tier was not full but had more than 1000 people.

Ask pupils to explore with apparatus to write seven different possible numbers for the lower tier and write each number onto a separate sticky note. (Encourage a range of numbers from 1000 to 3575, and look for suitable responses.)

Ask pupils to read each number aloud. Listen for correct vocabulary.

Invite pupils to show the number using base-ten apparatus (see 2, which shows 2472).

What is the largest possible number you could have written? (3575)
Unit 2: Number and place value

Ask pupils to show the numbers using Place Value Arrow Cards and Counters on the Place Value Frame (e.g. 3).

![Place Value Arrow Cards](image)

Ask pupils to place the seven numbers from their sticky notes into ascending order.

**Step 3**

Place 9 Counters into the thousands column (see 4).

![Place Value Frame](image)

Ask pupils what number this is. (9000)
Using Counters, count on from 9000 onto the frame, e.g. 9100, 9200, … 9800, 9900.
If they say ‘9 thousand ten hundred’, ask for another way of saying ‘ten hundred.’ (one thousand)

9 thousand and 1 more thousand is 10 thousand.

Count up again, this time in thousands (1000, 2000, … 9000, 10000) and explore this using the Place Value Frame (see 5).

![Place Value Frame](image)

**Step 4**

Play the game.

**Sowing the seeds for the next session**

Ask pupils how many ten thousands is the maximum that can go in the ten thousands column. (9)
Count up from 90000 in thousands (91000, 92000, … 99000, 100000). Listen for ‘ninety ten’ thousand and encourage ‘one hundred thousand’.

**Game**

Look and listen for pupils placing the higher value digits in columns on the left-hand side to give larger numbers.
- Use a 0–9 dice (or a Spinner with 0–9 Overlay) and one Place Value Frame per player.
- Take it in turns to throw the dice and decide which column to write the digit into.
- Repeat until each player has written 5 digits.
- The player who has the biggest number is the winner (e.g. 7).

At the end of the game ask: can you read your number?
Can you place the numbers in ascending order?
e.g. (77 534, 85 221, 96 310)
Challenge: How far away from 100 000 is each player?

**Varying and repeating**

The game can be repeated to provide further practice.
It can be varied so the winner is the player with the smallest number.

**Assessing and reflecting**

- Watch the pupils playing the game. Do they know to insert the largest digit into the highest value column that is available. Are they placing low digits into TTh and Th columns too soon, thus making their final number low?
- Written Assessment Question Unit 2, 2.

Discuss how pupils can use their learning outside the session, and complete their Learning Log (PCM 1) to reflect on the maths they have done so far.

**Continuing the learning**

Pupils play the game again at home with their friends or parents.
Change the rules, e.g. the winner is the person with the smallest number.

**Further teaching and practice**

NPC 4, Numbers and the Number System 2, Activities 2 and 3
NPC 5, Numbers and the Number System 1, Activities 6 and 7
MyMaths lessons: Working with thousands (1972); Place value hundreds and thousands (1352)
Percentages

Educational context
This session focuses on understanding percentages, including knowing that ‘per cent’ means ‘out of one hundred’ and that percentages are a special value fraction: hundredths. This builds on the previous session where pupils explored hundredths as fractions and decimals.

Prior learning
Dividing by 100
Multiplying by 2, 3, 5, 40

Making connections
This session looks at percentages as another way of representing quantities less than 1 and provides further links to hundredths as fractions (\(\frac{1}{100}\)). It links to multiplication of whole numbers by fractions (Session 4) and fractions of amounts.

Objectives
• To know that percentages are a way of expressing hundredths.
• To be able to work out simple percentages of amounts (e.g. 25% of 200, 1% of 400).
• To know the fraction equivalents of 1%, 50% and 10%.
• To understand that, e.g. 5% is half of 10% when the total amount is the same.

Vocabulary
per cent (‘cent’ means ‘100’ and ‘per’ means ‘out of’),
per cent of, off, equivalent

Main learning

Step 1
Discuss percentages as another way of expressing fractions.
Draw out from pupils that percentages are hundredths, but instead of writing a fraction, e.g. \(\frac{1}{100}\) or \(\frac{10}{100}\), a percentage is written as 1% or 10%.
Look and listen for pupils who are able to see that the symbol % looks like it is made from /00 or /100.
Discuss that the Decimal Baseboard has 100 parts of one whole and use Numicon Shapes to help pupils visualize some percentages, e.g. 1%, 10%, 50%, 38% (see 1).

This shows 38 out of 100. It is an image of 38%.

Ask pupils to show 20%, 27% and 45%.

Step 2
Discuss that percentage values are as easy to compare as whole numbers (that’s why we use them).
Explore how they can be compared visually, e.g. use two 100 squares and shade the first 100 square to show 55%, then shade in the second 100-square to show 57% (see 2).

Step 3
Explore further the relationship between percentages using a Decimal Baseboard and Numicon Shapes.
Discuss that 5% = \(\frac{1}{20}\) × 10% and look for pupils who can show this with a 10-shape and a 5-shape (see 3).

Have ready
Numicon Shapes
Decimal Baseboard
Laminate
Counters
100-bead string (or 0–100 cm Number Line)

100 Square – Blank
(PCM 7)
Written Assessment
Question Unit 6, 3
(PCM 5b)
Unit 6: Fractions, decimals and percentages

Ask pupils to explore and show that 15% is 10% + 5% (see 4).

Ask pupils to show how these percentages could be represented in a similar way:
20% = 2 × 10%  25% = 1/2 × 50%
60% = 50% + 10%  40% = 50% – 10%
19% = 20% – 1%  2% = 2 × 1%.
What Shapes will pupils choose to show these percentages on the Baseboard?

