How to use the mixed-age SOL

In this document, you will find suggestions of how you may structure a progression in learning for a mixed-age class.

Firstly, we have created a yearly overview.

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>Week 5</th>
<th>Week 6</th>
<th>Week 7</th>
<th>Week 8</th>
<th>Week 9</th>
<th>Week 10</th>
<th>Week 11</th>
<th>Week 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autumn</td>
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<tr>
<td>Number: Place Value</td>
<td>Number: Four Operations</td>
<td>Number: Fractions</td>
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<td>Spring</td>
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<tr>
<td>Y6: SATS</td>
<td>Investigations</td>
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</tbody>
</table>

Each term has 12 weeks of learning. We are aware that some terms are longer and shorter than others, so teachers may adapt the overview to fit their term dates.

The overview shows how the content has been matched up over the year to support teachers in teaching similar concepts to both year groups. Where this is not possible, it is clearly indicated on the overview with 2 separate blocks.

For each block of learning, we have grouped the small steps into themes that have similar content. Within these themes, we list the corresponding small steps from one or both year groups. Teachers can then use the single-age schemes to access the guidance on each small step listed within each theme.

The themes are organised into common content (above the line) and year specific content (below the line). Moving from left to right, the arrows on the line suggest the order to teach the themes.
Here is an example of one of the themes from the Year 1/2 mixed-age guidance.

### Subtraction

**Year 1 (Aut B2, Spr B1)**
- How many left? (1)
- How many left? (2)
- Counting back
- Subtraction - not crossing 10
- Subtraction - crossing 10 (1)
- Subtraction - crossing 10 (2)

**Year 2 (Aut B2, B3)**
- Subtract 1-digit from 2-digits
- Subtract with 2-digits (1)
- Subtract with 2-digits (2)
- Find change - money

In order to create a more coherent journey for mixed-age classes, we have re-ordered some of the single-age steps and combined some blocks of learning e.g. Money is covered within Addition and Subtraction.

The bullet points are the names of the small steps from the single-age SOL. We have referenced where the steps are from at the top of each theme e.g. Aut B2 means Autumn term, Block 2. Teachers will need to access both of the single-age SOLs from our website together with this mixed-age guidance in order to plan their learning.

### Points to consider

- Use the mixed-age schemes to see where similar skills from both year groups can be taught together. Learning can then be differentiated through the questions on the single-age small steps so both year groups are focusing on their year group content.
- When there is year group specific content, consider teaching in split inputs to classes. This will depend on support in class and may need to be done through focus groups.
- On each of the block overview pages, we have described the key learning in each block and have given suggestions as to how the themes could be approached for each year group.
- We are fully aware that every class is different and the logistics of mixed-age classes can be tricky. We hope that our mixed-age SOL can help teachers to start to draw learning together.
<table>
<thead>
<tr>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>Week 5</th>
<th>Week 6</th>
<th>Week 7</th>
<th>Week 8</th>
<th>Week 9</th>
<th>Week 10</th>
<th>Week 11</th>
<th>Week 12</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Autumn</strong></td>
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<td>Number: Place Value</td>
<td>Number: Four Operations</td>
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<td></td>
<td></td>
<td></td>
<td>Number: Fractions</td>
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<td><strong>Spring</strong></td>
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</tr>
<tr>
<td>Y5: Number: Fractions</td>
<td>Number: Decimals and Percentages</td>
<td>Y5: Number: Decimals</td>
<td>Measurement: Converting Units</td>
<td>Measurement: Perimeter, Area and Volume</td>
<td>Statistics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y6: Number: Ratio</td>
<td>Y6: Number: Algebra</td>
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<tr>
<td>Y6: SATS</td>
<td>Investigations</td>
<td>Consolidation</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
In this section, content from single-age blocks are matched together to show teachers where there are clear links across the year groups. Teachers may decide to teach the lower year’s content to the whole class before moving the higher year on to their age-related expectations. The lower year group is not expected to cover the higher year group’s content as they should focus on their own age-related expectations.

In this section, content that is discrete to one year group is outlined. Teachers may need to consider a split input with lessons or working with children in focus groups to ensure they have full coverage of their year’s curriculum. Guidance is given on each page to support the planning of each block.

