Lego Builders Math Adventure!

Introduction (5 minutes):

Let's talk about your awesome Lego creations! What's your favorite thing to build? Did you know we can use these amazing bricks for math too? Today, we're going on a math adventure using Lego to become super counters, adders, and subtractors!

Activity 1: Lego Counting Challenge (10 minutes)

- Spread out a pile of Lego bricks.
- Ask the student: "Can you count out 5 red bricks for me?"
- Repeat with different numbers and colors (e.g., "Find 8 blue bricks," "Count all the yellow bricks," "Show me 12 bricks of any color.").
- Encourage counting one by one. Correct gently if needed. Celebrate accurate counting!

Activity 2: Building Sums - Lego Addition (15 minutes)

- Start with a simple story: "Imagine you have 3 green Lego bricks to start building a car." (Student takes 3 green bricks).
- "Then, you find 2 more green bricks." (Student takes 2 more green bricks).
- "How many green bricks do you have altogether to build your car? Let's put them together and count!" (Student combines the groups and counts: 1, 2, 3, 4, 5).
- "That's right! 3 bricks plus 2 bricks equals 5 bricks! We can write that as 3 + 2 = 5." (Write it down if using paper/whiteboard).
- Practice more addition problems with different Lego combinations (e.g., 4 + 1, 2 + 5, 6 + 3). Use Lego bricks for every problem. Use stories related to building (towers, houses, etc.).

Activity 3: Taking Away Bricks - Lego Subtraction (15 minutes)

- Start with a simple story: "You built a tall tower with 6 Lego bricks." (Student builds or gathers 6 bricks).
- "Oh no! A big imaginary wobble makes 2 bricks fall off!" (Student removes 2 bricks from the group).
- "How many bricks are left in your tower now? Let's count." (Student counts the remaining bricks: 1, 2, 3, 4).
- "Correct! You started with 6 bricks and took away 2 bricks, so you have 4 bricks left. We can write that as 6 2 = 4." (Write it down if using paper/whiteboard).
- Practice more subtraction problems using Lego bricks and building stories (e.g., 5 3, 7 1, 8 -4).

Activity 4: Builder's Choice Practice (Optional, 5-10 minutes)

- Give the student simple addition or subtraction problems (verbally or written) like 2+4, 7-3, 5+5, 9-2.
- Have the student use their Lego bricks to figure out the answer. They can build, combine, and take away bricks to solve each one.

Conclusion (5 minutes):

Wow, great job being a Lego Math Builder today! What did we use the Lego bricks for? (Counting, adding, subtracting). Can you show me one more problem? Show me 3 bricks plus 1 more brick. How many? (4). Now show me 5 bricks take away 2 bricks. How many? (3). Awesome! Now you know how to use math when you're building with your Lego!