Step 4
Set the scene of a sale in a sofa shop.
Can pupils find out what 40% is of a sofa that costs £2200?
Explore finding percentages of amounts by interpreting the vocabulary and symbols.
Look and listen for pupils who can explain that 40% = \( \frac{40}{100} \) which means 40 \( \div 100 \).
Discuss that ‘of’ means ‘multiply’ or ‘times’ (\( \times \)), so finding 40% of £2200 has two steps:
•  £2200 \( \div 100 \) = £22
•  £22 \times 40 = £880

The first operation divides to give 1% of £2200, the second operation multiplies to give 40%.

Look and listen for pupils making the connection that they now need to subtract £880 from £2200 to find the new price of the sofa. (£1320)
Challenge: Another sofa was originally £1900. If the sale reduction is 30%, what is the new price? Which sofa is cheaper?

Sowing the seeds for the next session
Using 1-shapes, 10-shapes and a Decimal Baseboard, can pupils explain what the equivalent fraction is to 1% and 10%?

Varying and repeating
Repeat the session using a 100-bead string to show percentages, i.e. 100 beads represent 100%, so how many beads will show 42% or 52%?
Use the bead string to represent £600 and discuss how much 1 bead, or 10 beads, represents.

Activity
Look and listen for pupils who are able to find percentages totalling 100%.
•  Use Blank 100 Squares as your grids for designing a park.
•  Work in pairs. Give your partner percentages to use for designing their park, e.g. 50% grass, 20% water, 20% play area, 10% trees, making sure they total 100%.
•  Design, shade and label the correct number of squares for each element of your park, and give your design to your partner to check.

Assessing and reflecting
•  Which is more money, 20% of £300 or 40% of £200?
•  What is 40% of £1200?
•  Written Assessment Question Unit 6, 3.
Challenge:
•  If there are 25 cars and 5 of them are red, what percentage of the cars are red? How did you work it out?
Discuss how pupils can use their learning outside the session, and complete their Learning Log (PCM 1) to reflect on the maths they have done so far.

Continuing the learning
Ask pupils to design a garden area for their school, this time giving each other percentages that are not multiples of ten, e.g. 45% flower beds, 25% paving, 15% shed, and so on.
Can pupils work out what 10% off and 50% off are for some prices of items in a shop? Discuss the savings and the wording of sales signs, e.g. the use of ‘off’, ‘of’, and ‘up to’.

Further teaching and practice
Numbers and the Number System 7; Calculating 11
MyMaths lessons: Percentages of amounts 1 [1030]; Percentages of amounts 2 [1031]
Unit 8: Adding and subtracting

Adding and subtracting money

Session 2

Main learning

Step 1
Look together at the Cafe Menu on the Cafe and Curry Menus sheet (see 1).

<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chef’s salad</td>
<td>£7.99</td>
</tr>
<tr>
<td>Soup</td>
<td>£5.25</td>
</tr>
<tr>
<td>Tomato pasta</td>
<td>£7.90</td>
</tr>
<tr>
<td>Chunky pasta</td>
<td>£2.45</td>
</tr>
<tr>
<td>Coffee</td>
<td>£1.90</td>
</tr>
<tr>
<td>Orange juice</td>
<td>£1.49</td>
</tr>
<tr>
<td>Water</td>
<td>£0.75</td>
</tr>
</tbody>
</table>

Ask pupils to choose an item from the Cafe Menu and find the correct amount of money from the coins provided.

Discuss how this can be represented on a place value frame. Ask what the column values would be (ones, tenths, hundredths).

Place the coins on the Decimal Place Value Frame, e.g. Soup £5.25 (see 2). Pupils may also represent the tenths and hundredths using Numicon Shapes on the Decimal Baseboard.

When dealing with money, the decimal point separates the pounds from the pence.

Remind pupils that one penny is one hundredth of £1. Repeat with other amounts, including using zero as a place holder.

Ask pupils if the cost of the tomato pasta could be written as £7.9 instead of £7.90.

Look and listen for pupils who realize that 0 as a place holder is important in the context of money.

We always write money to two decimal places or in whole numbers.

Step 2
Tell pupils you have chosen one item of food – soup – and one drink – orange juice – and need to find the total. Ask them to estimate the answer (£5 + £1.50 = £6.50).

Educational context

This session focuses on adding and subtracting, using the written column method explored in Unit 3, but with numbers up to two decimal places in the context of money. Pupils calculate with money where regrouping is extended to decimals. Encourage pupils to continue estimating an answer using rounding before carrying out the calculation.

Prior learning
Secure understanding of place value with numbers up to two decimal places.
Using the written column method for adding and subtracting.

Making connections
In Unit 3, pupils are introduced to the column method for adding and subtracting, and in Unit 7, they work on decimals.

Objectives
• To know that the decimal point separates the whole and fractional parts in decimal notation.
• To add and subtract numbers up to two decimal places using the column method.
• To solve simple money problems involving numbers to two decimal places.

Vocabulary
estimate, more, column adding, column subtracting, regrouping, redistributing, column value, difference, pence, pound, tenths, hundredths, decimal point, zero as a place holder.

Have ready
Numicon Shapes
Decimal Baseboard
Laminate
£1, 10p and 1p coins (or cut from Coins, PCM 13)
Place Value Frame – Decimals (PCM 33)
Numeral Cards 0–9 (cut from PCM 28)
Cafe and Curry Menus (PCM 11)
Written Assessment Question Unit 8, 2 (PCM 5b)
Work out the exact calculation using the coins and Place Value Frame (£6.74) and then work through the calculation together, using the column method.

Look and listen for pupils applying their understanding of the written method to decimals when regrouping (see 3).

### Step 3
Ask pupils to choose two items from the menu and find the total cost. Repeat for several calculations to reinforce understanding of decimal places.

