

WHAT'S IN THIS SET

Teacher: Doron Jamil · Ember Charter School

Topic: Understanding Fractions - part part whole · Subject: Math · Grade: 3rd

10 problems · 5 BUILD THE FOUNDATION + 3 PUT IT TO WORK + 2 OWN THE THINKING

TIER GUIDE · WHAT TO WATCH FOR AS STUDENTS WORK

BUILD THE FOUNDATION

Students practice identifying the parts and the whole in a fraction by connecting visual models like shaded shapes or grouped objects to the numerator and denominator.

Watch for: *Students who can shade or circle the correct number of parts but write the total number of parts as the denominator instead of the total number of equal parts in the whole.*

PUT IT TO WORK

Students move beyond labeling parts and wholes to interpreting what a fraction means in context, such as determining what fraction of a group is shaded and what fraction is not.

Watch for: *Students who correctly identify the shaded fraction but stall when asked about the unshaded portion, which signals they understand part-to-whole but have not yet connected that both parts together must equal the whole.*

OWN THE THINKING

Students construct their own part-part-whole relationships by deciding how to partition a whole and justify why their fraction accurately represents the situation.

Watch for: *Students who can explain why changing the number of total parts*

1. ENTRY RAMP Ms. Carter baked a pan of sweet potato pie for the block party. She cut it into 2 equal pieces. Her neighbor Deja took 1 piece.

(Think about this: how many pieces is the whole pie cut into, and how many of those pieces does Deja have? Which of those two numbers goes on top, and which goes on bottom?)

Show your work here

2. READ IT CLOSELY Marcus and his little brother split a granola bar into 4 equal pieces. Marcus ate 3 of the pieces.

Show your work here

3. COUNTING PARTS AND NAMING THE WHOLE Aaliyah is helping set up the community garden. The garden plot is divided into 6 equal sections. The students planted vegetables in 4 of the sections. The other 2 sections still have empty soil.

(Think about this: if you know the part with vegetables and the part without, what should they add up to — and what does that tell you about the whole?)

Show your work here

4. BRIDGE TO PUT IT TO WORK The kids on Deonte's block are raising money to buy new basketball equipment for the park. They need donations from 8 families on the block. So far, 5 families have donated.

(Think about this: when you are trying to reach a community goal, how does knowing the fraction help you make a real decision about what to do next?)

Show your work here

THE CORE IDEA

A fraction tells you two things at the same time: how many parts you are talking about, and how many equal parts the whole was broken into. The bottom number — the denominator — tells you how many equal pieces the whole was split into. The top number — the numerator — tells you how many of those pieces you are counting. When something is split into parts, every part has to be the same size for a fraction to work. Think about splitting a pan of cornbread equally between 4 people: each person gets 1 out of 4 equal pieces, so each share is written as $\frac{1}{4}$. The fraction is not just a symbol — it is a description of a real, fair split.

PUT IT TO WORK