Just In Time Quick Check

Standard of Learning (SOL) K.5

Strand: Number and Number Sense

Standard of Learning (SOL) K.5

The student will investigate fractions by representing and solving practical problems involving equal sharing with two sharers.

Grade Level Skills:

- Share a whole equally with two sharers, when given a practical situation.
- Represent fair shares concretely or pictorially, when given a practical situation.
- Describe shares as equal pieces or parts of the whole (e.g., halves), when given a practical situation.

Just in Time Quick Check

Just in Time Quick Check Teacher Notes

Supporting Resources:

- VDOE Mathematics Instructional Plans (MIPS)
 - o K.5 Sharing Snacks (Word) / PDF Version
 - o K.5 Sharing Oranges (Word) / PDF Version
- VDOE Word Wall Cards: Kindergarten (Word) | (PDF)
 - o Fair Share

Supporting and Prerequisite SOL: n/a

SOL K.5 - Just in Time Quick Check: Student Interview

- 1) Provide the student with a paper square and say: "This square represents a brownie. Can you share it equally with me? You can draw how you would share it."
 - a) If the student has correctly split the brownie, go to task 2.
 - b) If the student is incorrect, follow up with these questions:
 - Are these pieces the same size? OR Is it a fair share?
 - How can we make this fair?

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Stu	dent	resp	onse:

2)	How much of the brownie do we each get? (NOTE: If the student replies that each gets
	one piece, ask them how much of the whole brownie would we each get? Does the
	student describe each piece as one-half or half of the brownies?)

Student response:

3) Give the student a pile of 6 counters and say: "These counters represent cookies. Can you pass these out so that we each get a fair share of the cookies? How much do we each have? (If the student responds with "3 cookies" ask them if there is another way to name the group. Is the student have to describe 3 cookies as one-half or half of the cookies?)

Student response:

Brownies for student use 		

SOL K.5 - Just in Time Quick Check Teacher Notes

Common Errors/Misconceptions and their Possible Indications

- 1) Provide the student with a paper square and say: "This square represents a brownie. Can you share it equally with me? You can draw how you would share it."
 - a) If the student has correctly split the brownie, go to task 2.
 - b) If the student is incorrect, follow up with these questions:
 - Are these pieces the same size? OR Is it a fair share?
 - How can we make this fair?

Most children are quite intuitive about sharing something equally between two people. However, some who may not be able to show and/or describe that the parts are equal or the same. Students will benefit from opportunities to solve fraction problems presented in the form of word problems, using concrete representations, to strengthen their fractional understanding.

- 2) How much of the brownie do we each get? (NOTE: If the student replies that each gets one piece, ask them how much of the <u>whole</u> brownie would we each get? Does the student describe each piece as one-half or half of the brownies?)

 Students may not be able to show and/or describe that the parts are equal or the same. Students with little to no fractional understanding may reply that each person gets one <u>piece</u> of the brownie, rather than using the term "one half" even after the emphasized question is used. The student may not have the mathematical language to verbalize halves and needs opportunities and support in building their mathematical vocabulary while using word problems and concrete representations to reinforce the meaning of fair shares, equal parts of a whole, and halves.
- 3) Give the student a pile of 6 counters and say: "These counters represent cookies. Can you pass these out so that we each get a fair share of the cookies? How much do we each have? (If the student responds with "3 cookies" ask them if there is another way to name the group. Is the student have to describe 3 cookies as one-half or half of the cookies?) Students who are unable to successfully complete this task are not able to coordinate the three concepts required to complete this task (creating the correct number of groups; making the groups fair or equal; and using all objects in the set).

Observe students as they determine how to partition the counters. Students who understand partitioning and know their double number combinations may automatically divide the six counters into two groups of 3. Other students may "deal out" the counters to ensure that each pile is a fair share. Ask the student how she knows she has shared fairly. Students may understand fair sharing of one whole thing and a fair share or half as being one of two equal parts of 1 whole object, but are not able to apply the idea of fair shares to a set. The student may tell you that each person has 3 cookies, but is not able to verbalize that each person has half of the set of cookies.

Students who create two groups, but have an unequal number of cookies in each group need opportunities to discuss fair share and what it means to have an equal amount. Questions to consider asking during instruction might include: Are these two sets fair? Which set would you rather have? Why? This gives the student an opportunity to reevaluate their work and correct the piles. Students who create the correct number of piles, but distribute the items unequally needs some practice in "dealing out" or creating equal groups from small collections of objects.

Students may place 1 or 2 cookies in each pile, and not exhaust the collections. These students should be asked what happens to the remaining cookies and whether the cookies can continue to be shared fairly.

Asking questions will help you understand which of the three fractional concepts your student is missing and provides the information you need in order to support them in a more targeted way.