### Step 4
Ask the pupils to find the difference between the price of the soup and the tomato pasta.

Look and listen for pupils who realize that this is a subtracting calculation. Ask them to estimate the answer. (£8 – £5 = £3)

Together, explore the calculation using the coins and Place Value Frame (TO·th). Work through the calculation using the column method (£7·90 – £5·25 = £2·65).

Look and listen for pupils understanding the written method for decimals when regrouping for subtraction (see 1).

Encourage pupils to record the final answer as £2·65 and check with their estimate.

### Game
Look and listen for pupils using estimating to find approximate answers and using subtracting (to two decimal places) to find the difference.

- Use the Curry in a Hurry section of the Cafe and Curry Menus sheet. Play in pairs.
- Take turns to choose a curry, rice and side dish. Estimate first and then write the bill, including finding the total cost of the three items.
- Ask a partner to check the total bill by using the inverse.

### Assessing and reflecting
- Benji orders chicken Kung Po £5·35, egg-fried rice £2·55, a vegetable spring roll £1·75 and a glass of lemonade. He spends £11·90. How much does the glass of lemonade cost? (£2·25)
- Written Assessment Question Unit 8, 2.

**Challenge:**
- Apples cost 56p each and grapes cost £1·50 for 1kg. Kristie buys 3 apples and 1·5 kg of grapes. How much does she spend? (£3·93)

Discuss how pupils can use their learning outside the session, and complete their Learning Log (PCM 1) to reflect on the maths they have done so far.

### Continuing the learning
Collect menus from restaurants or takeaways. Ask pupils to choose items to make an imaginary order from these, and work out the total cost.

Discuss the importance of reviewing the numbers involved in a calculation to determine whether a mental or written strategy is most appropriate, and that larger numbers or decimals do not automatically make the calculation more complicated.

### Further teaching and practice
NPC 4, Numbers and the Number System 6 and 8
GMS 4, Measurement 2
MyMaths lessons: More written methods (1908); Adding decimals in columns intro (1381)
### Interpreting remainders

#### Session 4

**Educational context**

This session focuses on dividing that results in a remainder and how to interpret that remainder as a number, as a fraction and as a decimal. This builds on the dividing work covered in Unit 9, Session 3.

**Prior learning**

Multiplying and dividing decimal numbers  
Fraction and decimal equivalents  
Dividing by 2, 5, 10

**Making connections**

Pupils build on previous work on dividing, even and odd numbers, fractions, decimals, money and mixed numbers.

**Objectives**

- To recognize a remainder.  
- To convert remainders to fractions and decimals.  
- To write a remainder as a number, fraction or decimal.  
- To write the quotient as a mixed number.

**Vocabulary**

divide, equally, left over, remainder, exchange, dividend (the quantity to be divided), divisor (the number divided into another number), quotient (the result of dividing)

**Have ready**

Numicon Shapes  
Baseboard Laminate  
Counters  
£1, 20p and 10p coins (or cut from Coins, PCM 13)  
Spinners with Dividends and Divisors Overlays (PCM 41)  
Written Assessment Question: Unit 9, 4 (PCM 5c)

### Main learning

**Step 1**

Set out 21 with Numicon Shapes (two 10-shapes and a 1-shape, see 1).

Ask pupils how to divide this into 2 equal amounts.

Discuss what happens when 1 is divided by 2.

Listen for pupils recalling that $1 \div 2 = \frac{1}{2}$ or 0.5.

Set out 21 again, this time with ten 2-shapes and a 1-shape (see 2) and ask pupils to divide these into 10 equal parts.

Discuss how the remainder (1) can be divided by 5: $1 \div 5 = \frac{1}{5}$ or 0.2.

Ask pupils to show what fraction is created by the 40p remainder when two £1 coins are divided by five. This builds on the dividing work covered in Unit 9, Session 3.

**Step 2**

Ask pupils to imagine that five friends had worked together to tidy a garden and were paid £12 altogether.

Discuss how much each friend gets if they share it equally (3).

Give pupils twelve £1 coins to share between the five friends.

Two pounds each, remainder 2.
Discuss what to do with the £2 remaining. Look and listen for pupils exchanging two £1 coins for twenty 10p coins and sharing again (see 4).

Discuss how the £2 and 40p can be written (£2·40 or £2 and 40p).

Ask pupils to show what fraction is created by the 40p if the 10p coins are exchanged for 20p coins (12).

Challenge: If the five friends tidy another garden and are given £16, how much does each friend get? (£3·20 or £3 1/5)

Step 3
Say that the 5 friends pick 24 apples from their own garden. Ask pupils to work out how many apples each friend will get if they share them equally. Listen for pupils who suggest calculating 24 ÷ 5.

Use a Baseboard and Counters to show that the friends would get 4 apples each with 4 left over (see 5).

Explore writing the answer to 24 ÷ 5 as a mixed number, 4 4/5, and as a decimal, 4·8 (see 6).

Challenge: Ask pupils to work out sharing 23 apples between the 5 friends (4 3/5 or 4·6).

Step 4
Show the dividing calculation 56 ÷ 5, using the short written method of dividing (see 7).

Discuss how the remainder (1) can be divided by 5: 1 ÷ 5 = 1/5, and can also be written as a decimal, 0·2.

Ask pupils to solve the dividing calculation 46 ÷ 4 and to write the remainder as a fraction (1 1/4).

Look and listen for pupils who can make the connection that the fraction can be simplified to 1 1/2, and can also be written as a decimal, 1·5.

Varying and repeating
Repeat Step 1 using the Baseboard and Counters. Pupils divide £18 and £24 between the five friends in Step 2, and 36 apples between the friends in Step 3.

Game
Look and listen for pupils dividing and identifying remainders correctly.

- Use two Spinners with Dividends and Divisors Overlays.

- Play the game in pairs. Take turns to spin the two Spinners.

  The first Spinner is for the number to be divided (dividend) and the second Spinner is for the divisor, i.e. Spinner 1 ÷ Spinner 2.

