Accelerated Individualized Mastery

Multiplication

Build, Write, Say Activities

Overview

The following ten activities are designed to give students extra practice with multiplication strategies they have yet to master. These activities utilize the integer blocks (along with the Build, Write, Say method) to further reinforce the math fact strategies taught within the AIM lessons.

Note: Several activities can be used with multiple lessons. Just practice the activity with the current lesson's math facts and have fun!

B1 Cooking with Facts

Strategy

Multiplication Facts (any)

Materials

- integer blocks
- dry erase board, marker, and eraser
- selected Fact Check Cards

Set Up

Display Fact Check Cards for several different Facts Not Yet Known across a table.

1. Explain that your student is a chef who is creating the "recipe" for each math fact using the blocks.
2. Have your student walk around the table and select a fact, then build it with the blocks.
3. Next, have your student write the fact with the product on the dry erase board and say it aloud.
4. Once they successfully build several multiplication facts, they are finished.
5. This activity can be completed once or twice a day.

B2 Grab Bag

Strategy

Multiplication Facts (any)

Materials

- integer blocks
- dry erase board, marker, and eraser
- selected Fact Check Cards
- paper bag

Set Up

Place a group of Fact Check Cards for Facts Not Yet Known in the paper bag.

1. Ask your student to randomly select a Fact Check Card from the bag (e.g., 2 × 4).
2. Have your student build the multiplication fact while teaching back the appropriate fact strategy.
3. Next, have your student write the fact on the dry erase board and say the fact aloud.
4. Verify that the product is correct. If the fact is correct, your student may "keep" that fact for the remainder of the activity. If incorrect, model the Build, Write, Say process to find the correct answer, then have your student place the Fact Check Card back in the bag.
5. Continue until your student has accumulated five Fact Check Cards.

B3 Double the Fun(ds)

Strategy
Doubles

Materials
- dry erase board, marker, and eraser (or paper and pencil)
- integer blocks (2–10)

Set Up
Explain that your student is hosting a multi-day bake sale to raise money for a charity of their choice. You have generously offered to match the funds they raise each day (thus doubling their daily earnings). It is your student's job to figure out their total earnings at the bake sale each day.

1. Present your student with an integer block of your choice. This represents how much they have earned for the first day of the bake sale (e.g., the 5-block equals $5 earned).
2. Next, have your student build, write, and say the appropriate doubles fact (e.g., "$5 multiplied by two, or doubled, equals $10"). This will allow them to factor in your matching donation and find their total earnings for day one.
3. Once your student has successfully used the Build, Write, Say method to build the math fact that represents their first day's earnings, present them with the next integer block, which represents the second day's earnings.
4. Continue until all desired facts have been practiced.

B4 Movie Theater Multiplication

Strategy
Tens Facts
Increase Place Value by One Place

Materials
- integer blocks (3–10)
- paper and pencil
- poster (P6)

Set Up
Have your student pretend that they are a ticket seller at the local movie theater. There is currently a promotion where group tickets (when purchased together) are $10 each, tax included. You will pretend to be a customer paying for a group of friends to go to the movies (e.g., a group of 4). It is your student's job to tell you the total cost of your tickets.

1. Present your student with an integer block of your choice (e.g., the 9-block). This represents how many people are in your group. (For added fun, you can even make up some movie titles that your "group" is going to see.)
2. Your student must then use the Build, Write, Say method to determine the total cost for your group's movie tickets (e.g., "9 over and 10 up: 9 multiplied by 10 equals 90. The total cost for your tickets is $90.").
3. Once your student has correctly taught back the fact strategy to you, they may say "Next!" and the next "group" of moviegoers may purchase tickets.
4. Continue this activity until all desired facts have been practiced.

B5 Bowling for Facts

Strategy
Fives Facts
Use the Tens Fact, Find Half the Product

Materials
- integer blocks (5-block, 10-block)
- cups
- ball (preferably one that is soft)
- paper and pencil
- selected Lesson 5 Fact Check Cards

Set Up
Place the Fact Check Cards you would like to practice in a straight line on the ground, about a foot apart from one another. Then, cover each card with a plastic or paper cup so that the Fact Check Card is not visible. These will be your "bowling pins."

1. Have your student stand across the room from where you set up the "pins," and explain to them that they must gently roll the ball toward the cups to knock them over. (Be sure that there are no obstacles between your student and the cups.)
2. If your student knocks a cup (or multiple cups) over, they must pick up the Fact Check Card that was underneath that cup and use the Build, Write, Say method to solve the fact. (If your student knocks over more than one cup at a time, they may choose the order in which they solve the facts.)
3. If your student is able to correctly teach back the fact strategy, you may remove that pin from the game.
4. If your student is unable to correctly solve the multiplication fact, model the fact strategy for them, then stand the pin back up for them to knock over again.
5. Your student continues until all "pins" have been knocked over and all fives facts have been correctly demonstrated.

B6 Water Balloon Multiplication

Strategy
Nines Facts
Use the Tens Fact, Subtract One Group

Materials
- integer blocks
- paper and pencil
- bucket
- sticky notes

Set Up
Write each nines fact you wish to practice on a sticky note. Place one of these facts on the side of the bucket.