The themes should be taught in order from left to right.
Common Content

Metric Measures
Year 5 (Sum B4)
- Kilograms and Kilometres
- Milligrams and millilitres
- Metric Units
Year 6 (Spr B4)
- Metric measures
- Convert metric measures
- Calculate with metric measures

Imperial Measures
Year 5 (Sum B4)
- Imperial units
Year 6 (Spr B4)
- Imperial measures

Miles & Kilometres
Year 6 (Spr B4)
- Miles and kilometres

Time
Year 5 (Sum B4)
- Converting units of time

In this block, both year groups look at metric and imperial measures.

Year 6 extend their learning by looking at converting between miles and kilometres.

Teachers may decide to recap converting units of time with both year groups. Time is covered again later in the term when reading timetables in the Statistics block.
Block 4 - Converting Units

Theme 1 - Metric Measures
Kilograms and Kilometres

Notes and Guidance

Children focus on the use of the prefix ‘kilo’ in units of length and mass, meaning a thousand. They convert from metres to kilometres (km), grams to kilograms (kg) and vice versa. It is useful for children to feel the weight of a kilogram and various other weights in order for them to have a better understanding of their value.

Bar Models or double number lines are useful for visualising the conversions.

Mathematical Talk

What does ‘kilo’ mean when used at the start of a word?

Complete the stem sentence:
There are _____ grams in ___ kilograms.

How would you convert a fraction of a kilometre to metres?

What is the same and what is different about converting from kg to g and km to m?

Varied Fluency

Find the missing values on the double number line.

<table>
<thead>
<tr>
<th>kg</th>
<th>1</th>
<th>2</th>
<th>2.5</th>
<th>4.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>g</td>
<td>500</td>
<td>1,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Write your conversions as sentences.

Complete the missing information.

\[
\frac{1}{10} \text{ kilogram} = \bigcirc \text{ grams} \quad \frac{3}{10} \text{ km} = \bigcirc \text{ metres}
\]

\[
7 \text{ kg} + \frac{1}{4} \text{ kg} = \bigcirc \text{ g} \quad 12 \text{ km} + \bigcirc \text{ km} = 12,500 \text{ m}
\]

Compare the measurements using <, > or =

5 kg \bigcirc 4,500 g \quad 12 kg \bigcirc 12,000 g

3.7 km \bigcirc 370 m \quad 37,000 m \bigcirc 3.7 \text{ km}
Amir buys 2,500 grams of potatoes and 2,000 grams of carrots. He pays with a £5 note. How much change does he get?

Eva is converting measurements. She says, I have divided by 1,000 to convert the measurements.

Which conversions could Eva have completed?

- 3 km $\rightarrow$ 3,000 m
- 3,000 m $\rightarrow$ 3 km
- 5,500 g $\rightarrow$ 5.5 kg
- 2.8 kg $\rightarrow$ 2,800 g

Eva could have converted 3,000 m to 3 km or 5,500 g to 5.5 kg.
Children focus on the use of milli- in units of length and mass. They understand that milli- means \( \frac{1}{1,000} \).

They convert from metres to millimetres (mm), litres to millilitres (ml) and vice versa. Using rulers, metre sticks, jugs and bottles helps children to get a better understanding of the conversions.

Complete the missing information

\[
\begin{align*}
\frac{1}{1,000} \text{ m} &= \underline{\text{mm}} \\
\frac{1}{100} \text{ m} &= \underline{\text{mm}} \\
\frac{1}{10} \text{ m} &= \underline{\text{mm}} \\
3 \text{ l} + \frac{1}{4} \text{ l} &= \underline{\text{ml}} \\
2 \text{ l} + \underline{\text{ml}} &= 2,500 \text{ ml}
\end{align*}
\]

Compare the measurements using <, > or =

\[
\begin{align*}
2 \text{ l} &\quad 1,500 \text{ ml} &\quad 60 \text{ l} &\quad 6,000 \text{ ml} \\
2.8 \text{ m} &\quad 280 \text{ mm} &\quad 3,700 \text{ m} &\quad 3.7 \text{ mm}
\end{align*}
\]
### Milligrams and Millilitres