  - If the quotient (the result) has a remainder, then you score 1, no remainder scores 0.
  - The first player to score 5 wins.

Assessing and reflecting

- Divide 101 by 5 and write the remainder as a fraction.
- Divide 101 by 10 and write the remainder as a decimal.
- Written Assessment Question Unit 9, 4.

Challenge:
- Divide 67 by 5 and write the remainder as a fraction.

Discuss how pupils can use their learning outside the session, and complete their Learning Log (PCM 1) to reflect on the maths they have done so far.

Continuing the learning

Pupils play the game again and can score a bonus point if they can express a remainder as a fraction and a decimal. The first player to score 10 wins.

Ask pupils if they can say which of these dividing calculations results in a remainder and how they know:

- 12 ÷ 2
- 13 ÷ 2
- 23 ÷ 2
- 55 ÷ 5
- 70 ÷ 5
- 31 ÷ 5
- 101 ÷ 10
- 950 ÷ 10
- 655 ÷ 10

Further teaching and practice

NPC 5, Calculating 4, 8, 9 and 13
MyMaths lesson: Interpreting remainders (1767)
Comparing and ordering fractions

Session 4

Main learning

Step 1
Give pupils number rods to compare fractions with the same denominator.

Can pupils show you how to use a 10-rod to represent 1 and the 2-rods to represent $\frac{2}{5}$? (see 1)

![Image showing fraction rods](image1)

The denominators are the same, so the size of the fraction is determined by the value of the numerator.

Ask pupils how they know that the 2-rod is $\frac{1}{5}$.

Listen for pupils reasoning that five 2-rods are the same length as the 10-rod representing 1, so one 2-rod = $1 \div 5$ or $\frac{2}{5}$.

Step 2
Ask which rods would be best for comparing tenths. Pupils use 1-, 2-, 5- and 10-rods to use to compare tenths (see 2).

![Image showing fraction rods](image2)

Use the 10-rod to represent 1. (10/10)

Discuss how we know the 5-rod is $\frac{5}{10}$ (it represents half of 1, or $\frac{10}{10} \div 2 = \frac{5}{10}$).

Which is the biggest fraction in 2 ($\frac{10}{10}$) and which is the smallest ($\frac{1}{10}$)?

Step 3
Work together to compare fractions with the same numerator.

Use the same number rods as in Step 2 with the equivalent fraction names (see 3).

![Image showing fraction rods](image3)

Listen for pupils discussing the relative fraction sizes.

Ask them to identify the biggest fraction less than 1 ($\frac{1}{2}$) and the smallest ($\frac{1}{10}$).

Explore putting the fractions in order of size, starting with the biggest (see 1).

If the numerators are the same, then the bigger the denominator, the smaller the fraction.

$\frac{1}{2} > \frac{1}{5} > \frac{1}{10}$
Unit 10: Fractions

Comparing and ordering fractions  Session

Step 4
Give pupils a strip of paper to represent 1.
Ask them to fold it in half and write $\frac{1}{2}$ at the fold.
Then ask them to fold the half into half to make quarters and write $\frac{1}{4}$ at the first fold.
Discuss where $\frac{1}{10}$ would be on the strip and ask pupils to mark it on.
Look and listen for pupils identifying the positions of the fractions correctly (see 5).

![Fraction positions](image)

Ask them to identify the biggest fraction ($\frac{1}{2}$) and the smallest ($\frac{1}{10}$).
Explore putting the fractions in order of size, starting with the biggest (see 6).

$\frac{1}{2} > \frac{1}{4} > \frac{1}{10}$

Sowing the seeds for the next session
Using number rods or Shapes to illustrate their thinking, can pupils explain why it is possible to add fractions with the same denominator, but not fractions with different denominators? (The denominators show the kind of fraction being added, so need to be the same.)

Varying and repeating
Use 10-, 5-, 2- and 1-shapes to set up a Shapes version of the number rods in Steps 2 and 3 (see 7).

![Shapes](image)

Fold the paper strip in Step 4 into thirds and sixths to compare, e.g. $\frac{1}{10}$, $\frac{1}{5}$, $\frac{1}{3}$, $\frac{1}{2}$.

Game
Look and listen for pupils identifying the numerators and denominators and comparing fractions correctly.

- Use a Spinner and a Numerals Overlay.
- Take turns to spin the Spinner twice.
- Player 1’s first spin gives the denominator of their fraction and the second spin gives the numerator.
- The next player does the same.
- Write down and compare the two fractions (or more, if playing in a group).
- The biggest fraction scores a point.
- Decide how many points to score for a win.

Note that this will generate proper and improper fractions.

Assessing and reflecting

- Which of these fractions is the biggest: $\frac{6}{11}$, $\frac{3}{11}$, $\frac{9}{11}$ or $\frac{2}{11}$?
- What are two proper fractions bigger than $\frac{1}{2}$?
- Written Assessment Question Unit 10, 4.

Challenge:

- A running track is 400 m. What fraction of a kilometre is this in tenths and in fifths?

Discuss how pupils can use their learning outside the session, and complete their Learning Log [PCM 1] to reflect on the maths they have done so far.

Continuing the learning

Pupils play the Game again, this time comparing the fractions and the player with the smallest fraction wins a point.
Can pupils collect information to present to a partner using fractions, e.g. there are 20 cars in the car park: $\frac{2}{5}$ of the cars are silver, $\frac{2}{5}$ are black, $\frac{2}{5}$ are red and $\frac{2}{5}$ are blue?