1. Have your student pretend that they are preparing for a water balloon fight at a family barbeque.
2. The multiplication fact stuck to the bucket will tell your student the amount of water balloons they need to make (e.g., 3 × 9). It is their job to figure out the product using the integer blocks.
3. Have your student build, write, and say as they teach the fact strategy back to you (e.g., "three times nine is twenty-seven").
4. Once they have correctly finished building the fact, your student may put the blocks in the bucket and write the product on the sticky note.
5. Remove the blocks from the bucket, place a new fact on the side of the bucket, and repeat the previous steps until the desired amount of math facts have been practiced.

Variation
For added fun, your student can fill and throw a water balloon for every fact they build correctly!

B7 Fabric Multiplication

Strategy
Multiplication by 3
Use the Doubles Fact, Add One More Group

Materials
- integer blocks
- paper and pencil
- selected Lesson 7 Fact Check Cards

Set Up
Have your student pretend that they are fabric shopping because they are making blankets for the local animal shelter. Typically, fabric is measured in yards. However, your student's blanket template only uses feet for measurement. Therefore, they must convert the length of each fabric roll from yards to feet. (1 yard = 3 feet)

1. Have your student draw a Fact Check Card from the pile. The factor being multiplied by 3 indicates the length (in yards) of the imaginary fabric roll (e.g., 4 × 3; length of the fabric roll is 4 yards).
2. To find how long that is in feet, your student must build, write, and say the fact strategy to solve the multiplication by 3 fact (e.g., 4 × 3 = 12 feet of fabric).
3. Once your student has successfully taught back the fact using the appropriate strategy, have them draw the next card from the pile.
4. Continue until all desired facts have been practiced.

B8 Push-Up Multiplication

Strategy
Multiplication by 4
Double, Doubles

Materials
- integer blocks
- paper and pencil
- selected Lesson 8 Fact Check Cards

Set Up
Have your student pretend that they are training for a sport of their choice, and that you are their coach. Explain that this "training program" requires them to do four equal sets of push-ups each day—two sets in the morning and two sets in the evening. Your student must then tell you how many total push-ups they have completed each day.

1. Choose a Fact Check Card at random and present it to your student. The factor being multiplied by 4 tells your student how many push-ups they must complete during each set (e.g., 7 × 4 means that seven push-ups must be completed each set).
2. Have your student select the appropriate blocks (e.g., four 7-blocks) to represent the four sets of push-ups.
3. Using the Build, Write, Say method, your student must model the fact strategy to combine the two morning sets and two evening sets of push-ups (e.g., double 7 plus double 7 is the same as 7 × 4). Then solve for the total number of push-ups completed that day (e.g., 7 × 4 = 28 push-ups).
4. Once your student has correctly taught back the fact strategy to solve the math fact, pick another Fact Check Card to use as tomorrow's "training program."

Note: Your student does not have to do actual push-ups for this activity!

B9 Garden Plot Planner

Strategy
Multiplication by 6
Use the Fives Fact, Add One More Group

Materials
- integer blocks (6–8)
- paper and pencil
- half-inch graph paper (provided on next page)
- selected Lesson 9 Fact Check Cards

Set Up
Shuffle a chosen group of Lesson 9 Fact Check Cards into a pile.

1. Explain to your student that they will use the Fact Check Cards to plan out and build a community garden using the integer blocks. (Each Fact Check Card represents a different size garden plot.)
2. Have your student draw a fact from the pile at random, then explain that they must use the appropriate blocks to build a garden plot on the graph paper, as specified by the card (e.g., 6 × 8).
3. As they build, write, and say each fact, ensure that your student correctly utilizes the fact strategy to teach the fact back to you (e.g., 6 × 8 = 48).
4. Once your student has successfully used the Build, Write, Say method to build their first garden plot, they should trace it on the graph paper, then draw the next Fact Check Card from the pile.
5. Continue until all selected facts have been practiced.

B10 Exploring Extras

Strategy
Multiplication: Extras

Materials
- integer blocks (7-block, 8-block)
- dry-erase board, marker, and eraser
- sticky notes

Set Up
This scavenger hunt activity requires your student to find an “artifact” that you have hidden (this can be any item of your choosing). To find the artifact, they will solve extras facts and follow clues that are hidden around your home.

First, write each extras fact on the front (non-stick) side of each sticky note. Then, ask your student to go to a different location (upstairs, their room, etc.) so you may hide the “artifact” of your choosing. Once you have hidden the artifact, write a clue on the back side of each extras fact that will lead them to the next clue, then stick them around your home (e.g., “Go to the kitchen for the next clue,” or “Final Clue: The artifact is in the basement!”). Once this is done, call your student back to the room.

1. Explain that your student must follow a series of clues to find an artifact that you have hidden somewhere in the house.
2. Give your student the general location of the first clue to make sure they do not start out of order.
3. Your student must use the Build, Write, Say method to solve each fact prior to reading the clue on the opposite side of the sticky note.
4. When your student has successfully taught back the extras fact using their favorite Facts Known, they may read the clue and progress to the next fact.
5. Continue until your student finds the artifact!