**Reasoning and Problem Solving**

<table>
<thead>
<tr>
<th>Cola is sold in bottles and cans.</th>
<th>Alex sells 54 glasses. Alex makes £1.59 profit.</th>
<th>Ribbon is sold in 225 mm pieces. Teddy needs 5 metres of ribbon. How many pieces does he need to buy? Teddy would like to make either a bookmark or a rosette with his left over ribbon. Which can he make?</th>
</tr>
</thead>
<tbody>
<tr>
<td>330 ml 48 p</td>
<td></td>
<td>To make 5 bookmarks you will need: 1.2 metres of ribbon 1 pair of scissors</td>
</tr>
<tr>
<td>1.25 litres £1.59</td>
<td></td>
<td>To make 1 mini rosette you will need: 4 pieces of ribbon cut to 35 mm A stapler</td>
</tr>
<tr>
<td>Alex buys 5 cans and 3 bottles. She sells the cola in 100 ml glasses. She sells all the cola. How many glasses does she sell? Alex charges 50 p per glass. How much profit does she make?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teddy buys 23 pieces of ribbon. Teddy will have 175 mm left over. A bookmark needs 240 mm, and a rosette needs 140 mm so he can make the rosette.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Cola**

- **Sold in**: Bottles and cans.
- **Alex buys**: 5 cans and 3 bottles.
- **She sells the cola in**: 100 ml glasses.
- **How many glasses does she sell?**
- **Alex charges**: 50 p per glass.
- **How much profit does she make?**

**Ribbon**

- **Sold in**: 225 mm pieces.
- **Teddy needs**: 5 metres of ribbon.
- **How many pieces does he need to buy?**
- **Teddy would like to make**: Either a bookmark or a rosette with his left over ribbon.
- **Which can he make?**

**To make 5 bookmarks**

- **You will need**: 1.2 metres of ribbon 1 pair of scissors

**To make 1 mini rosette**

- **You will need**: 4 pieces of ribbon cut to 35 mm A stapler
Measure the height of the piles of books in centimetres.

Find the difference between the tallest and shortest pile of books in millimetres.

Line A is 6 centimetres long.
Line B is 54 millimetres longer than line A.
Line C is \( \frac{2}{3} \) of line B.
Draw lines A, B and C.

Here are the heights of 4 children.

What is the same and what is different about these conversions?
• Converting from cm to m
• Converting from m to cm

What does ‘centi’ mean when used at the start of a word?

Which unit of measure would be best to measure: the height of a door frame, the length of a room, the width of a book?

Whitney 1.3 m  Jack 124 cm  Rosie 1.32 m  Mo 141 cm

Put the children in height order, starting with the shortest. Write their heights in millimetres.
### Metric Units

#### Reasoning and Problem Solving

A plank of wood is 5.8 metres long.

Two lengths are cut from the wood.  

| 175 cm | \( \frac{3}{5} \) m |

How much of the wood is left?

| There is 25 cm left. | \( \div 10 \) | \( \div 100 \) | \( \div 1,000 \) |

Complete the conversion diagram.

| mm | cm | m |

Can you make a diagram to show conversions from m and cm to mm?

An 10 pence coin is 2 mm thick.

A pile of 10 pence coins worth £1.30  

What is the height of the pile of coins in centimetres?

| ±10 | ±100 | ±1,000 |

Dora says,

| One metre is 100 times bigger than one centimetre. One centimetre is 10 times bigger than one millimetre. So, one metre is 110 times bigger than one millimetre. |

Is Dora correct?

| Explain your answer. |

Dora is incorrect. She has added the number of times bigger together rather than multiplying.

| One metre is 1,000 times bigger than one millimetre. |

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Children read, write and recognise all metric measures for length, mass and capacity. They may need to be reminded the difference between capacity (the amount an object can contain) and volume (the amount actually in an object).

They develop their estimation skills in context and decide when it is appropriate to use different metric units of measure.

Which units measure length? Mass? Capacity?

When would you use km instead of m? When would you use mm instead of cm?

Which is the most appropriate unit to use to measure the object? Explain your answer.

Why do you think _____ is not an appropriate estimate?

Choose the unit of measure that would be the most appropriate to measure the items.

- The weight of an elephant
- The volume of water in a bath
- The length of an ant
- The length of a football pitch
- The weight of an apple

Estimate how much juice the glass holds:

- 250 ml
- 2 litres
- 0.5 litres
- \(\frac{1}{2}\) kg

Estimate the height of the door frame:

- 20 mm
- 20 cm
- 2 m
- 2 km
- 0.2 km

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Teddy thinks his chew bar is 13.2 cm long.

Do you agree? Explain why.

Teddy is wrong because he has not lined up the end of his chew bar with zero. It is actually 8.8 cm long.

Ron’s dog is about $\frac{1}{4}$ of the height of the door. Ron is three times the height of his dog. Estimate the height of Ron and his dog.

Door $= 2\text{ m} (200\text{ cm})$

Dog $= 50\text{ cm}$

Ron $= 150\text{ cm}$

Here is a train timetable showing the times of trains travelling from Halifax to Leeds.

