Design and Test a Solution

Grade 4 Science Worksheet - Challenge Me

Name _____ Date _____

Circle the answer.

1. A team's shade lowered a toy's temperature by 2 degrees. The goal is 6 degrees. Thermometer readings show the sun shines in from the side. Which change fits the data?

   measure only at midday

   move the thermometer into the sun

   make the top of the shade thicker

   add side flaps to block low sunlight

2. Materials: 2 paper plates, 4 craft sticks, glue. Task: a stand that holds a tablet upright. Test: the tablet slides off. What is the best next step?

   add a ledge at the bottom to stop the sliding

   use more glue on the plates' faces

   add a third plate on top

   test with a smaller tablet only

3. A marble roller coaster must take at least 5 seconds. In testing, the marble takes 2 seconds. Which change answers this problem?

   remove the turns to make it shorter

   make the first drop much steeper

   add more turns to slow the marble

   use a faster marble

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

   the solution cannot change the wall's wiring

   the solution lasts all year

   younger students can turn the light on

   the solution is safe to use

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Design and Test a Solution

Answer Key - Grade 4 Science Worksheet - Challenge Me

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