Golden Bead Mysteries!

Let's solve some fun number mysteries using our beautiful golden beads!

Materials Needed:

- Montessori Golden Beads (at least 10 unit beads and 1 ten-bar)
- A small empty box or container (our 'mystery box'!)
- Paper and pencil or crayon (optional, for writing equations)
- Optional: A simple balance scale or a drawing of one

What Does 'Equals' Mean?

Think of the equals sign (=) like a balance scale. It means whatever is on one side is exactly the same amount as what's on the other side. They are balanced!

Activity 1: Balancing Beads

Let's use our balance scale (or imagine one!). Place 5 golden unit beads on one side.

On the other side, place 3 golden unit beads. Oh no, it's not balanced! How many more beads do we need to add to the side with 3 to make it balance with the side that has 5?

Let's put our 'mystery box' next to the 3 beads. How many beads should go in the mystery box? Use your unit beads to find out! (Answer: 2 beads)

We can write this like a number sentence: 3 + ? = 5. The question mark is our mystery box! We found out that ? = 2.

Making Ten!

Remember our ten-bar? It's the same as 10 unit beads.

Activity 2: Building a Ten-Bar

Place 7 unit beads in a line. How many more unit beads do we need to make a full ten-bar (or 10 beads altogether)?

Place the 'mystery box' next to the 7 beads. Use your unit beads to find out how many should go in the box to make 10.

We can write this as: 7 + ? = 10. What number does the mystery box stand for? (Answer: 3)

Try another one: If you have 4 unit beads, how many more do you need to make 10? (4 + ? = 10)

Solving Bead Puzzles

Let's use our beads and mystery box to solve more puzzles!

Activity 3: Finding the Missing Beads

Puzzle 1: Place 6 unit beads on the table. Say, "I started with some beads, then I added 2 more, and now I have 6." How many beads did I start with? Represent this with your beads and the mystery box. We can write it as: ? + 2 = 6. How many beads are in the mystery spot? (Use beads to find the answer: 4)

Puzzle 2: Place 8 unit beads on the table. Say, "I had 8 beads, but some rolled away! Now I only have 5 left." How many beads rolled away? Represent this: 8 - ? = 5. How many beads are in the mystery spot? (Use beads to find the answer: 3)

Super Sleuth!

Great job being a number detective today! You learned that the equals sign (=) means 'the same on both sides' and that we can use a symbol like a question mark (?) or a box to stand for a mystery number we need to find. You used the golden beads to solve these mysteries!