Fractions: Shooting Stars

Aim:	**Success Criteria:**	**Resources:**
Compare and order fractions, including fractions > 1. I can compare and order fractions where the denominators are not multiples of the same number.	I can use bar models to compare and order fractions. I can use the greater-than and less-than symbols to compare fractions. I can use a common denominator to compare and order fractions.	**Lesson Pack** Whiteboards and pens – class set
	Key/New Words: Fraction, numerator, denominator, lowest common multiple, lowest common denominator, greater than (>), less than (<).	**Preparation:** **Star Order Strategy Fraction Game** – one per pair or small group **Extra Challenge Activity Sheet** – as required **Diving into Mastery Activity Sheets** – as required **Fraction Wall** – as required

Prior Learning:	It will be helpful if children have previous experience of comparing fractions with the same denominator and of finding equivalent fractions.

Learning Sequence

	**Bar Model Fractions:** Using the bar model images shown on the **Lesson Presentation**, the children complete the sentence stems using the vocabulary of comparing.	
	**Comparing Using the Denominator:** The images on the **Lesson Presentation** show the method of comparing fractions by changing them into equivalents with the lowest common denominator. Ask the children to discuss what is happening using the questions provided.	
	**Star Constellations:** The children complete the comparing fractions star constellations shown on the **Lesson Presentation** by identifying the equivalent common denominator to change the fractions to and then the correct symbol to use to compare them.	
	**Ordering Using the Denominator:** Using the images on the **Lesson Presentation**, demonstrate how to use the method of changing fractions to equivalents using a common denominator to order a set of fractions presented in a word problem.	
	**Comparing and Ordering Fractions:** Children complete the **Star Order Strategy Fraction Game** to show they can compare and order fractions where the denominators are not multiples of the same number.  Work with a partner or small group to play the game. Provide fraction walls and adult support as required.  Work with a partner or small group to play the game. Provide fraction walls as required, but also ensure children are explaining their reasoning using their understanding of common denominator equivalents.  Work with a partner or small group to play the game. Ensure children are explaining their reasoning using their understanding of common denominator equivalents. An **Extra Challenge Activity Sheet** is provided, if needed.	

Diving into Mastery: Schools using a mastery approach may prefer to use the following as an alternative activity. These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding.

Children complete fluency questions involving comparing and ordering fractions where the denominators are not multiples of the same number.

Children answer reasoning questions involving comparing and ordering fractions where the denominators are not multiples of the same number, explaining their reasoning.

Children work individually or collaboratively on a problem-solving investigation involving comparing and ordering fractions where the denominators are not multiples of the same number.

Fraction Puzzle: On their whiteboards, the children find a way to complete the fraction statement shown on the **Lesson Presentation**. If they create a statement different to anyone else in their group, they score a point. The highest score at the end wins.

Exploreit

Rollit: Children roll a dice twice and use the numbers to create a proper fraction. They find a fraction which is larger than it and a fraction which is smaller than it, both with different denominators.

Raceit: In pairs, each child writes a fraction on a whiteboard. They show each other their fractions and race to complete a comparison statement using both fractions.