

## Materials

- Pencil
- Paper or notebook
- Optional: Calculator (for checking work only)
- Optional: Blue and red colored pencils

## Ohana Means Arithmetic! (Lilo & Stitch Style)

Aloha! Today, we're going to help Lilo keep track of Stitch's adventures using arithmetic, specifically multiplication and division. Sometimes Stitch causes a lot of chaos (like Experiment 626 should!), and sometimes he does good deeds. We need math to figure it all out!

### Part 1: Stitch's 'Good Deed' Multiplication

Lilo is trying to teach Stitch to be good. Let's say Stitch does 12 good deeds every day for a week (7 days).

**Problem:** How many good deeds does Stitch do in a week?

To solve this, we need to multiply the number of good deeds per day by the number of days:  $12 \times 7$

*Let's solve it together:*

- Step 1: Multiply the ones digit:  $2 \times 7 = 14$ . Write down the 4, carry over the 1.
- Step 2: Multiply the tens digit:  $1 \times 7 = 7$ . Add the carried-over 1:  $7 + 1 = 8$ .
- Answer: Stitch does 84 good deeds in a week! Way to go, Stitch!

### Practice Multiplication:

1. If Stitch helps Nani clean the house 3 times a day for 15 days, how many times does he help clean? ( $3 \times 15$ )
2. Lilo takes 24 photos of tourists each day for 5 days. How many photos does she take in total? ( $24 \times 5$ )
3. Experiment 625 (Reuben) makes 115 sandwiches every day. How many sandwiches does he make in 3 days? ( $115 \times 3$ )

### Part 2: Dividing the Experiments (Division Time!)

Jumba Jookiba has created 624 alien experiments (besides Stitch). He wants to place them equally into 4 containment units.

**Problem:** How many experiments go into each containment unit?

To solve this, we need to divide the total number of experiments by the number of containment units:  $624 \div 4$

*Let's solve it together (Long Division):*

1. How many times does 4 go into 6? It goes 1 time ( $1 \times 4 = 4$ ). Subtract 4 from 6 ( $6 - 4 = 2$ ). Bring down the next digit (2).
2. Now we have 22. How many times does 4 go into 22? It goes 5 times ( $5 \times 4 = 20$ ). Subtract 20 from 22 ( $22 - 20 = 2$ ). Bring down the next digit (4).
3. Now we have 24. How many times does 4 go into 24? It goes 6 times ( $6 \times 4 = 24$ ). Subtract 24 from 24 ( $24 - 24 = 0$ ).
4. Answer: Jumba puts 156 experiments in each containment unit.

### Practice Division:

1. Gantu captures 135 experiments and puts them equally into 5 transport pods. How many experiments are in each pod? ( $135 \div 5$ )
2. Lilo has 208 pictures of Stitch and wants to put them into photo albums that hold 8 pictures per page. How many pages will she fill? ( $208 \div 8$ )
3. If 3 spaceships are needed to transport 468 tourists off the island, how many tourists fit on each spaceship equally? ( $468 \div 3$ )

### Activity: Good vs. Chaos Points!

Let's track Stitch's points for a day! Use blue for 'Good Deeds' and red for 'Chaos'.

- Stitch helps Lilo practice her hula dance 5 times (+10 points each time). Multiplication:  $5 \times 10 = ?$  Good Points
- Stitch 'borrows' 3 surfboards without asking (-15 points each time). Multiplication:  $3 \times 15 = ?$  Chaos Points
- Stitch shares his coconut cake slice equally among himself, Lilo, and Nani (3 beings). The cake originally had 18 pieces. Division:  $18 \div 3 = ?$  Good Points
- Stitch accidentally knocks over a stack of 48 pineapples arranged in 4 equal rows. How many were in each row? (-5 points per row knocked over). Division:  $48 \div 4 = ?$  rows. Multiplication:  $? \times 5 = ?$  Chaos Points

Calculate the total Good Points and Chaos Points. Which one is higher today?

### Conclusion

Great job using multiplication and division to track the adventures on Kaua'i! You see how important arithmetic is, whether you're counting good deeds, dividing up experiments, or figuring out photo album pages. Keep practicing your math 'Ohana' style!