Compare Engineering Solutions

Grade 4 Science Worksheet

Name _____ Date _____

Circle the answer.

1. A student says, "Cooler A is best because it kept ice the longest." Cooler A costs $30; the budget is $10. What is wrong with her claim?

   budgets do not matter in design

   Cooler A kept ice the shortest time

   keeping ice is not a criterion

   it ignores the cost constraint

2. Filter 1 uses sand and gravel. Filter 2 uses sand, gravel and charcoal. Filter 2's water smelled better. What can the class conclude?

   gravel alone fixed the smell

   sand made the water smell worse

   adding charcoal improved the smell

   both filters were exactly the same

3. Car A: 6 m, then 6 m, then 6 m. Car B: 9 m, then 2 m, then 7 m. Both averaged 6 m. Which is more reliable, and why?

   they are the same, because the averages match

   Car A, because its results stayed the same

   Car B, because its average is higher

   Car B, because it once went 9 m

4. Filter A: very clean water, costs $8. Filter B: clean water, costs $3. Both meet the "clean water" criterion. Budget: $5. Which is the best choice?

   neither, because both cost money

   Filter A, because it costs more

   Filter A, because it is the cleanest

   Filter B, because it is clean enough and within budget

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Answer Key - Grade 4 Science Worksheet

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