<table>
<thead>
<tr>
<th>Time (Halifax)</th>
<th>Time (Leeds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>07:33</td>
<td>08:09</td>
</tr>
<tr>
<td>07:49</td>
<td>08:37</td>
</tr>
<tr>
<td>07:52</td>
<td>08:51</td>
</tr>
</tbody>
</table>

An announcement states all trains will arrive $\frac{3}{4}$ of an hour late. Which train will arrive in Leeds closest to 09:07?

The first train from Halifax, which will now arrive in Leeds at 08:54.
There are ___ grams in one kilogram.
There are ___ kilograms in one tonne.
Use these facts to complete the tables.

<table>
<thead>
<tr>
<th>g</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,500</td>
<td></td>
</tr>
<tr>
<td>2.05</td>
<td></td>
</tr>
<tr>
<td>1,005</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>kg</th>
<th>tonnes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,202</td>
<td></td>
</tr>
<tr>
<td>4.004</td>
<td></td>
</tr>
<tr>
<td>125</td>
<td></td>
</tr>
</tbody>
</table>

There are ___ mm in one centimetre.
There are ___ cm in one metre.
There are ___ m in one kilometre.
Use these facts to complete the table.

<table>
<thead>
<tr>
<th>mm</th>
<th>cm</th>
<th>m</th>
<th>km</th>
</tr>
</thead>
<tbody>
<tr>
<td>44,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2,780</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.75</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How could you work out what each mark is worth on the scales?
What do you think would be the most efficient method for converting the units of time?
What's the same and what's different between 1.5 km and 1.500 km? Are the zeroes needed? Why or why not?
What do you notice about the amounts in the table? Can you spot a pattern?
What's the same and what's different about km and kg?
Mo thinks that 12,000 g is greater than 20 kg because 12,000 > 20.

Explain why Mo is wrong.

Put these capacities in order, starting with the smallest.

A shop sells one-litre bottles of water for 99p each.
300 ml bottles of water are on offer at 8 bottles for £2.

Whitney wants to buy 12 litres of water. Find the cheapest way she can do this.

£11.88 to buy 12 one-litre bottles.

12 litres = 40 bottles of size 300 ml.
40 ÷ 8 = 5 so this will cost 5 × 2 = £10
Whitney should buy 40 bottles of 300 ml.
A tube of toothpaste holds 75 ml. How many tubes can be filled using 3 litres of toothpaste?


To bake buns for a party, Ron used these ingredients:

- 600 g caster sugar
- 0.6 kg butter
- 18 eggs (792 g)
- \(\frac{3}{4}\) kg self-raising flour
- 10 g baking powder

What is the total mass of the ingredients? Give your answer in kilograms.

Children use and apply their conversion skills to solve measurement problems in context.

Teachers should model the use of pictorial representations, such as bar models, to represent the problem and help them decide which operation to use.

What operation are you going to use and why?

How could you use a bar model to help you understand the question?

How many ___ are there in a ___?

How can we convert between ___ and ___?
Calculate with Metric Measures

### Reasoning and Problem Solving

| Jack, Alex and Amir jumped a total of 12.69 m in a long jump competition. | Jack jumped 2.23 m. Alex jumped 4.23 m. Amir jumped 6.23 m. |
| Alex jumped exactly 200 cm further than Jack. | Each nail weighs 3.85 grams. There are 24 nails in a packet. |
| Amir jumped exactly 2,000 mm further than Alex. | What would be the total mass of 60 packets of nails? Give your answer in kilograms. |
| What distance did they all jump? Give your answers in metres. | How many packets would you need if you wanted \( \frac{1}{2} \) kg of nails? |
| Dora made a stack of her magazines. Each magazine on the pile is 2.5 mm thick. The total height of the stack is 11.5 cm high. How many magazines does she have in her pile? | How many grams of nails would be left over? |
| There are 46 magazines in Dora’s pile. | 5.544 kg |

6 packets (554.4 g)

55.4 g left over
Miles and Kilometres

Notes and Guidance

Children need to know that 5 miles is approximately equal to 8 km. They should use this fact to find approximate conversions from miles to km and from km to miles.

They should be taught the meaning of the symbol ‘≈’ as “is approximately equal to”.

Mathematical Talk

Give an example of a length you would measure in miles or km.

If we know 5 miles ≈ 8 km, how can we work out 15 miles converted to km?

