Design and Test a Solution

Grade 4 Science Worksheet

Name _____ Date _____

Circle the answer.

1. A team must build a boat that floats with 10 pennies. What is the criterion for success?

   it is the biggest boat in class

   it floats with 10 pennies inside

   it is painted blue

   it is built on a Tuesday

2. Materials: 10 straws, 1 meter of tape. Goal: a tower at least 40 cm tall that holds a tennis ball. Which is a constraint?

   the tower holds a tennis ball

   the tower is at least 40 cm tall

   use only 10 straws and 1 meter of tape

   the tower stands on its own

3. A class must build a bird feeder. They can spend only $5. What is the $5 limit?

   a criterion for success a design drawing a constraint on cost a test result

4. Problem: younger students cannot reach the classroom light switch. Which is a constraint?

   the solution is safe to use

   the solution cannot change the wall's wiring

   younger students can turn the light on

   the solution lasts all year

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Answer Key - Grade 4 Science Worksheet

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