Build and Test a Design

Grade 1 Science Worksheet - Challenge Me

Name _____ Date _____

Circle the answer, or write the answer on the line.

1. The goal is to hold 7 blocks. Which result means the design worked?

   It held 6 blocks. It held 5 blocks. It held 8 blocks. It fell at once.

2. Which is a fair test for two paper bridges?

   Test only one bridge.

   Use a different table each time.

   Put the same blocks on each.

   Put more blocks on one.

3. A bridge holds weight but bends. Which change keeps what works?

   Remove the wide base.

   Start over with all new parts.

   Add a support and keep the wide base.

   Change the goal.

4. Mia's goal is 4 blocks. Tom's goal is 6 blocks. Both bridges held 5. Who met the goal?

   Both Mia Neither Tom

5. Why draw a plan before you build?

   to use more glue to skip testing to hide mistakes to decide what to build

6. Which sentence is a good design goal?



   The tower must be my favorite color.

   The tower must be pretty.

   The tower must stand and hold 4 blocks.

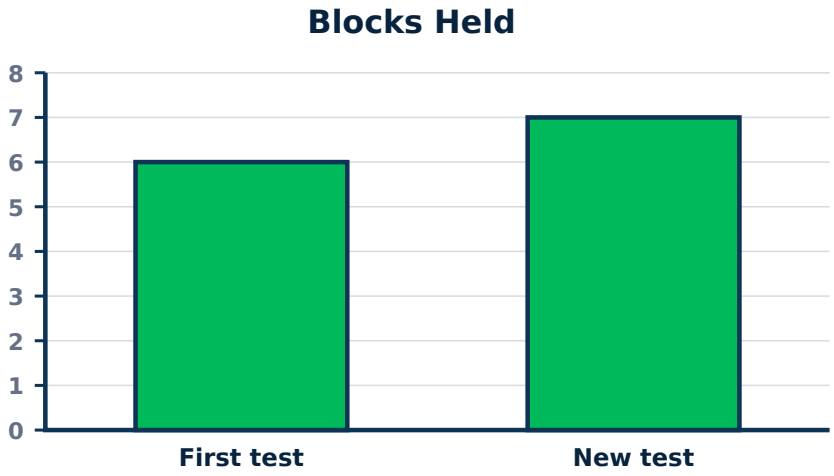
   The tower must be a surprise.

7. The goal is 7 blocks. The bridge held 6. How many more blocks must it hold?



_____

8. Look at the bars. How many blocks did the new design hold?



_____

9. Test 1 held 3 blocks. Test 2 held 5. Test 3 held 5. What does this show?

The design never changed.

The design got worse each time.

The design got better each time.

The design got better, then stayed the same.

10. A student changes the base, the material and the height all at once. What is the problem?

The tower will be taller.

Nothing is wrong.

She will not know which change helped.

The test will be quicker.

Scan to get this marked free. No screen time for your child.
Print it · do it in pencil · scan it · PencilGo picks the next sheet.

Build and Test a Design

Answer Key - Grade 1 Science Worksheet - Challenge Me

Circle the answer, or write the answer on the line.

1. The goal is to hold 7 blocks. Which result means the design worked?

   It held 6 blocks. It held 5 blocks. **It held 8 blocks.** It fell at once.

2. Which is a fair test for two paper bridges?

   Test only one bridge.

   Use a different table each time.

   Put the same blocks on each.

   Put more blocks on one.

3. A bridge holds weight but bends. Which change keeps what works?

   Remove the wide base.

   Start over with all new parts.

   Add a support and keep the wide base.

   Change the goal.

4. Mia's goal is 4 blocks. Tom's goal is 6 blocks. Both bridges held 5. Who met the goal?

   Both **Mia** Neither Tom

5. Why draw a plan before you build?

   to use more glue to skip testing to hide mistakes **to decide what to build**

6. Which sentence is a good design goal?



   The tower must be my favorite color.

   The tower must be pretty.

   The tower must stand and hold 4 blocks.

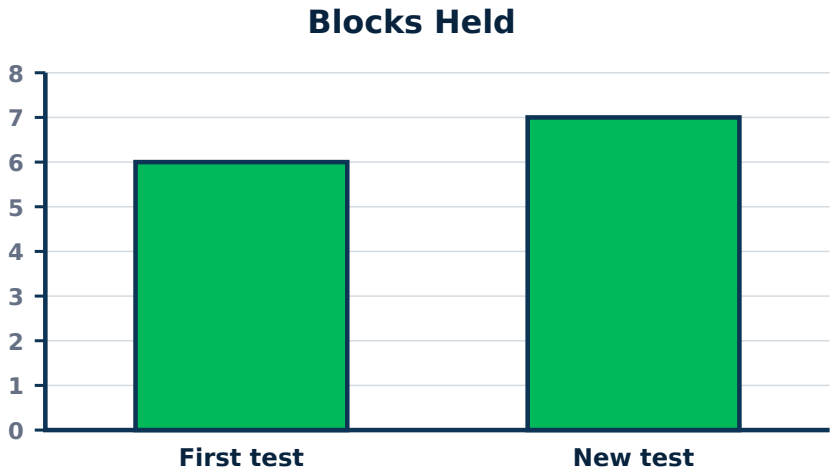
   The tower must be a surprise.

7. The goal is 7 blocks. The bridge held 6. How many more blocks must it hold?



1

8. Look at the bars. How many blocks did the new design hold?



7

9. Test 1 held 3 blocks. Test 2 held 5. Test 3 held 5. What does this show?

The design never changed.

The design got worse each time.

The design got better each time.

The design got better, then stayed the same.

10. A student changes the base, the material and the height all at once. What is the problem?

The tower will be taller.

Nothing is wrong.

She will not know which change helped.

The test will be quicker.