Can you think of a situation where you may need to convert between miles and kilometres?

Varied Fluency

5 miles ≈ 8 kilometres

Use this fact to complete:
• 15 miles ≈ _______ km
• 30 miles ≈ _______ km
• _______ miles ≈ 160 km

If 10 miles is approximately 16 km, 1 mile is approximately how many kilometres?
• 2 miles ≈ _______ km
• 4 miles ≈ _______ km
• 0.5 miles ≈ _______ km

In the United Kingdom, the maximum speed on a motorway is 70 miles per hour (mph). In France, the maximum speed on a motorway is 130 kilometres per hour (km/h). Which country has the higher speed limit, and by how much? Give your answer in both units.
## Miles and Kilometres

### Reasoning and Problem Solving

#### Ron and Annie are running a 5 mile race.

Ron and Annie are running a 5 mile race. Annie has 1 mile left to run, whereas Ron has 1.2 miles left to run. Ron has the furthest left to run. Who has the furthest left to run?

<table>
<thead>
<tr>
<th>Ron</th>
<th>Annie</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have run 6.4 km so far</td>
<td>I have run 3.8 miles so far</td>
</tr>
</tbody>
</table>

#### The distance between Cardiff and London is 240 km.

A car is travelling at 60 mph. How long will it take them to get to London from Cardiff?

<table>
<thead>
<tr>
<th>The distance between Cardiff and London is 240 km.</th>
</tr>
</thead>
<tbody>
<tr>
<td>240 km ≈ 150 miles</td>
</tr>
<tr>
<td>150 ÷ 60 = 2 (\frac{1}{2}) hours</td>
</tr>
<tr>
<td>Or</td>
</tr>
<tr>
<td>60 miles ≈ 96 km</td>
</tr>
<tr>
<td>240 ÷ 96 = 2 (\frac{1}{2}) hours</td>
</tr>
</tbody>
</table>

#### Mo cycles 45 miles over the course of 3 days.

Mo cycles 45 miles over the course of 3 days. On day 1, he cycles 16 km. On day 2, he cycles 10 miles further than he did on day 1.

<table>
<thead>
<tr>
<th>Mo cycles 45 miles over the course of 3 days.</th>
</tr>
</thead>
<tbody>
<tr>
<td>On day 1, he cycles 16 km.</td>
</tr>
<tr>
<td>On day 2, he cycles 32 km / 20 miles.</td>
</tr>
<tr>
<td>How far does he cycle on day 3?</td>
</tr>
<tr>
<td>Give your answer in miles and in kilometres.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>On day 3 he cycles</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 km / 15 miles.</td>
</tr>
</tbody>
</table>

#### Mo cycles 45 miles over the course of 3 days.

On day 1 he cycles 16 km / 10 miles. On day 2 he cycles 32 km / 20 miles. On day 3 he cycles 24 km / 15 miles.
Year 5 | Spring Term | Week 8 – Measurement: Converting Units

Imperial Units

Notes and Guidance

Children are introduced to imperial units of measure for the first time. They understand and use approximate equivalences between metric units and common imperial units such as inches, pounds (lbs) and pints.
Using the measurements in the classroom, such as with rulers, pint bottles, weights and so forth, helps children to get an understanding of the conversions.
1 kg is sometimes seen as approximating to 2.2 lbs.

Mathematical Talk

What do we still measure in inches? Pounds? Pints?

Why do you think we still use these imperial measures?

What does approximate mean?

Why do we not use the equals (=) sign with approximations?

How precise should approximation be?

Varied Fluency

One inch is approximately 2.5 centimetres
1 inch ≈ 2.5 cm

Use the bar models to help with the conversions.

? cm

1 in 1 in 1 in 1 in

16 in ≈ □ cm

15 in ≈ □ cm

33 in ≈ □ m

10 cm ≈ □ in

1 cm ≈ □ in

5.5 m ≈ □ in

1 kilogram is approximately 2 pounds
1 kg ≈ 2 lbs

Use this information to complete the conversions.

2 kg ≈ □ lbs

5 kg ≈ □ lbs

□ kg ≈ 22 lbs

55 kg ≈ □ lbs

There are 568 millilitres in a pint.

How many litres are there in:

- 2 pints
- 5 pints
- 0.5 pints
- 2.5 pints

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Jack's house has 3 pints of milk delivered 4 times a week. How many litres of milk does Jack have delivered each week?

He uses about 200 ml of milk every day in his cereal. Approximately, how many pints of milk does Jack use for his cereal in a week?

