

# Fraction Instructional Progression – 3rd Grade

Equal Sharing	Equal Sharing	Multiple Groups	Multiple Groups	Equal Sharing	Multiple Groups
Number of sharers: 2, 4, 8	Number of sharers: 3, 6	Amount in each group: $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{3}{4}$	Amount in each group: $\frac{1}{3}$	Number of sharers: 10	Amount in each group: $\frac{1}{10}$
<ul style="list-style-type: none"> <li>- Begin with the number of items to be shared is more than the number of sharers. This will create a mixed number as an answer.</li> <li>-Students will name fractions by words rather than standard notation at first (ie. half, fourth, eighth).</li> <li>-Introduce standard notation for unit fractions after lots of work with pictures and fraction words.</li> <li>-Introduce equations to represent students' answers.</li> </ul>	<ul style="list-style-type: none"> <li>- Begin with the number of items to be shared is more than the number of sharers. This will create a mixed number as an answer.</li> <li>-Students will name fractions by words rather than standard notation at first (ie. third, sixth)</li> <li>-Introduce standard notation for unit fractions after lots of work with pictures and fraction words.</li> <li>-Introduce equations to represent students' answers.</li> </ul>	<ul style="list-style-type: none"> <li>- Make sure the fraction in the group is a fraction they understand from working with equal sharing problems.</li> <li>-Can begin with problems such as 4 groups of <math>\frac{1}{4}</math> to begin to reason about the relationship with a unit fraction to a whole.</li> <li>-Move to problems where the answer will be an improper fraction. Such as 6 groups of <math>\frac{1}{4}</math>, so students can reason about how many wholes are in the problem.</li> <li>-Begin with the amount in each group as a unit fraction (<math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>). Before moving to <math>\frac{3}{4}</math>.</li> <li>-Encourage students to use equations to represent their answers.</li> </ul>	<ul style="list-style-type: none"> <li>- Make sure the fraction in the group is a fraction they understand from working with equal sharing problems.</li> <li>-Can begin with problems such as 3 groups of <math>\frac{1}{3}</math> to begin to reason about the relationship with a unit fraction to a whole.</li> <li>-Move to problems where the answer will be an improper fraction. Such as 4 groups of <math>\frac{1}{3}</math>, so students can reason about how many wholes are in the problem.</li> <li>-Begin with the amount in each group as a unit fraction (<math>\frac{1}{3}</math>). Before moving to mixed numbers <math>2\frac{1}{3}</math>.</li> <li>-Encourage students to use equations to represent their answers.</li> </ul>	<ul style="list-style-type: none"> <li>- Begin with the number of items to be shared is more than the number of sharers. This will create a mixed number as an answer.</li> <li>-Students will name fractions by words rather than standard notation at first (ie. tenth)</li> <li>-Introduce standard notation for unit fractions after lots of work with pictures and fraction words.</li> <li>-Introduce equations to represent students' answers.</li> </ul>	<ul style="list-style-type: none"> <li>- Make sure the fraction in the group is a fraction they understand from working with equal sharing problems.</li> <li>-Can begin with problems such as 10 groups of <math>\frac{1}{10}</math> to begin to reason about the relationship with a unit fraction to a whole.</li> <li>-Move to problems where the answer will be an improper fraction. Such as 13 groups of <math>\frac{1}{10}</math>, so students can reason about how many wholes are in the problem.</li> <li>-Encourage students to use equations to represent their answers.</li> </ul>
<b>Quarter 1:</b> Equal Sharing Problems  <b>Quarters 2-4:</b> All Problem Types					
Standards Addressed: 3.G.A.2, 3.NF.A.1	Standards Addressed: 3.G.A.2, 3.NF.A.1	Standards Addressed: 3.NF.A.1	Standards Addressed: 3.NF.A.1	Standards Addressed: 3.G.A.2, 3.NF.A.1	Standards Addressed: 3.NF.A.1

## Fraction Equivalence

***Equivalency ideas should be incorporated throughout fraction work.***

To address 3.NF.3b, different strategies will elicit multiple equivalent answers. This will create an opportunity to discuss equivalent fractions. (p.34 in ECM book)

To address 3.NF.3d, students need opportunities to compare two fractions. Provide opportunities with Equivalency Word Problems (p.145 in ECM book)

Based on the resource *Extending Children's Mathematics: Fractions and Decimals* (Susan B. Empson and Linda Levi).