# Design and Test a Solution

Grade 4 Science Worksheet - Challenge Me

Name _____ Date _____

Circle the answer.

1. A bird feeder must keep squirrels out. Test: squirrels climb the pole. Which improvement answers the test?

   add a smooth cone around the pole

   hang a second feeder beside it

   paint the feeder green

   fill the feeder with more seeds

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

   use only 10 straws and 1 meter of tape

   the tower is at least 40 cm tall

   the tower stands on its own

3. A team has 30 minutes, 8 index cards and tape to build a bridge that spans 20 cm. Which is a criterion?

   the bridge spans 20 cm

   the team uses 8 index cards

   the team uses only tape

   the team has 30 minutes

4. Problem: water drips from a classroom sink onto the floor. Which is the best problem statement?

   design a way to catch drips so the floor stays dry

   make the sink and floor a new color

   stop using any water in the classroom

   move the whole class to a bigger room

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Answer Key - Grade 4 Science Worksheet - Challenge Me

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