Be Afraid...Be Very Afraid

Your heart pounds. Your hands sweat. It's time to face your worst fears. Read on if you dare.

By Diane Wedner

You're deep in a dark rain forest. Water drips down your neck. High overhead, a harpy eagle screeches. Closer by, a monkey cries.

Suddenly, something brushes against your arm. You jump. Phew! It's only a vine. Nothing to worry about.

You take deep breaths and try to slow your pounding heart. Then you feel something scratchy on your leg. It's just the vine, you tell yourself. Then you think, it's moving...

You look down—and scream. That's no vine. There's a huge, hairy spider crawling up your leg. It's a Goliath bird-eating tarantula.

The spider's eight shiny eyes glare at you. It hisses angrily and raises its legs. Deadly venom drips from its giant fangs. Forget about eating birds. This spider looks big and bad enough to eat you!


Frozen in Fear

Facing a giant spider can make anyone jumpy. This fear is normal. It can come from instinct. That's a natural reaction to creepy-crawly critters and other scary things. It can also come from memories. When something bad happens, we learn to be afraid of that situation.

For some people, though, the reaction is much worse than feeling a little jumpy. They freeze in fear. They can't move. They can't think clearly. Terror takes over. These people have a phobia, or a super-size fear. People with phobias even feel terror when they are in little or no danger.

Take the tarantula. It's scary, but it's not deadly to humans. People aren't even its prey. Those facts don't matter to people with a spider phobia. All they see is danger. Just thinking about a spider can make their heart pound. Seeing a photo of one can cause panic.

People with phobias go to extremes to avoid what scares them. That can be hard. Something scary might be around any corner—or on the next page. Maybe it's snakes or other creepy critters. Maybe it's heights or other scary places.

If this describes you, stop reading. If not, read on. You're about to experience what it's like to have a phobia. Don't worry if your skin crawls. Remember, a little fear is normal.

Believe It...or Not

Fear changes our perception, or how we see things. It can make something look bigger or more dangerous than it really is.

Slithering Snakes

Spiders aren't the only critters that give people the creeps. In fact, many common phobias involve animals. Think of rats with whiplike tails, or cockroaches with skittering feet. Then there are slithering, hissing, scaly reptiles.

Just imagine you're resting against a pile of rocks. Suddenly, something cool slides across your foot. It's a snake. Another snake slithers out of the rocks, then another. The rocks are a snake den! Inside, hundreds of snakes were hibernating. Now they're waking up.

You run away just in time. Soon, slithering snakes cover the ground. Some crawl up small trees. The snakes hiss. Their tongues flicker.

You're a safe distance away, but you can imagine a snake sliding up your leg. They are harmless garter snakes. Yet you can almost feel one biting you. Your heart races. You shiver and shake, even though you're safe.

Terrible Teeth

A different danger lurks in the sea. You're in a boat with scientists observing seals. Suddenly, a tiger shark leaps out of the water. You're so close that you can see rows of its jagged teeth.
The teeth snap on a seal’s neck. The seal has no chance of escape. The shark thrashes its head back and forth. Its teeth rip off big chunks of seal. The scientists lean forward to take notes. You fall back, trying to get as far away from the shark as possible.

You worry the shark will flip the boat and toss you in the water. You grip the boat so hard that your knuckles turn white. You gasp for breath. You feel trapped. Panic rises.

The sharp slips under the surface. A pool of red seal blood remains. You can’t see the shark any more, but you know it’s there. You don’t let go of the boat until you’re back on dry land.

Horrible Heights

Creepy critters may top the list of scary things. Yet for some people, there are plenty of other horrors in nature. Take heights. You’re hiking up a mountain trail. You go around the bend. Whoa! You’re on the edge of a cliff. Your toes hang over a 305-meter (1,000-foot) drop. Loose dirt rolls under your heels. You could slip.

You’re not a bird, so “flight” isn’t an option. Instead, you freeze. This instinct keeps you from hurtling off the cliff.

Even so, you imagine falling and the splash as you hit the ground. Your knees wobble like wet spaghetti. Your head spins. You try to find something to hold onto. There’s nothing. Shaking, you fall to your hands and knees. Then you slowly crawl back from the edge.

Zapped!

If you think you’re safe, think again. Suddenly, black clouds boil up in the sky. Day turns into night. A cold wind whips, but that’s not why you feel a chill running down your spine.

A bright light splits the sky. Lightning zigzags toward the ground and strikes a tree. Branches sizzle and crash. Then, Boom! Thunder rumbles. It’s so close and loud that the ground shakes.