Further teaching and practice

NPC 5, Calculating 4, 14 and 15
MyMaths lessons: Comparing fractions (1075); Comparing scalable fractions (1844)
Place Value Arrow Cards

0 0 0
1 0 0
2 0 0
3 0 0
4 0 0
5 0 0
6 0 0
7 0 0
8 0 0
9 0 0
Place Value Arrow Cards

00000 50000
10000 60000
20000 70000
30000 80000
40000 90000

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<table>
<thead>
<tr>
<th>Place Value Frame – TTh Th H T O</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ones</td>
</tr>
<tr>
<td>Tens</td>
</tr>
<tr>
<td>Hundreds</td>
</tr>
<tr>
<td>Thousands</td>
</tr>
<tr>
<td>Ten Thousands</td>
</tr>
<tr>
<td>Thousands</td>
</tr>
</tbody>
</table>
### Written Assessment Questions

Note: answers to these questions can be found on Written Assessment Answers (PCM 6a and 6b).

<table>
<thead>
<tr>
<th>Unit</th>
<th>Session</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 2</td>
<td>1</td>
<td>Use the digits 3, 8, 6 and 0 to make as many numbers as possible between 6000 and 7000. Now write them in ascending order.</td>
</tr>
<tr>
<td>Unit 2</td>
<td>2</td>
<td>Write the following numbers in ascending order: 86 343, 34 334, 86 430, 86 403, 86 433, 34 433</td>
</tr>
<tr>
<td>Unit 2</td>
<td>3</td>
<td>Write down 700 000 and subtract 100 000 at a time until you reach 0.</td>
</tr>
<tr>
<td>Unit 2</td>
<td>4</td>
<td>Esme and her three friends went to the 2017 gig and each bought a T-shirt (use Rock Band, photocopy master 34a). (a) Estimate the total cost for Esme and her friends. (b) Find the exact cost for Esme and her friends.</td>
</tr>
<tr>
<td>Unit 3</td>
<td>1</td>
<td>Estimate the answer to 6125 + 2743 by rounding the numbers to: a) the nearest 1000 b) the nearest 100</td>
</tr>
<tr>
<td>Unit 3</td>
<td>2</td>
<td>Fill in the empty boxes to make the calculation correct. 3 □ 1 + □ 4 □ = 500</td>
</tr>
<tr>
<td>Unit 3</td>
<td>3</td>
<td>Calculate □ = 852 − 380</td>
</tr>
<tr>
<td>Unit 3</td>
<td>4</td>
<td>Solve these calculations: (a) 2143 + □ = 6999 (b) 1461 = □ − 2573</td>
</tr>
<tr>
<td>Unit 4</td>
<td>1</td>
<td>Calculate 4 × 1, 4 × 2, 4 × 5, 4 × 0. Write down the steps you took to find the answers.</td>
</tr>
<tr>
<td>Unit 4</td>
<td>2</td>
<td>Calculate 73 × 100. Write down the steps you took to find the answer.</td>
</tr>
<tr>
<td>Unit 4</td>
<td>3</td>
<td>Calculate 213 × 5. Write down the steps you took to find the answer.</td>
</tr>
<tr>
<td>Unit 4</td>
<td>4</td>
<td>Calculate 655 ÷ 5. Write down the steps you took to find the answer.</td>
</tr>
<tr>
<td>Unit 5</td>
<td>1</td>
<td>What fraction of the days of the week is a Saturday? Write down your thinking.</td>
</tr>
<tr>
<td>Unit 5</td>
<td>2</td>
<td>Which is smaller, ( \frac{3}{5} ) or ( \frac{4}{7} )? Explain how you know.</td>
</tr>
<tr>
<td>Unit 5</td>
<td>3</td>
<td>Calculate ( \frac{1}{10} ) of 80. Calculate ( \frac{1}{5} ) of 80. What do you notice about your answers?</td>
</tr>
<tr>
<td>Unit 5</td>
<td>4</td>
<td>How many equivalent fractions to ( \frac{6}{10} ) can you find? Explain your thinking.</td>
</tr>
</tbody>
</table>
**Written Assessment Answers**

Note: these answers correspond to the Written Assessment Questions (PCMs 5a – 5c).

<table>
<thead>
<tr>
<th>Unit</th>
<th>Session</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 2</td>
<td>1</td>
<td>6038, 6083, 6308, 6380, 6803, 6830</td>
</tr>
<tr>
<td>Unit 2</td>
<td>2</td>
<td>34334, 34343, 86343, 86403, 86430, 86433</td>
</tr>
<tr>
<td>Unit 2</td>
<td>3</td>
<td>700000, 600000, 500000, 400000, 300000, 200000, 100000, 0</td>
</tr>
<tr>
<td>Unit 2</td>
<td>4</td>
<td>(a) 4 tickets at approximately £80 = £320, plus 4 T-shirts at approx. £20 = £80; total approx. £320 + £80 = £400. (b) 4 tickets at £83 = £332, plus 4 T-shirts at £17 = £68; total £332 + £68 = £400.</td>
</tr>
<tr>
<td>Unit 3</td>
<td>1</td>
<td>6000 + 3000 = 9000 6200 + 2700 = 8900</td>
</tr>
</tbody>
</table>
| Unit 3 | 2 | (using column addition, missing numbers in **bold**)

