

Fun Abacus Adventure!

Let's explore the amazing abacus, a super cool calculator from the past!

Lesson Activities:

1. Meet the Abacus (10 min):

- Let's look at our abacus. Can you see the outside part holding it together? That's the **frame**.
- See the sticks going up and down? Those are the **rods**.
- There's a bar across the middle - that's the **beam**.
- Look at the beads! The ones below the beam are 'earth beads' (worth 1 each). The ones above the beam are 'heaven beads' (worth 5 each). We'll start by using the rod on the far right.
- To start, we need to 'clear' the abacus. Push all the earth beads down, away from the beam, and all the heaven beads up, away from the beam. Now it's at zero! Let's practice clearing it a few times.

2. Counting is Fun! (15 min):

- Make sure your abacus is cleared. Let's count on the rightmost rod!
- To show '1', push ONE earth bead UP to touch the beam. Great! Clear it.
- To show '2', push TWO earth beads UP to the beam. Awesome! Clear it.
- Do the same for 3 and 4.
- For '5', it's special! Push all four earth beads DOWN. Now, push the heaven bead DOWN to touch the beam. That single bead means 5! Cool, right? Clear it.
- For '6', we need 5 and 1. Keep the heaven bead (5) DOWN, and push ONE earth bead UP. That's 6! Clear it.
- Try making 7 (5 and 2 beads up), 8 (5 and 3 beads up), and 9 (5 and 4 beads up).
- **Practice Game:** I'll say a number between 1 and 9, and you show it on the abacus! Ready? (Call out numbers randomly: 3, 1, 5, 8, 4, 9, 2, 6, 7).

3. Simple Adding Magic (15 min):

- Clear your abacus. Let's add $2 + 1$.
- First, show '2' on the abacus (push 2 earth beads up).
- Now, add '1' more by pushing one more earth bead up.
- How many beads are touching the beam? Count them... 3! So, $2 + 1 = 3$.
- Let's try $1 + 3$. Show 1. Add 3 more by pushing 3 earth beads up. Result? 4! Clear.
- Now let's use the heaven bead! Try $5 + 2$. Show 5 (heaven bead down). Add 2 (push 2 earth beads up). Result? 7! Clear.
- Try $5 + 4$. Show 5. Add 4 (push 4 earth beads up). Result? 9! Clear.
- **Challenge Add:** What about $4 + 1$? Show 4 (4 earth beads up). To add 1, we don't have any more earth beads down here! So, we do an exchange: push the 4 earth beads DOWN, and push the heaven bead (5) DOWN. The answer is 5!
- Practice these problems: $1+1$, $2+2$, $3+1$, $5+1$, $5+3$, $2+1$, $1+2$, $4+1$.

4. Wrap-up & Your Turn (5 min):

- Quick Check: Show me 6! Show me 3! Show me 9!
- What's $1+2$ on the abacus? What's $5+4$?
- Great job today! You learned the parts of the abacus, how to show numbers, and even how to add!
- For fun practice later, try showing your age on the abacus, or maybe how many windows are in the room!

Making it Fit You:

- **Need more time?** Focus just on numbers 1-5 and adding only earth beads (like $1+1$, $2+1$,

1+2). We can learn about the 5-bead next time!

- **Ready for more?** We can try showing numbers like 10 or 12 using the next rod to the left, or even try simple subtraction like 3-1 or 8-2!