

**Unit 11**  
**Fractions**

Five daily lessons

**North West Consultants**

**Year 3**  
**Spring term**

This Unit Plan is designed to guide your teaching.  
You will need to adapt it to meet the needs of your class.

**Unit Objectives**  
**Year 3**

- **Begin to recognise simple equivalent fractions e.g. 5/10 is equivalent to  $\frac{1}{2}$ , 5/5 to 1 whole**

Pages

**Link Objectives**

**Year 2**

**Year 4**

- Begin to recognise and find one quarter of shapes and small numbers of objects.
- Recognise that 4 quarters make one whole

- Recognise equivalence of simple fractions
- Identify 2 fractions with a total of 1
- Compare a fraction with one half, and say whether it is greater or less

**Resources needed to teach this unit:**

- Fraction ITP
- Squared paper strips
- Multilink
- Card
- Whiteboards
- Number fans

Planning Sheet	Day 1	Unit 11 Fractions		Term: Spring	Year Group: 3
Oral and Mental		Main Teaching			Plenary
Objectives and Vocabulary	Teaching Activities	Objectives and Vocabulary	Teaching Activities	Teaching Activities/Focus Questions	
		<p><b>Begin to recognise simple equivalent fractions.</b> E.g. <math>5/10</math> is equal to <math>1/2</math></p> <p><b>Vocab</b> Equivalent Tenths Equal parts</p> <p><b>Resources</b> Fraction ITP Squared paper strips</p>	<p>Write the word fraction on the board. Ask the children to discuss with their partner what they know about fractions. Make a spider diagram with all the children's contributions.</p> <p><b>Q. How do we find <math>1/4</math> of 8?</b></p> <p>Children to discuss how to find fractions of amounts and recap how to find <math>3/4</math> and <math>2/3</math>.</p> <p>Use fraction wall ITP Show strip divided in half and one divided in quarters. Highlight 2 quarters.</p> <p><b>Q. What fraction of the wall is highlighted?</b> Expect the answer <math>2/4</math> or <math>1/2</math></p> <p><b>Q. What do we know from looking at the strips about <math>2/4</math>?</b> Expect the answer it is the same as <math>1/2</math></p> <p>Explain that these fractions are equivalent or the same.</p> <p>Give the children equal length paper strips made from squared paper. Ask them to fold one in half and then fold the other strips to show equivalent fractions.</p>	<p>Discuss with the children the equivalent fractions they found. Show these using the interactive teaching programme for fractions.</p> <p>Then using the ITP show a rod divided into 10.</p> <p><b>Q. How many tenths in <math>1/2</math>?</b></p> <p>Ask one of the children to highlight the tenths.</p> <p>Now show a rod divided into 12.</p> <p><b>Q. How many twelfths in <math>1/2</math>?</b></p> <p>Ask children to explain how to work out the equivalent fractions for <math>1/2</math>.</p> <div style="border: 1px solid black; padding: 10px; margin-top: 20px;"> <p>By the end of the lesson children should know:</p> <p>How to find fractions equivalent to <math>1/2</math></p> </div>	

Planning Sheet	Day 2	Unit 11: Fractions		Term: Spring	Year Group: 3
Oral and Mental		Main Teaching			Plenary
Objectives and Vocabulary	Teaching Activities	Objectives and Vocabulary	Teaching Activities	Teaching Activities/Focus Questions	
		<p>Begin to recognise simple equivalent fractions. E.g. <math>5/10</math> is equal to <math>1/2</math></p> <p><b><u>Vocab</u></b> Equivalent Tenths Equal parts</p> <p><b><u>Resources</u></b> Whiteboards</p>	<p><b>Q. If I have 10 strawberries and I give 1 each to my 5 friends, what fraction of the strawberries have I given away?</b></p> <p>Children to discuss this with partners and write fraction on whiteboards. Expect the answer <math>1/2</math> or <math>5/10</math>.</p> <p><b>Q. Why have we got 2 different fractions?</b></p> <p>Children to discuss again with partners and share ideas with class. Expect answer that these two fractions are the same or equivalent. Demonstrate this using a number line from 1 to 10. Show that <math>5/10</math> is the same as <math>1/2</math>.</p> <p><b>Q. In a car park there are 40 cars, 10 are red and 20 are blue. What fraction of the cars are red or blue?</b></p> <p>Children to solve this problem with a partner and show answer on whiteboard. Discuss answers and equivalent fractions</p> <p>Children to work with partners to develop problems to demonstrate equivalent fractions. Differentiate by giving the children fractions to include in their problems.</p>	<p><b>Q. In a car park there are 40 cars, 10 are red and 20 are blue. What fraction of the cars are neither red nor blue?</b></p> <p>Ask children to solve this problem with a partner. Discuss with the children how they found answer. Draw attention to the fact that this is a two-step problem.</p> <div style="border: 1px solid black; padding: 10px; margin-top: 20px;"> <p>By the end of the lesson children should know:</p> <p>How to find equivalent fractions of quantities</p> </div>	

