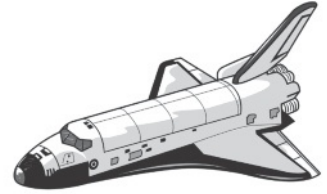


Name \_\_\_\_\_

# Materials Testing

*Did You Know?* Material engineers research, develop, and test different materials to be used in products. They are involved in making all kinds of products, such as keyboards, phones, and rockets. After testing different materials, engineers may decide that ceramic, plastic, or metal is the best choice for a product.



- 1 One engineer tests new cell phone covers. She has 5 different types of plastics to test. For each type of plastic, she needs to make 6 covers. Will the total number of covers be even or odd? Explain.

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- 2 A company tests 5 different paints. They use each paint to color 7 toys. Will the total number of toys painted be even or odd? Explain.

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- 3 A balloon factory tests 4 different materials for a new balloon. They will do the same number of tests on each material. The manager says that they need to do an odd number of total tests. How can they do this?

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- 4 **Extension** Some engineers have 9 different metals to test. For each metal, they will do the same number of tests. They want to have an even number of tests between 40 and 80. What are the possible number of total tests they could do? How many tests could they do with each metal? Explain.

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