

Cart Choice Check

Use clear criteria to evaluate a design.

4.2.D "evaluate a design or object using criteria."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline the three criteria for a useful cart and circle each test result that shows whether a cart met or missed a criterion.

Testing Water Carts

- ① The school garden needed a way to carry water from a rain barrel to young plants. A team built two small carts. Cart A had a wide base, four wheels, and a bucket that held 8 liters. Cart B had a narrow base, two wheels, and a bucket that held 12 liters. Before testing, the team chose criteria for a useful cart.
- ② Their criteria were clear. The cart should carry at least 10 liters, stay upright on a bumpy path, and be easy for a fourth grader to pull. During a test, each cart traveled 20 meters over grass and small stones. Cart A stayed upright and was easy to pull, but it carried only 8 liters. Cart B carried 12 liters, but it tipped once and was hard to pull.
- ③ The team evaluated both carts by checking each result against every criterion. Cart A met two criteria but missed the amount of water needed. Cart B met the water criterion but missed safety and ease of pulling. Because a cart must meet all three criteria, the team did not choose either cart. They decided to redesign Cart B with a wider base and smoother-rolling wheels, then test it again.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 What three criteria did the team use to evaluate the carts?

2 Why did Cart A not meet all of the team's criteria?

3 Which two criteria did Cart B miss? Use test evidence.

4 Was the team's decision to choose neither cart supported by the test results? Explain.

3 YOUR TURN _____ Your own words

Choose an object you use at school. In 3 or 4 sentences, name three criteria for the object, evaluate whether it meets each criterion, and give a conclusion about keeping or changing it.

PART 1 • READ AND MARK

Underline the three criteria for a useful cart and circle each test result that shows whether a cart met or missed a criterion. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What three criteria did the team use to evaluate the carts?	The cart had to carry at least 10 liters, stay upright on a bumpy path, and be easy for a fourth grader to pull.
2	Why did Cart A not meet all of the team's criteria?	Cart A stayed upright and was easy to pull, but it held only 8 liters, not the required 10 liters.
3	Which two criteria did Cart B miss? Use test evidence.	Cart B missed staying upright because it tipped once. It also missed being easy to pull because it was hard to pull.
4	Was the team's decision to choose neither cart supported by the test results? Explain.	Yes. Cart A missed the water amount criterion, and Cart B missed the stability and ease-of-pulling criteria. Neither cart met all three criteria.

PART 3 • YOUR TURN (SAMPLE ANSWER)

I evaluated my water bottle using these criteria: it should not leak, should hold enough water, and should be easy to carry. It does not leak and holds enough water for school, but its wide shape is hard to fit in my backpack pocket. I would keep it, but I would look for a narrower bottle when it needs replacing.

Accept equivalent wording for the criteria and evidence from the passage. For the open response, accept any reasonable object, as long as the student names three criteria, evaluates the object against them, and gives a conclusion supported by evidence.