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>5</td>
<td>1</td>
<td>+</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Unit 3</td>
<td>3</td>
<td>(using column subtraction) 852 – 380 = <strong>472</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit 3</td>
<td>4</td>
<td>(use the inverse) (a) 6999 – 2143 = <strong>4856</strong> (b) 2573 + 1461 = <strong>4034</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit 4</td>
<td>1</td>
<td>4 × 1 = 4, 4 × 2 = 8 (double 4 × 1), 4 × 5 = 20 (half of 10 × 5), 4 × 0 = 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit 4</td>
<td>2</td>
<td>7300, e.g. 3 × 100 = 300 and 70 × 100 = 7000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit 4</td>
<td>3</td>
<td>1065, e.g. 200 × 5 = 1000, 10 × 5 = 50 and 3 × 5 = 15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit 4</td>
<td>4</td>
<td>131, e.g. 500 ÷ 5 = 100, 100 ÷ 5 = 20, 55 ÷ 5 = 11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit 5</td>
<td>1</td>
<td><strong>1/7</strong>. Saturday is 1 day out of the 7 days in a week.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit 5</td>
<td>2</td>
<td>4 is closer to <strong>1/2</strong> (compare <strong>3 5/7</strong> to <strong>2 5/5</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit 5</td>
<td>3</td>
<td><strong>1/10</strong> of 80 = <strong>8</strong>, <strong>1/5</strong> of 80 = <strong>16</strong>, <strong>1/5</strong> × 80 is 2 times bigger than <strong>1/10</strong> of 80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit 5</td>
<td>4</td>
<td>e.g. <strong>3 5/20</strong> = <strong>1 7/10</strong>, <strong>12 200/100</strong> = <strong>60 30/50</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit 6</td>
<td>2</td>
<td>0.25 = <strong>1/4</strong>. 0.12 = <strong>3/25</strong> or <strong>12/100</strong>. 0.33 = <strong>33/100</strong> (accept <strong>1/3</strong>)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit 6</td>
<td>3</td>
<td>The price for one item ends up the same, but with BOGOF you have to buy two items.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit 6</td>
<td>4</td>
<td>27, <strong>3 3/5</strong> × 45, 45 ÷ 5 = 9, 3 × 9 = 27</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Written Assessment Questions

Note: answers to these questions can be found on Written Assessment Answers (PCM 6a and 6b).

<table>
<thead>
<tr>
<th>Unit</th>
<th>Session</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 6</td>
<td>1</td>
<td>Calculate $\frac{3}{7} + \frac{2}{7}$ and $\frac{3}{11} + \frac{6}{11}$. Write down the answers in fractions and words.</td>
</tr>
<tr>
<td>Unit 6</td>
<td>2</td>
<td>On a blank 100 Square, shade 0·25, 0·12 and 0·33. Now write each decimal as a fraction.</td>
</tr>
<tr>
<td>Unit 6</td>
<td>3</td>
<td>Is ‘Buy One Get One Free’ the same as ‘50% off’? Explain your thinking.</td>
</tr>
<tr>
<td>Unit 6</td>
<td>4</td>
<td>Find three fifths of 45. Write down the steps you took to find the answer.</td>
</tr>
<tr>
<td>Unit 7</td>
<td>1</td>
<td>Place the following decimals in ascending order: (a) 0·8, 0·5, 0·9, 0·1, 0·4, 0·7, 0·3 (b) 0·65, 0·38, 0·27, 0·25, 0·97, 0·01 (c) 0·3, 0·08, 0·6, 0·07, 0·55, 0·64, 0·33 Can you work out: (d) 0·6 + 0·2 = (e) 0·05 + 0·03 = (f) 0·6 − 0·2 = (g) 0·05 − 0·03 =</td>
</tr>
<tr>
<td>Unit 7</td>
<td>2</td>
<td>Alya has 3 × £1 coins and 4 pence. She writes this down as £3·4. Is her answer correct? If not, what would the correct answer be and why?</td>
</tr>
<tr>
<td>Unit 7</td>
<td>3</td>
<td>In the number 6·374, what place value does the digit 4 have? Which is bigger, 4·009 or 4·101?</td>
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<tr>
<td>Unit 7</td>
<td>4</td>
<td>What is 7·8 rounded to the nearest whole number? What is 14·17 rounded to the nearest tenth?</td>
</tr>
<tr>
<td>Unit 8</td>
<td>1</td>
<td>71953 + 8621 =</td>
</tr>
<tr>
<td>Unit 8</td>
<td>2</td>
<td>Two pairs of football socks cost £10·40, while one pair of football socks costs £7·75. (a) How much more does two pairs of football socks cost? (b) How much would three pairs cost?</td>
</tr>
<tr>
<td>Unit 8</td>
<td>3</td>
<td>Two numbers have a difference of 1·25. Both numbers are less than 20. What could the other two numbers be?</td>
</tr>
<tr>
<td>Unit 8</td>
<td>4</td>
<td>(a) $11·8 + 9 = 21·7$ (b) $16·\square - 4·05 = 12·28$</td>
</tr>
</tbody>
</table>
Coins

1p 1p 1p 1p 1p 1p 1p
5p 5p 5p 5p 5p 5p 5p
10p 10p 10p 10p 10p 10p 10p
20p 20p 20p 20p 20p 20p 20p
50p 50p 50p 50p 50p 50p 50p
£1 £1 £1 £1 £1 £1 £1

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<table>
<thead>
<tr>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
<th>Tenths</th>
<th>Hundredths</th>
<th>Thousandths</th>
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<tr>
<td></td>
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<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Place Value Frame – Decimals (HTO·h t h)**
### Cafe and Curry Menus

#### Cafe Menu

<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chef's salad</td>
<td>£7.99</td>
</tr>
<tr>
<td>Soup</td>
<td>£5.25</td>
</tr>
<tr>
<td>Tomato pasta</td>
<td>£7.90</td>
</tr>
<tr>
<td>Chunky chips</td>
<td>£2.45</td>
</tr>
<tr>
<td>Coffee</td>
<td>£1.90</td>
</tr>
<tr>
<td>Orange juice</td>
<td>£1.49</td>
</tr>
<tr>
<td>Water</td>
<td>£0.75</td>
</tr>
</tbody>
</table>

#### Curry Menu

<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicken madras curry</td>
<td>£7.95</td>
</tr>
<tr>
<td>Prawn korma curry</td>
<td>£8.95</td>
</tr>
<tr>
<td>Vegetable balti curry</td>
<td>£5.45</td>
</tr>
<tr>
<td>Lamb tikka curry</td>
<td>£6.35</td>
</tr>
<tr>
<td>Pilau rice (large)</td>
<td>£2.35</td>
</tr>
<tr>
<td>Pilau rice (small)</td>
<td>£1.85</td>
</tr>
<tr>
<td>Mushroom rice</td>
<td>£2.80</td>
</tr>
<tr>
<td>Egg fried rice</td>
<td>£2.55</td>
</tr>
<tr>
<td>Poppadoms</td>
<td>£0.50</td>
</tr>
<tr>
<td>Plain naan</td>
<td>£2.40</td>
</tr>
<tr>
<td>Garlic naan</td>
<td>£2.70</td>
</tr>
<tr>
<td>Keema naan</td>
<td>£3.35</td>
</tr>
<tr>
<td>Peshwari naan</td>
<td>£2.95</td>
</tr>
</tbody>
</table>
### Written Assessment Questions

Note: answers to these questions can be found on Written Assessment Answers (PCMs 6a and 6b).

