

READ THE PASSAGE As you read the passage, visualize what a statue of Bes might look like.

8

A Humorous Protector

In ancient Egyptian mythology, Bes was a god who protected people, especially women and children. People placed statues of Bes in their homes. Bes's image also adorned jewelry, masks, furniture, knives, and other household items. They believed he would fight off evil spirits, watch over children, and help women in labor.

Typically, Egyptians made pictures or statues of gods in profile, meaning the god always looked to the left or right side. But pictures and statues of Bes always show him in portrait, or from the front. Some images of Bes show him in armor, ready to fight. The armor symbolizes his readiness to protect people from evil.

Another unusual thing about Bes is that he is often shown with his tongue sticking out. Whereas stories of most other Egyptian gods portrayed them as having serious personalities, Bes was thought of as the defender of everything good, who also had a good sense of humor. He stayed near newborn children to protect and entertain them. When a baby smiled or laughed for no reason, parents assumed Bes was making funny faces.

Although it has been thousands of years since Bes's height of popularity, he has had a lasting impact on the world. For example, the island of Ibiza, located in the Mediterranean Sea near Spain, was originally named after this interesting Egyptian character.

STRATEGY PRACTICE On a separate sheet of paper, sketch a statue of Bes, using details from the passage. Compare your sketch with a partner's.**SKILL PRACTICE** Read each question. Fill in the bubble next to the correct answer.

- The passage is mostly about _____.
 A an island with an Egyptian name
 B the characteristics of Egyptian myths
 C the traits of one Egyptian god
 D why Egyptians believed in gods
- How is Bes usually shown?
 A as an evil spirit
 B from the front
 C fighting others
 D looking very serious
- What is an example of humorous behavior?
 A wearing armor
 B adorning masks
 C protecting women and children
 D making faces at babies
- The title of the passage refers to _____.
 A Bes
 B Ibiza
 C an ancient Egyptian
 D Egyptian armor

Name: _____

8th

READ THE COLUMN Look for words or phrases that will help you make a mental picture.

Dr. Frankenvolt, Mad Scientist

Dear Dr. Frankenvolt,

I am not doing so well in science class this year. I need a really great science project in order to get a decent grade in the class. Do you have any ideas? Or maybe you can give me a mind-control ray for my teacher? That would work, too!

—Gemma in Georgia

Dear Gemma,

Believe me, if I had a mind-control ray, you would be addressing me as King Frankenvolt! However, I do have a good idea for your science project. How about a secret substance that acts like both a liquid and a solid? After you make it, try doing different things to it, such as squeezing it slowly and then quickly, placing it near a strong source of sound waves, such as a loud speaker, or pouring it slowly or quickly into other containers.

Perhaps you can give some to your teacher for his or her birthday.

—King, I mean Dr., Frankenvolt

Frankenvolt Mystery Goo

- 6 oz. of cornstarch*
- 4 oz. of water
- a few drops of food coloring (optional)

Mix the ingredients together, stirring thoroughly for 10 minutes.

*Add up to 2 oz. of cornstarch for thicker goo.

STRATEGY PRACTICE How can visualizing help someone better follow a list of directions?

SKILL PRACTICE Read each question. Fill in the bubble next to the correct answer.

1. What is the advice column mostly about?
 (A) how to make a science project
 (B) how to study better for science class
 (C) how to think of science projects
 (D) how to control your teacher
2. What information can you learn from the asterisk?
 (A) the best type of cornstarch to use
 (B) what to do with the cornstarch
 (C) how to make the goo thicker
 (D) the best way to store the goo
3. Which of these helps you determine that this column is an advice column?
 (A) the column title
 (B) the text in boldface type
 (C) the text in italic type
 (D) the bulleted list
4. What is unique about Dr. Frankenvolt's secret substance?
 (A) It fits into any container.
 (B) It gets harder if you add more liquid.
 (C) It can be used to repair sound equipment.
 (D) It reacts differently according to how it is handled.

Name: _____

READ THE PASSAGE Read the passage and study the image closely.

Heraldic Design

In Europe during the Middle Ages, lords and kings fought one another often. In order to tell who was who on the battlefield, a knight wore an insignia, or design, on a coat over his armor to identify himself. This insignia, called *arms*, was later embellished with additional elements representing the family. The resulting design is called the *heraldic achievement*. Here is a guide to its main components.

Supporters were animals, plants, or people next to the shield, representing guardians or business interests.

Ordinaries and charges were the pictures and symbols on the field of the shield that were important to the knight.

The **motto** was a saying or phrase, often in Latin or French, associated with a knight's family.



The **helmet and crest** appeared above the shield. The helmet shape followed current fashion, while the crest was a decoration. Common crest themes were wings, fan shapes, and animal heads.

The **field** was the solid-color paint, metal, or fur that covered the shield.

The **shield's** shape depended on the time period and the shield's function.

STRATEGY PRACTICE On a separate sheet of paper, draw your own heraldic design. Choose symbols and colors that are meaningful to you. Then explain your choices to a partner.

SKILL PRACTICE Read each question. Fill in the bubble next to the correct answer.