You begin to shake and sweat at the first rumble of thunder. You race home and dive under a bed or hide in a closet. In fact, finding a safe place indoors is the right thing to do. If lightning strikes you, it can badly hurt or even kill you. Luckily, your chances of getting zapped by lightning are only one in a million.

Trapped!

For some people, though, hiding in a closet is their worst nightmare. They fear being trapped in small spaces. Does that scare you?

Try this test. Imagine you’re exploring a cave. It’s dark, so you click on a flashlight. At first, the cave is tall enough to stand in. The deeper you go, the narrower the cave gets. Soon, you’re crawling on your hands and knees, then on your belly.

Ooops! You drop your flashlight. It flickers off. The cave is so narrow that you can’t turn around. You bump the ceiling. Dirt falls down your neck. It feels like the walls are closing in on you. You worry you’ll run out of oxygen. Should you use your last breath to scream for help? Will anyone hear you? If that’s how you feel just reading this, maybe you have a phobia.

Danger Alert

Extreme fear can stop you from exploring your world. A little fear, though, is a good thing. It can keep you safe. It can keep you from falling off a cliff or facing off with a hungry shark.

So don’t be afraid to explore. The next time you feel that rush of adrenaline, though, pay attention. If your heart pounds and your skin prickles, look around you for signs of danger. If you spot trouble, it’s time for flight or fight.

Fear Factory

See what happens inside your body when fear strikes.

1. You see a spider.
2. Nerves carry the information to a part of your brain called the amygdala. That’s where fear and memory of scary things live.
3. Your brain tells glands on your kidneys (behind your intestines) to release a chemical called adrenaline.
4. Adrenaline races through your body. It gets you ready to fight the danger, freeze, or run.
5. Your heart races.
6. Your lungs pump extra oxygen. That gives you a burst of energy.
7. The blood vessels in your skin shrink. You shiver.
8. Your digestive system shuts down. You feel nauseous.
10. Ooops! Your brain realizes the tiny spider can’t hurt you. Your body returns to normal—until the next scare.

Wordwise

**instinct:** a behavior or action that is natural from birth instead of learned

**perception:** the ability to become aware of what is around you through the use of your senses, such as sight, sound, and touch

**phobia:** an extreme and lasting fear that is not based on reason
Comprehension Strategy:
As you read, think about what scares you. Use information in the article to think about how your body might react.

Overview

Summary

• A phobia is an extreme and lasting fear that is not based on reason.
• People have phobias about a variety of objects and situations.
• When people react to a fear or a phobia, a natural chain of reactions occurs within their bodies.

Learning Objectives

Students will:
• understand what a phobia is;
• recognize the various objects and situations that can trigger common phobias;
• understand what happens inside the human body when a person experiences fear;
• understand how to make connections between the text and their personal experiences when reading.

Materials Needed

• access to the website: http://www.fearexhibit.org/brain
• 2 or 3 small boxes
• 2 or 3 small bowls
• items that feel strange to the touch, such as cooked spaghetti in a bit of water, soggy pretzel sticks, peeled grapes, or an overly ripe banana (substitute non-food items if any students have allergies)
• access to the Internet or research materials

Resources

• Learn more about fear and phobias:
  –http://www.psychiatry.org/mental-health/phobias

• View a slideshow about common phobias:
  http://www.webmd.com/anxiety-panic/ss/slideshow-phobias

• Watch a video about treating phobias:

Background

• People detect, process, and use information about the environment around them in different ways.
• The brain plays an important role in processing that information and prompting immediate behaviors.
• One possible reaction is fear. Fear is a normal human emotion. It is a natural instinct in humans that is programmed into the nervous system. Fear allows us to survive dangerous situations.
• A phobia is an extreme and lasting fear that is not based on reason.
• When people are afraid, their bodies react in an instantaneous and predictable way:
  –nerves send information to the amygdala, which is where memory is stored, in the brain;
  –the brain prompts a gland on top of the kidney to release adrenaline;
  –adrenaline races through the body prompting a fight-or-flight reaction, causing some or all of the following actions inside the body:
    –the heart races
    –the lungs pump extra oxygen, giving a person extra energy
    –blood vessels shrink, making a person shiver
- the digestive system shuts down, making a person feel nauseous
- muscles tense
- When the brain recognizes that the situation is not dangerous, the body returns to normal.

- For people with phobias, these symptoms are heightened to the point of terror. Reactions to triggers are automatic and uncontrollable. People with phobias will do everything they can to avoid anxiety-causing objects or situations.