<table>
<thead>
<tr>
<th>Unit</th>
<th>Session</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>1</td>
<td>Calculate (\frac{3}{7} + \frac{2}{7}) and (\frac{3}{11} + \frac{6}{11}). Write down the answers in fractions and words.</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>On a blank 100 Square, shade 0·25, 0·12 and 0·33. Now write each decimal as a fraction.</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>Is ‘Buy One Get One Free’ the same as ‘50% off’? Explain your thinking.</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>Find three fifths of 45. Write down the steps you took to find the answer.</td>
</tr>
</tbody>
</table>
| 7    | 1       | Place the following decimals in ascending order:  
(a) 0·8, 0·5, 0·9, 0·1, 0·4, 0·7, 0·3  
(b) 0·65, 0·38, 0·27, 0·25, 0·97, 0·01  
(c) 0·3, 0·08, 0·6, 0·07, 0·55, 0·64, 0·33  
Can you work out:  
(d) 0·6 + 0·2 =   
(e) 0·05 + 0·03 =   
(f) 0·6 − 0·2 =   
(g) 0·05 − 0·03 = |
| 7    | 2       | Alya has 3 × £1 coins and 4 pence. She writes this down as £3·4. Is her answer correct? If not, what would the correct answer be and why? |
| 7    | 3       | In the number 6·374, what place value does the digit 4 have? Which is bigger, 4·009 or 4·101? |
| 7    | 4       | What is 7·8 rounded to the nearest whole number? What is 14·17 rounded to the nearest tenth? |
| 8    | 1       | 71953 + 8621 = |
| 8    | 2       | Two pairs of football socks cost £10·40, while one pair of football socks costs £7·75.  
(a) How much more does two pairs of football socks cost?  
(b) How much would three pairs cost? |
| 8    | 3       | Two numbers have a difference of 1·25. Both numbers are less than 20. What could the other two numbers be? |
| 8    | 4       |  
(a) 11·8 + 9·□ = 21·7  
(b) 16·□ − 4·05 = 12·28 |
- **Unit Session Question**
  - **Unit 6**
    - 1 Calculate $3\frac{7}{2} + 2\frac{7}{2}$ and $3\frac{11}{6} + 6\frac{11}{6}$. Write down the answers in fractions and words.
  - **Unit 6**
    - 2 On a blank 100 Square, shade 0·25, 0·12 and 0·33. Now write each decimal as a fraction.
  - **Unit 6**
    - 3 Is 'Buy One Get One Free' the same as '50% off'? Explain your thinking.
  - **Unit 6**
    - 4 Find three fifths of 45. Write down the steps you took to find the answer.
  - **Unit 7**
    - 1 Place the following decimals in ascending order:
      - (a) 0·8, 0·5, 0·9, 0·1, 0·4, 0·7, 0·3
      - (b) 0·65, 0·38, 0·27, 0·25, 0·97, 0·01
      - (c) 0·3, 0·08, 0·6, 0·07, 0·55, 0·64, 0·33
    - Can you work out:
      - (d) 0·6 + 0·2 =    (e) 0·05 + 0·03 =
      - (f) 0·6 − 0·2 =     (g) 0·05 − 0·03 =
  - **Unit 7**
    - 2 Alya has 3 × £1 coins and 4 pence. She writes this down as £3·4. Is her answer correct? If not, what would the correct answer be and why?
  - **Unit 7**
    - 3 In the number 6·374, what place value does the digit 4 have?
  - Which is bigger, 4·009 or 4·101?
  - **Unit 7**
    - 4 What is 7·8 rounded to the nearest whole number? What is 14·17 rounded to the nearest tenth?
  - **Unit 8**
    - 1 Estimate: 72 000 + 9000 = 81 000
    - 71 953 + 8621 = 80 574
  - **Unit 8**
    - 2 (use adding and subtracting)
      - (a) 10·40 − 7·75 = £2·65
      - (b) 10·40 + 7·75 = £18·15
  - **Unit 8**
    - 3 There are many possibilities. Some examples of adding and subtracting are 8 and 9·25, or 18 and 16·7.
  - **Unit 8**
    - 4 (use the inverse, missing numbers in bold)
      - (a) 21·7 − 11·8 = 9·9
      - (b) 12·28 + 4·05 = 16·33
  - **Unit 9**
    - 1 95·8 seconds, 9·58 × 10
  - **Unit 9**
    - 2 420 , 28 × 10 = 280, 28 × 5 = 140 (half of 280), 280 + 140 = 420
  - **Unit 9**
    - 3 30, 15 ÷ 5 = 3, 10 packs: 3 × 10 = 30
  - **Unit 9**
    - 4 6 $\frac{7}{10}$ , 6 $\cdot$ 7
  - **Unit 10**
    - 1 The numerator (top number) is smaller than the denominator (bottom number).
  - **Unit 10**
    - 2 6, 5 $\frac{10}{10}$
  - **Unit 10**
    - 3 Yes, $\frac{5}{6} \times \frac{6}{8} = \frac{30}{36}$
  - **Unit 10**
    - 4 10, 25 × $\frac{2}{5} = \frac{50}{5} = 10$
  - **Unit 11**
    - 1 $\frac{7}{12}$, $\frac{1}{4} + $ $\frac{1}{3} = \frac{3}{12} + \frac{4}{12} = \frac{7}{12}$
  - **Unit 11**
    - 2 $\frac{5}{6}$ or (5 $\frac{3}{4}$), 3 + 1 = 4, $\frac{7}{10} + \frac{9}{10} = \frac{16}{10} = 1 \frac{6}{10}$. 4 + 1 $\frac{6}{10} = 5 \frac{6}{10}$
  - **Unit 11**
    - 3 £2, 40% = $\frac{40}{100} = \frac{2}{5}$, $\frac{2}{5} \times £5 = £2$
  - **Unit 11**
    - 4 45, $\frac{9}{10} \times 50 = 9 \times 5 = 45
Spinner Overlays – Dividing