- The motto on the heraldic achievement shown indicates the valuing of _____.
 - (A) family honor
 - (B) hard work
 - (C) big factories
 - (D) ocean animals
- What part of the heraldic achievement shown indicates that fishing is important?
 - (A) the shield's shape
 - (B) the ordinaries and charges
 - (C) the supporters
 - (D) the crest
- Where is the helmet found on a heraldic achievement?
 - (A) just above the motto
 - (B) in the middle of the field
 - (C) just below the crest
 - (D) surrounding the shield
- Some of the words are in boldface to _____.
 - (A) indicate a link to more information
 - (B) define another term in the sentence
 - (C) emphasize important details
 - (D) indicate the component being described

8

READ THE CHART Think about what these symptoms look or feel like.

Insect- and Arachnid-Borne Diseases

The following chart lists some diseases that can be passed on to humans from insects (such as mosquitoes and flies) and arachnids (such as ticks and spiders).*

Disease	Carrier	Type of Germ	Symptoms	Severity
malaria	mosquito	parasite	fever, chills, body aches, nausea, vomiting, diarrhea	very high in young, old, and weak
Lyme disease	tick	bacterium	rash; fever; headache; body aches; fatigue; damage to heart, nerves, and joints	very low
Chagas disease	kissing bug	parasite	swelling; fever; body aches; headache; rash; nausea; vomiting; damage to the heart, esophagus, brain lining, and colon	low to moderate
dengue fever	mosquito	virus	fever, pain behind eyes, body aches, rash, bleeding	low, but can be severe for children
yellow fever	mosquito	virus	fever, chills, back and body aches, headache, nausea, bleeding, black vomit, low blood pressure, heart failure, coma, seizures	low to moderate
sleeping sickness	tsetse fly	parasite	fever, headache, body aches, irritability, fatigue, swollen lymph nodes, rash, confusion, personality changes	very high if untreated

**Source: Centers for Disease Control and Prevention*

STRATEGY PRACTICE Visualize and describe how a person with one of these diseases might appear.

SKILL PRACTICE Read each question. Fill in the bubble next to the correct answer.

- | | |
|---|--|
| <p>1. Which of these carries the most diseases?</p> <p>(A) kissing bug</p> <p>(B) tsetse fly</p> <p>(C) tick</p> <p>(D) mosquito</p> | <p>3. Which chart column would help doctors diagnose patients?</p> <p>(A) Disease</p> <p>(B) Carrier</p> <p>(C) Symptoms</p> <p>(D) Severity</p> |
| <p>2. Which symptoms are common to all of the diseases?</p> <p>(A) fever and body aches</p> <p>(B) rash and body aches</p> <p>(C) body aches and headache</p> <p>(D) fever and rash</p> | <p>4. How can you find out where the information in the chart comes from?</p> <p>(A) read the title</p> <p>(B) read the footnote</p> <p>(C) look in the Disease column</p> <p>(D) look in the Carrier column</p> |

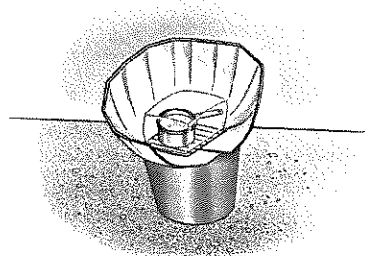
READ THE PASSAGE Think about the steps needed to build a solar oven.

Making an Oven from a Windshield Shade

You have no doubt seen them in people's cars—the large silver shades behind the windshield, reflecting the sun's rays away from the car to keep the car's interior cool. You can use those same devices to make food hot. Here's how!

What you will need:

- a reflective accordion-folded windshield shade
- duct tape
- a plastic bucket
- a cooking rack
- a black pan (preferably iron)
- an oven bag (large enough to hold the pan)



Campers love this simple, effective oven design.

Lay the windshield shade flat on the ground. Fold the sides together so that the bottom right and left corners touch and overlap slightly. The shape will resemble a funnel or a bowl. Place tape along the bottom edge to keep the oven's shape. Place the windshield shade oven on top of the bucket. Set the cooking rack on top of the oven, making sure it is stable. Place the food you want to cook in the pan, and then place the pan in the cooking bag and seal it. Put the pan on top of the rack. Position the oven so that as much sunlight as possible is shining on the pan. Turn the oven periodically as the sun changes position in the sky. On a clear, calm day, your oven may reach temperatures of up to 350°F. The long, slow cooking process is perfect for making soup, cooking beans, or anything else you might do with a crock pot or slow cooker.

STRATEGY PRACTICE Which instruction was easiest for you to visualize? Why?

SKILL PRACTICE Read each question. Fill in the bubble next to the correct answer.

1. Who would most likely benefit from making a windshield shade oven?
 - (A) a taxi driver
 - (B) a restaurant chef
 - (C) a camper
 - (D) a cooking student
2. What does the silver windshield shade do?
 - (A) It reflects the sun's energy into the pot.
 - (B) It takes the heat out of the car.
 - (C) It transfers the light from the windshield to the food.
 - (D) It redirects the power from a regular oven.
3. Which of these is clarified in the diagram?
 - (A) the purpose of the oven
 - (B) the position of the folded shade and the bucket
 - (C) the maximum temperature of the oven
 - (D) the position of the oven in the sun
4. Where can you find out everything you need to make this oven?
 - (A) the title
 - (B) the diagram
 - (C) the caption
 - (D) the bulleted text