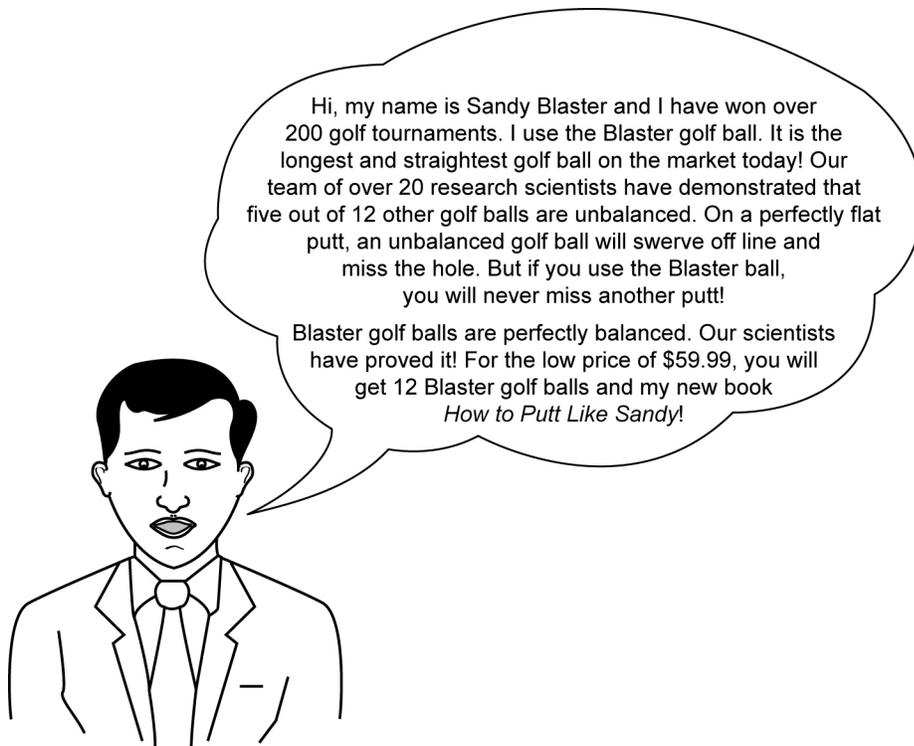


Test It! Balanced Golf Balls, Part 1

Read the advertising claim.



In this investigation, you will test the claim that golf balls are unbalanced.

Question

Are golf balls unbalanced?

Safety Precautions

- Do not eat or drink anything in the science lab.

What You Need

small, plastic container

100 mL water-softening salt

golf ball

permanent marker pen

250 mL water

plastic container

Name: _____

Date: _____

INTRO-3
(continued)

What to Do

1. Add the water to the plastic container.
2. Dissolve the water-softening salt in the water.
3. Place the golf ball in the water. Add more salt to the container if your golf ball does not float.
4. Wait for the ball to stop spinning. Use the permanent marker to put a dot on the part of the golf ball that is out of the water.
5. Push the ball down and let it spin under water.
6. Let the ball return to the surface and wait for it to stop spinning.
7. Repeat steps 5 and 6 three more times.

What Did You Observe?

8. Did the marked area of the golf ball return to the same position with the spot facing up? YES NO

What Did You Discover?

9. Complete the following sentence using the words unbalanced, lighter, and heavier.

If the golf ball comes to rest in the same position, with the spot facing upwards, your ball is probably _____. The _____ side faces up and the _____ side faces down.

Name: _____

Date: _____

Test It! Balanced Golf Balls, Part 2

In the advertising claim, the golfer said that scientists have demonstrated that five out of 12 other golf balls are unbalanced. Use the following steps to design your own investigation to test this claim.

Question

Are five out of every 12 golf balls unbalanced?

What Do You Think Will Happen?

1. If I test 12 different golf balls, then I will find that _____ are unbalanced.

Safety Precautions

2. List all the safety precautions that you think apply.

What You Need

3. List the materials and apparatus that you will use.

What to Do

4. Below and on the back of this paper, list the steps that you will follow to do a fair test.

Name: _____

Date: _____

What Did You Observe?

5. Record your observations on this table.

| Golf Ball Number | Balanced or Unbalanced | Golf Ball Number | Balanced or Unbalanced |
|------------------|------------------------|------------------|------------------------|
| 1 | | 7 | |
| 2 | | 8 | |
| 3 | | 9 | |
| 4 | | 10 | |
| 5 | | 11 | |
| 6 | | 12 | |

What Did You Discover?

6. Complete the following sentences using the correct number.

a) In this investigation, I found that _____ out of 12 golf balls were unbalanced.

b) I found that _____ out of 12 golf balls were balanced.

7. Did the results support your prediction? YES NO Explain.

8. Did your investigation support the advertising claim made by the golfer?

YES NO Explain. _____

Making Connections

9. Reread the advertising claim made by the golfer. Underline one sentence in the claim that isn't true.

10. Why do you think that the company used a professional golfer to promote the product?
