



Fair Share Fractions

Stage	Strand	Strand Unit
1	Number	Fractions

Learning Outcomes	Maths Concepts
Through appropriately playful and engaging learning experiences, children should be able to develop an awareness of part-whole relationships using a variety of models (area, length and set).	- Sets, objects and spaces can be partitioned in different ways. - Fractions are a representation of part-whole relationships. - Fractions are named according to their number of equal parts or shares.

Learning Maths

This learning experience gives learners the opportunity to explore the concept of fractions using the set model. The concept is introduced by discussing times learners share equally with a sibling or friend. Pairs are given a set of six counters and asked to share them equally. They discuss how they completed the task. Learners are introduced to the term $\frac{1}{2}$ to describe when objects are divided into two equal parts. Next learners are given a variety of sets of objects, (cubes, counters, links etc) and asked to share them equally with a partner.

Understanding and Connecting	Communicating	Reasoning	Applying and Problem Solving
<i>The learner</i>			
Partitions objects into two equal shares and describes the whole and parts by the number of shares/ parts, e.g. I have 10 counters in the whole set and I got 5 counters when the set was divided in half.	Represents and records their understanding of halves using concrete materials, pictorially or with symbols.	Explains the approach used to divide the set of objects into two equal shares.	Poses problems for their peers, e.g. if I had 10 sweets, how many sweets would I have to give you if you wanted half of them? Compares the ideas and approaches of their peers to solve the problem.



Teaching Maths	
Fostering Productive Disposition	Encouraging Playfulness with Mathematics
Provide a rich and meaningful context for the learning experience by linking it to relevant experiences in the learners' lives, e.g. if you shared a bag of 8 sweets at a birthday party with 4 friends, how many would you each get?	Signal when learners encounter the concept of fractions through Aistear and introduce learners to the language of fractions.
	Emphasising Mathematical Modeling
	Provide a range of concrete materials to facilitate learners exploring the concept of $\frac{1}{2}$. Encourage learners to record their explorations using writing and digital tools.
Using Cognitively Challenging Tasks	Promoting Maths Talk
Encourage learners to spot patterns, e.g. if you divide a bigger set, do you get more or less? Ask learners to divide pieces of string or strips of paper in half (linear model). Ask learners to divide shapes in half (area model).	Prompt maths talk by using skilful, strategic, open and thoughtful questioning to encourage learners to share and exchange thinking and ideas, e.g. • How do you know you have equal shares? • Is it still a half if the portions are not equal?
Assessing Maths	
• Can learners explain how they divided the materials into equal parts? • Could learners draw a picture of their work to show $\frac{1}{2}$ of the set? • Do learners use the term $\frac{1}{2}$ to describe an equal share of a set during Aistear?	
Source	
Adapted from: PDST Fractions Manual pages 31-35	