### Dividends

- 54
- 35
- 13
- 12
- 21
- 15
- 9

### Divisors

- 11
- 2
- 4
- 38
- 5
- 2

### Numerators

- 1
- 5
- 27

### Denominators

- 11
- 2
- 4
- 38
- 5

### Eighths

- $\frac{1}{8}$
- $\frac{3}{8}$
- $\frac{2}{8}$
<table>
<thead>
<tr>
<th>Unit</th>
<th>Session</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 9</td>
<td>1</td>
<td>If a train travels 100 m in 9.58 seconds, how quickly will it travel 1 km? Write down how you could work that out. What else do you have to think about?</td>
</tr>
<tr>
<td>Unit 9</td>
<td>2</td>
<td>There are 28 pens in a pack. How many pens would there be in 10 packs, and in 15 packs? Write down the steps you took to find the answers.</td>
</tr>
<tr>
<td>Unit 9</td>
<td>3</td>
<td>If there were 15 carrots divided by 5, what is the answer? What would the answer be if there were ten times as many carrots? Write down the steps you took to find the answers.</td>
</tr>
<tr>
<td>Unit 9</td>
<td>4</td>
<td>Divide 67 by 10 and write the remainder as a fraction and as a decimal.</td>
</tr>
<tr>
<td>Unit 10</td>
<td>1</td>
<td>Describe how you know when a fraction is a proper fraction and write down an example of one.</td>
</tr>
<tr>
<td>Unit 10</td>
<td>2</td>
<td>What happens when you add $\frac{1}{10}$ to $5\frac{9}{10}$? Write down what you notice.</td>
</tr>
<tr>
<td>Unit 10</td>
<td>3</td>
<td>Is $\frac{5}{6}$ equivalent to $\frac{30}{36}$? Explain how you know.</td>
</tr>
<tr>
<td>Unit 10</td>
<td>4</td>
<td>A bus has 25 passengers. If two fifths ($\frac{2}{5}$) of the passengers are children, how many children are on the bus? Write down the steps you took to find the answer.</td>
</tr>
<tr>
<td>Unit 11</td>
<td>1</td>
<td>In a pack of balloons, $\frac{1}{4}$ are red, $\frac{1}{3}$ are yellow. What fraction are red or yellow? What fraction are neither red nor yellow? Write down the steps you took to find the answer.</td>
</tr>
<tr>
<td>Unit 11</td>
<td>2</td>
<td>What is $3\frac{7}{10} + 1\frac{9}{10}$? Write down the steps you took to find the answer.</td>
</tr>
<tr>
<td>Unit 11</td>
<td>3</td>
<td>Find 40% of £5. Write down the steps you took to find the answer.</td>
</tr>
<tr>
<td>Unit 11</td>
<td>4</td>
<td>Calculate $\frac{9}{10}$ of 50. Write down the steps you took to find the answer.</td>
</tr>
<tr>
<td>Session</td>
<td></td>
<td></td>
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<tr>
<td>---------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session 1</td>
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<tr>
<td>Session 2</td>
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<tr>
<td>Session 3</td>
<td></td>
<td></td>
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<tr>
<td>Session 4</td>
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</tbody>
</table>
Learning Log Prompts

In the Assessing and reflecting section of the sessions, there is a chance for pupils to reflect on their learning using the Learning Log (photocopiable master 1). These prompts can be used with the log to build up a record of pupils’ achievements.

Knowledge / skills

• What do you know now, that you did not know at the start of the session?
• What skills have you used during this session?
• Draw a picture showing what you have learned today.
• Create a mind-map showing what we have learned today.

Emotional

• How has today’s session made you feel?
• What difficulties have you encountered today? How have you dealt with them?
• Pick one good thing you have done today. Identify why it was good and how it helped you.

Connections

• How does today’s session connect to our previous areas of study?
• How might you combine today’s learning with something else you already know?

Using the learning in practice

• How might you use your learning from today’s session in the future?
• Who might use what we have learned today in their daily lives?

Re-teaching / metacognition

• If you were going to teach this session to someone else, what would you identify as the key things they would need to know?
• Swap your work with a partner and assess it. What have they done well? How might they improve?
• Write a text message explaining what you have learned this session.
• Write a possible exam question based on today’s learning. Swap books with a partner and attempt their question.

Learning journey

• Based on what we have learned today, what do you think we should study next? Why?
• What strengths have you shown in today’s session? What areas for improvement can you find?
• Write down any questions you still have about the topic, which you do not feel have been answered yet.
This sample contains one session from each of the five Big Ideas:

- Ordering and comparing numbers: 4-digit and 5-digit numbers from Number and place value
- Percentages from Fractions, decimals and percentages
- Adding and subtracting money from Adding and subtracting
- Interpreting remainders from Multiplying and dividing
- Comparing and ordering fractions from Fractions

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<table>
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<tr>
<th>Title</th>
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