Grade 2 | Science

Week 15 Practice Workbook | Days 71-75

Read the matching Student Textbook lesson. Type into the answer fields, and save a completed copy. Print pages for drawing activities.

Day 71: The Same Pieces Can Make Different Objects

Three builds from one set of 12 blocks

Build	Blocks used	How it looks
Tower	12	Tall and narrow
Wall	12	Long and low
House	12	Square, with a pointed roof

1. How many blocks did each build in the table use?

2. Which build was tall and narrow?

3. Explain how one set of blocks can become a tower and then a wall.

Day 72: Build, Take Apart and Rebuild

Sample results

Object	Blocks used	Blocks tall	Blocks long
Tower	20	20	1
Bridge	20	2	10

1. In the sample results, how many blocks did the tower use? How many did the bridge use?

2. Which object was longer?

3. Did the number of blocks change when the tower became a bridge? Explain how the data show this.

Hands-on task: Build a tower, then rebuild it as a bridge

• Count out 20 blocks.

• Build the tallest tower you can with all 20 blocks. Count how many blocks tall it is.

• Take the tower apart. Count the blocks to check that you still have 20.

• Use the same 20 blocks to build a bridge between two books. Count how many blocks long it is.

• Record your results in the table below.

Object	Blocks used	How many blocks tall	How many blocks long
Tower	____	____	____
Bridge	____	____	____

What stayed the same and what changed:

Day 73: Shapes and Joins That Make Structures Stronger

Sample results: gentle taps before it fell

Design	Taps before it fell
Narrow tower	2
Wide-base tower	7
Wall with blocks stacked straight up	3
Wall with overlapping blocks	8

1. Which tower design was stronger in the sample results?

2. How many more taps did the overlapping wall take than the straight-stacked wall?

3. Use the results to explain why builders overlap bricks in a wall.

Day 74: Plan, Test and Improve a Design

Sample results

Design	What it looked like	Pennies it held
First design	One flat layer of blocks	6
Better design	Two layers, with the top blocks overlapping the joins below	15

1. How many pennies did the better design hold in the sample?

2. How many more pennies did the better design hold than the first design?

3. The builder used the same 20 blocks both times. Explain what made the second design stronger.

Hands-on task: Build, test and rebuild a better bridge

- Set two books 6 inches apart.
- Plan and build a bridge across the gap with 20 blocks.
- Test it: set pennies on the middle one at a time until the bridge falls or sags. Record the number.
- Take the bridge apart. Use what you learned about wide bases and overlapping pieces to plan a better design with the same 20 blocks.
- Build and test the new design across the same gap, then record your results.

Design	Draw or describe it	Pennies it held
First design	_____	____
Better design	_____	____

What made my second design better:

Day 75: Independent Check: Taking Apart and Rebuilding

Building with 16 craft sticks

Object	Sticks used	Shape of its sides
Raft	16	Rectangles
Picture frame	16	A square
Small house	16	Squares and triangles

Answer on your own. An adult may read the questions aloud but should not give the answers.

1. How many craft sticks did each object use?

2. Name one way to make a block or stick structure stronger.

3. Lina took apart her block car and built a boat. Explain whether she made new pieces or reused the same pieces, and how she could check.

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