



Build a Boat

Overview: In this activity, children practice trading units for rods, rods for flats, etc.

Materials: Base Ten Blocks, 3 pieces of blank paper

- On the paper, arrange 5–10 Cuisenaire Rods so they look like a boat. You can use any rods you want, except the white ones.
- With your pencil, carefully trace your boat on the paper.
- Remove the rods from your drawing.
- Estimate (make a smart guess) how many white rods it will take to cover the drawing of your boat.
- Cover your drawing with white rods and then count them. Was your estimate right?
- Repeat again with other shapes you design.

Copy and Repeat

Overview: In this activity, children create patterns and convert those patterns to number sentences to estimate how many rods they need to repeat the pattern.

Materials: Cuisenaire Rods, paper, pencil

- Use your Cuisenaire Rods to create one of the patterns shown here.



- Each pattern is repeated twice. The first pattern is green, red, green, red, repeat.
- If doing that pattern once, requires 2 reds and 2 greens, and doing it twice (as shown) requires 4 reds and 4 greens, how many rods of each color would you need to repeat 5 times? The number sentence might be $(2r + 2g) + (2r + 2g) + (2r + 2g) + (2r + 2g) + (2r + 2g) = 10r + 10g$

- Build the pattern so it repeats 5 times. Was your estimate correct?

- Do this again with the other pattern.

- For extra fun—

- On your paper, design your own pattern with at least 2 repeats.
- Trace it in onto the paper.
- Remove the Cuisenaire Rods and give it to a friend. See if they can figure out how you made your pattern.

