Spotlight on Strategy

Multiplication is a faster way to add. Instead of adding 3 + 3 + 3 + 3, you can multiply 4 × 3. Either way, the answer is 12. Multiplication shows groups of equal objects.

_____ × _____		
Number of groups	of	Number in each group

Let's start by using fishbowls and fish. Our fishbowls will be our groups. To find what 5 × 3 equals, we will think of this as 5 groups of 3, or 5 fishbowls with 3 fish in each.

We can count the total number of fish: 5 × 3 = 15.
We can also solve by adding: 3 + 3 + 3 + 3 + 3 = 15.

Your Turn

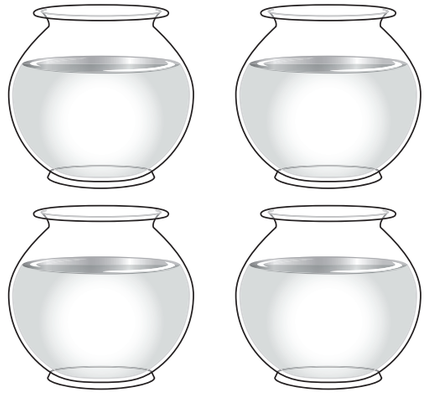
1.

2 groups of 4 fish

2 × 4 = _____

4 + 4 = _____

2.



4 groups of 5 fish

4 × 5 = _____

5 + 5 + 5 + 5 = _____

Spotlight on Strategy

Explain that some students may have already memorized multiplication facts and that this is great. Tell students that in this lesson they are going to focus on strategy, which is a way to solve a problem. Show students that they are going to practice three strategies in this lesson: **1)** multiplication as repeated addition, **2)** multiplication using pictures of groups and items, and **3)** writing multiplication number sentences.

Introduce the example of the fishbowls and the number of fish in each bowl. Provide copies of the fishbowl printable and provide students with individual bags of fish-shaped crackers to use to practice creating multiplication problems. Each student should receive 6 fishbowls, and each bag should contain about 30 crackers. (Note: If students have allergies that prevent the use of fish-shaped crackers, then allow them to use a different manipulative.)

Direct — **Direct** students to set out 6 fishbowls on their desks and then to put 3 fish in each fishbowl.

Ask — **Ask:** How many fishbowls do we have? (student answer: 6)

Ask: How many fish are in each bowl? (student answer: 3)

Ask: How many fish do we have in all? (student answer: 18)

Say — **Say:** We have 6 groups of 3 fish. What multiplication sentence can we write? (student answer: 6 × 3 = 18)

Ask — **Ask:** What addition sentence can we write? (student answer: 3 + 3 + 3 + 3 + 3 + 3 = 18)

Direct — **Direct** students to return their crackers to their bags, and ask them to use their fishbowls to show you 4 fishbowls with 4 fish in each. Repeat the line of questioning used above. Repeat with 2 fishbowls with 5 fish in each. Make note of which students have strong understanding and which are struggling.

Your Turn

As students work to complete the practice items, tactile learners may prefer to continue using the fishbowl papers and fish-shaped crackers. Look for students who are confusing the number of groups with the number in each group.

Extension

For students who are ready to continue practicing the concept of solving multiplication as groups, give them a pair of six-sided number cubes to play circles and stars. Students should roll the number cubes. The first number rolled is the number of large circles to draw. The second number rolled is the number of stars to draw in each circle. Write the multiplication problem this shows, and count the total number of stars drawn to solve.