Planning Sheet	Day 3	Unit 11: Fractions		Term: Spring	Year Group: 3
Oral and Mental		Main Teaching			Plenary
Objectives and Vocabulary	Teaching Activities	Objectives and Vocabulary	Teaching Activities	Teaching Activities/Focus Questions	
		<p><b>Begin to recognise simple equivalent fractions.</b> E.g. 5/10 is equal to <math>\frac{1}{2}</math></p> <p><b>Vocab</b> Equivalent Tenths Equal parts</p> <p><b>Resources</b> Cards for 'Follow me' game</p>	<p>This session the children will use the problems they wrote in the previous lesson to devise a game of 'follow on' with equivalent fractions.</p> <p>Each pair of children writes their problem on a piece of card that is divided in half with a space for answers at the top and the problem at the bottom.</p> <p>When children have written out problems sit children in circle. Start from one pair of children. They ask the next pair to solve their problem. (Rest of class also work out answer and write on whiteboards)</p> <p>Once pair 2 have solved problem, and the answer is agreed by rest of class, they write the answer on the answer section of their card and then ask the next pair to solve their problem.</p> <p>This continues round the circle until a loop is formed.</p> <p>Then take in all the cards and hand them out again randomly to the pairs of children.</p> <p>Play the game and use timer.</p> <p>Give the children a simple fraction <math>\frac{1}{2}, \frac{1}{4}, \frac{1}{3}</math> etc</p> <p>Ask them to draw a fraction wall to show equivalent fractions.</p>	<p><b>Q. What fraction is equivalent to <math>\frac{1}{3}</math>?</b></p> <p>Children to write answers on white boards</p> <p>Show all answers on the board.</p> <p><b>Q. How can you find equivalent fractions?</b></p> <p>Children to discuss with partners and share ideas with class.</p> <div style="border: 1px solid black; padding: 10px; margin-top: 20px;"> <p>By the end of the lesson children should know:</p> <p>How to find equivalent fractions.</p> </div>	

Planning Sheet	Day 4	Unit 11: Fractions		Term: Spring	Year Group: 3
Oral and Mental		Main Teaching			Plenary
Objectives and Vocabulary	Teaching Activities	Objectives and Vocabulary	Teaching Activities	Teaching Activities/Focus Questions	
		<p><b>Begin to recognise simple equivalent fractions.</b> E.g. 5/10 is equal to <math>\frac{1}{2}</math></p> <p><b><u>Vocab</u></b> Equivalent Tenths Equal parts</p> <p><b><u>Resources</u></b> Multilink Number fans</p>	<p>Give the children three pieces of card and ask them to write <math>\frac{1}{2}</math> on one card, then <math>\frac{1}{4}</math> on the next and <math>\frac{1}{3}</math> on the last card.</p> <p><b>Q. Show me a fraction equivalent to 5/10.</b></p> <p>Children to hold up their equivalent fraction card.</p> <p>Repeat for other equivalent fractions.</p> <p>Give the children 4 post it notes and ask them to work in pairs.</p> <p>Draw a number line on the board and mark <math>\frac{1}{4}</math>, <math>\frac{2}{3}</math>, <math>\frac{3}{4}</math> and <math>\frac{8}{10}</math></p> <p>Children to work in pairs to write an equivalent fraction on post it note and come and stick it on the board They are to use all four post it notes.</p> <p>Look at equivalent fractions with class and check they are all correct.</p> <p>Give children multilink cubes and ask them to make shapes from more than 10 cubes to show fractions <math>\frac{2}{3}</math>, <math>\frac{3}{4}</math>, <math>\frac{8}{10}</math> etc. Differentiate by setting different fractions. Children to write a sentence explaining <math>\frac{2}{3}</math> is represented by e.g. _____ blue cubes out of _____ cubes</p>	<p>Children to bring shapes and number sentences to plenary. Ask volunteers to share their work.</p> <p><b>Q. If <math>\frac{2}{3}</math> is represented by 12 blue cubes out of 18 cubes. How many cubes would be blue if we had 24 cubes altogether?</b></p> <p>Children to discuss with partners and show answers using number fans.</p> <p>Repeat with other questions.</p> <div style="border: 1px solid black; padding: 10px; margin-top: 20px;"> <p>By the end of the lesson children should know:</p> <p>How to find equivalent fractions to <math>\frac{2}{3}</math>, <math>\frac{3}{4}</math> etc</p> </div>	

<b>Planning Sheet</b>	<b>Day 5</b>	<b>Unit 11: Fractions</b>	<b>Term: Spring</b>	<b>Year Group: 3</b>
<b>Oral and Mental</b>		<b>Main Teaching</b>		<b>Plenary</b>
<b>Objectives and Vocabulary</b>	<b>Teaching Activities</b>	<b>Objectives and Vocabulary</b>	<b>Teaching Activities</b>	<b>Teaching Activities/Focus Questions</b>
		<p>Begin to recognise simple equivalent fractions. E.g. <math>5/10</math> is equal to <math>1/2</math></p> <p><b><u>Vocab</u></b> <b>Equivalent</b> <b>Tenths</b> <b>Equal parts</b></p>	<p><b>Q. I have a bag of 20 potatoes. I want to cook <math>3/4</math> of them. How many potatoes do I cook?</b></p> <p>Children to discuss with partner and work out answer on whiteboards.</p> <p>Ask children to share working with the class.</p> <p>e.g. <math>1/4</math> of 20 is 5 so <math>3/4</math> is 15</p> <p><b>Q. There are 40 sheep in a field. <math>2/10</math> of them are black. How many are white?</b></p> <p>Children to discuss with partner and work out answer on whiteboards.</p> <p>Ask children to share working with the class.</p> <p>e.g. <math>1/10</math> of 40 is 4.</p> <p><math>2/10</math> is 8</p> <p><math>40 - 8</math> leaves 32 sheep white.</p> <p>Set more problems for the children to solve, discuss answers and methods of calculation.</p>	<p><b>Q. How do we find equivalent fractions?</b></p> <p>Children to share ideas.</p> <p>Write on board all ideas about equivalent fractions.</p> <div style="border: 1px solid black; padding: 10px; margin-top: 20px;"> <p>By the end of the lesson children should know:</p> <p>How to find fractions of quantities using equivalent fractions.</p> </div>