

Name: _____

Date: _____

Real-World Science: Evaluating Promotional Materials

Learning goals

After completing this activity, you will be able to ...

- Draw inferences based on data related to promotional materials.

Vocabulary: inference

Drawing Inferences from Promotional Materials

Every day, you likely come across many different kinds of promotional materials. Promotional materials include television commercials, billboards, marketing brochures, radio advertisements, company Web sites, and much more. In other words, anything that tries to sell you a product or a service is a promotional material.

Often, promotional materials contain scientific information. This information may or may not be factual. It is often up to you to draw **inferences** about the accuracy of the information. When you draw an inference, you form a judgment based on the given facts and the facts you already know. However, inferences (unlike conclusions) are not based on direct observation.



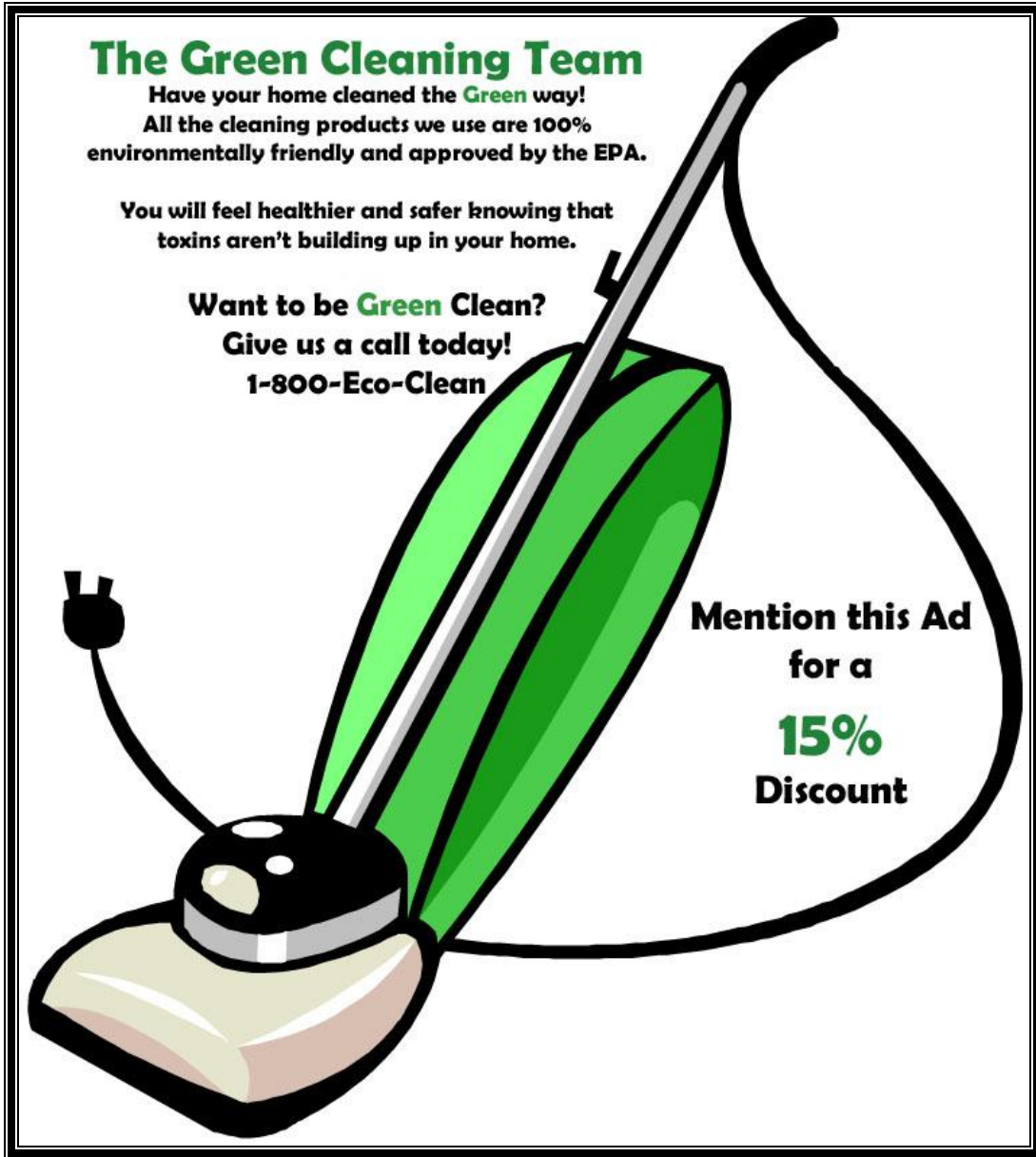
When drawing inferences about data presented in promotional products, ask yourself the following questions:

- What are some strategies the advertisers are using in order to:
 - Gain your attention
 - Sell you their product or service
 - Persuade you that the information in the advertisement is accurate
- Which data in the advertisement is most likely to be biased?
- Does the data in the advertisement match your current knowledge?
- Does anything in the advertisement seem too good to be true?
- What information are they *not* giving you in the advertisement?

On the next page of this activity, you'll have a chance to practice analyzing examples of promotional materials. Then, you'll find an example of an actual advertisement and put your new skills to the test.

Promotional Materials for a Service

Examine the advertisement below and answer the questions that follow.



The Green Cleaning Team
Have your home cleaned the **Green** way!
All the cleaning products we use are **100%**
environmentally friendly and approved by the EPA.

You will feel healthier and safer knowing that
toxins aren't building up in your home.

Want to be **Green Clean**?
Give us a call today!
1-800-Eco-Clean

Mention this Ad
for a
15%
Discount

1. What strategies is this company using to sell its services?

2. Why do you think the advertisement mentions the EPA?

3. Does the information in the advertisement seem too good to be true? Explain your answer.

4. Suppose you knew that the EPA did not approve cleaning products. How would this affect how you evaluated this advertisement?

5. What are some questions you could ask this cleaning service in order to verify their claim that they are environmentally friendly?

Promotional Materials for a Product

Examine the advertisement below and answer the questions that follow.

PEARSON'S LOW-JUMP PARACHUTE

DON'T TAKE UNECESSARY RISKS! IF YOU ARE JUMPING BELOW 2,000 FT, MANY PACKS ARE UNSAFE.

The advertisement includes a graph showing Speed on the y-axis and Distance Fallen on the x-axis. A horizontal line indicates the Safe Landing Speed. Two curves are shown: a blue curve for Pearson's Low-jump parachute and a red curve for the Competitor's parachute. Both curves start at a peak speed and decrease as distance fallen increases. The blue curve reaches the safe landing speed at a shorter distance than the red curve. A vertical line marks 2,000 feet on the x-axis.

1. Using your previous knowledge of science, what attribute of Pearson's Low-jump parachute might enable it to slow down a skydiver more quickly than other parachutes?

2. What data does the company provide to support its claims?

3. Suppose you knew the data was collected by scientists employed by the company. How does that affect how you viewed the data?

Evaluating Promotional Materials on Your Own

Find an advertisement for a product or service in a periodical or on the Internet. Make a copy of the advertisement, which you will turn in with this worksheet. Use the following questions to evaluate the advertisement.

1. What product or service is being advertised? _____

2. What strategies is the advertisement using to gain your attention, sell you their product or service, and persuade you that the information in the advertisement is accurate?

3. Is any information in the advertisement likely biased? If so, which information and how is it biased?

4. Do you believe the information in the advertisement is accurate? Explain your answer.

5. From the advertisement, what inferences can you draw about the effectiveness of the advertised product or service?
