Design and Test a Solution

Grade 4 Science Worksheet - Challenge Me

Name _____ Date _____

Circle the answer.

1. Why should a team write down criteria before they build?

   so the design will look neat

   so they can skip the test

   so they use more materials

   so they know how to tell if the design works

2. A phone stand must hold a phone at an angle and fit in a pocket. Which design idea meets both criteria?

   a tall stack of books

   a small folding card stand

   a heavy wooden block stand

   a stand that lies flat with no angle

3. A toy umbrella must keep a doll dry under a spray bottle. Test: water drips through the paper canopy. What is the best fix?

   spray from farther away

   use thinner paper

   make the handle longer

   cover the paper with plastic wrap

4. Problem: a school's hallway gets muddy on rainy days. Which pair is one criterion and one constraint?

   is made of rubber; is red

   keeps mud off the hallway; costs under $40

   costs under $40; fits by the door

   keeps mud off the hallway; dries shoes fast

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Answer Key - Grade 4 Science Worksheet - Challenge Me

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