Compare Engineering Solutions

Grade 4 Science Worksheet - Building Confidence

Name _____ Date _____

Circle the answer.

1. Design A cooler: 6 hours cold, weighs 3 kg. Design B: 5 hours cold, weighs 1 kg. Goal: at least 5 hours and under 2 kg. Which meets every goal?

   Design B Design A

   both designs

2. A school must pick a sunshade. Shade 1 cools 8 degrees, costs $40. Shade 2 cools 6 degrees, costs $15. The goal is at least 5 degrees cooler for under $20. Which is best?

   both shades Shade 2

   Shade 1

3. Turbine A made 8 units of electricity but broke in strong wind. Turbine B made 6 units and did not break. The goal is to work all winter. Which tradeoff should the team accept?

   less electricity from B to get a turbine that lasts

   no turbine at all

   more electricity from A even though it breaks

4. Car X rolled 3 m, 6 m and 4 m. Car Y rolled 5 m, 5 m and 5 m. Car Z rolled 2 m, 7 m and 5 m. Which car was most consistent?

   Car Y Car Z Car X

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Answer Key - Grade 4 Science Worksheet - Building Confidence

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