12 pints is approximately 6,816 millilitres, or 6.8 litres.

200 × 7 = 1,400 ml

1400 ÷ 568 = 2.46 pints

So Jack uses approximately 2 and a half pints.

Children convert both measures to the same unit.

Dora weighed approximately 3.9 kg and Amir weighed 3.5 kg so Dora was heavier.

Dora weighed 7.8 lbs when she was born.

Amir weighed 3.5 kg when he was born.

Who was heavier, Dora or Amir? Explain your answer.
Children need to know and use the following facts:

• 1 foot is equal to 12 inches
• 1 pound is equal to 16 ounces
• 1 stone is equal to 14 pounds
• 1 gallon is equal to 8 pints
• 1 inch is approximately 2.5 cm

They should use these to perform related conversions, both within imperial measures and between imperial and metric.

Mathematical Talk

Put these in order of size: 1 cm, 1 mm, 1 inch, 1 foot, 1 metre. How do you know?

When do we use imperial measures instead of metric measures?

Why are metric measures easier to convert than imperial measures?

Varied Fluency

Use these facts to complete:

2.5 cm ≈ 1 inch
1 foot = 12 inches

Use this fact to complete:

2 lbs = ____ ounces
5 stone = ____ lbs

---

• How many gallons are equivalent to 64 pints?
• How many pints are equivalent to 15 gallons?
• How many gallons are equivalent to 2 pints?
### Imperial Measures

#### Reasoning and Problem Solving

<table>
<thead>
<tr>
<th>Jack is 6 foot 2 inches tall.</th>
<th>Jack is 185 cm tall, he is 23 cm taller than Rosie.</th>
<th>Eva wants to make a cake.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosie is 162 cm tall.</td>
<td></td>
<td>Here are some of the ingredients she needs:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 8 ounces of caster sugar</td>
</tr>
<tr>
<td>Who is taller and by how much?</td>
<td></td>
<td>• 6 ounces of self-raising flour</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 6 ounces of butter</td>
</tr>
</tbody>
</table>

60 gallons of water are drunk at a sports day.

Each child drank 3 pints.

How many children were at the sports day?

60 gallons = 480 pints
480 ÷ 3 = 160 children

This is what Eva has in her cupboards:

- 0.5 lbs of caster sugar
- 0.25 lbs of self-raising flour
- $\frac{3}{8}$ lbs of butter

Does Eva have enough ingredients to bake the cake? If not, how much more does she need to buy?

Eva has the exact amount of butter and caster sugar, but does not have enough self-raising flour – she needs another 2 ounces.
Converting Units of Time

Notes and Guidance

Children convert between different units of time including years, months, weeks, days, hours, minutes and seconds.
Bar modelling will support these conversions.
Use of time lines, calendars, clocks is recommended to enhance pupils’ understanding.
It is worth reminding pupils that time is not decimal so some methods may not be effective for conversions.

Mathematical Talk

How many months / weeks / days are there in a year?
How many hours / minutes / seconds are there in a day?
Can 21 days be written in weeks? Can 25 days be written in weeks? Explain your answers.
Is 0.75 hours the same as 75 minutes? Why or why not?

Varied Fluency

Complete the conversions.
1 year = months 2.5 years = months
 years = 60 months 3 years 2 months = months
 years months = 75 months

Complete the table.

<table>
<thead>
<tr>
<th>Days</th>
<th>Weeks / Weeks and Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>42 days</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 weeks and 5 days</td>
</tr>
<tr>
<td></td>
<td>10 weeks and 5 days</td>
</tr>
<tr>
<td>100 days</td>
<td></td>
</tr>
</tbody>
</table>

Use this information to complete the conversions.
$\frac{1}{3}$ hour = minutes
3 and 24 = 204
1.5 minutes = seconds
1.05 minutes = seconds
Teddy’s birthday is in March. Amir’s birthday is in April. Amir is 96 hours older than Teddy. What dates could Teddy and Amir’s birthdays be?

- 28th March and 1st April
- 29th March and 2nd April
- 30th March and 3rd April
- 31st March and 4th April

Three children are running a race.

- Whitney finishes the race in 3 minutes 5 seconds.
- Eva finishes the race in 192 seconds.
- Alex finishes the race in 2 minutes and 82 seconds.

Who finishes the race first?

Whitney: 3 min 5 s
Eva: 3 min 12 s
Alex: 3 min 22 s

Whitney finishes the race first.