- Common phobias include reactions to animals like spiders or snakes; activities such as flying, being in water, being in high places; and a variety of social situations. People may fear speaking in public. They may fear being in public places or small rooms. In some people, their fears are so intense that they never leave their homes.

- Phobias covered in the article include:
  - Arachnophobia: the fear of spiders;
  - Ophiophobia: the fear of snakes;
  - Galeophobia: the fear of sharks;
  - Acrophobia: the fear of heights;
  - Astraphobia: the fear of thunder and lightning;
  - Claustrophobia: the fear of small spaces;

**Fast Facts**

- A phobia is an anxiety disorder. Yet only 6 percent of people with phobias seek treatment for their conditions.

- Some phobias are very unusual. For example:
  - Alektorophobia: the fear of chickens;
  - Anathophobia: the fear of dust;
  - Chromatophobia: the fear of colors;
  - Triskaidekaphobia: the fear of the number 13.
  - Panophobia is the fear of everything.

**Prepare to Read**

**Activate Prior Knowledge**

**Identifying Fears**


Preview the video to determine whether any of your students will be overly sensitive to the video's content. If you suspect that will be the case, provide an opportunity for those students to leave the room before viewing the video.

2. Show students the video with the sound turned off. After the video, allow students to discuss their reactions and how the video made them feel.

3. Guide the class to understand that watching a video like this will naturally bother some people more than others. Some may not have been affected at all. Some may not be able to watch it. Discuss reasons why.

4. Next, display the projectable edition for students. Show students the photos in the article one by one. Ask students how each photo makes them feel.

5. Invite volunteers to share other things or situations that might make people feel fearful. Record the list on the board. Tell students you will revisit the list after reading the article.

**Vocabulary**

**Prior Knowledge of Key Words**

1. Write the words instinct, perception, and phobia on the board.

2. Divide the class into small groups. Give students five minutes to discuss what the words mean and write a definition for each.

3. Next, have students turn to the Wordwise vocabulary in the article. Have volunteers read aloud each word and its definition.

4. Point out to students that their prior knowledge of each of these words may reflect how the words are used in everyday language. The written definitions reflect the academic or content meaning of the words.

5. Give students five more minutes to discuss how the definitions they wrote differ from the academic definitions.

6. Invite volunteers from each group to share their ideas with the class.

**Reading**
Explore Reading

Making Connections with Phobias

1. Ask students if they have ever seen someone who was so afraid of something that they couldn’t move, or who won’t go places due to their fears. Allow students to share their experiences.

2. Explain to students that people who react in this way may have a phobia, or an extreme and lasting fear that is not based on reason. Their perception, or how they see and experience the situation, is that it is more dangerous than it really is.

3. Discuss the difference between a phobia and a fear and how perception of a situation changes when a fear turns into a phobia. Then tell students they are going to read an article about common fears and how people with phobias might react when faced with these trigger situations.

4. Draw a chart like the one below on the board. Tell students they will use this chart to record information about trigger situations, how they might be perceived by someone with a phobia, and the actual danger of the situation. Discuss as a class whether or not fear is a reasonable reaction in each instance. Note that many of the situations described in the article may be scary but the reaction of a person with a healthy fear will be different (i.e. less extreme) than that of a person with a phobia.

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<thead>
<tr>
<th>The Situation</th>
<th>The Perception</th>
<th>The Reality</th>
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5. Read the article as a class. Stop after each section so students can add information to the chart. Have each student complete his or her own chart.

6. When you are finished reading, discuss as a class whether or not fear was a reasonable reaction in each situation. How real was the danger? Invite volunteers to express how they think they would react in these same situations.

Extend Reading

Reading a Diagram

1. Display page 7 of the projectable edition. Ask students what type of text feature this page shows. (a diagram)

2. Invite a volunteer to identify the headline of the diagram. (Fear Factory) Invite another volunteer to locate the deck. (See what happens inside your body when fear strikes) Discuss with students how these two elements of the diagram support each other.

3. Explain to students that sometimes design determines how information is presented to readers. Invite students to examine the diagram to find one example of where this has occurred. (Although all of the steps are numbered, steps 4 and 10 do not have leader lines.)

4. Discuss with students why this design choice makes sense. (Step 4 relates to the entire body. One leader line would not make sense. Step 10 is the last thing that happens in this sequence of events, but it relates to the brain. Due to its location in the diagram, it does not make sense to include a leader line.)

Writing

Explore Writing

Persuasive Writing

1. Tell students that people have many different purposes when they write. They may want to inform or entertain. They may also want to persuade a reader to think or feel a certain way.

2. Tell students that the writer of this article wanted to inform, or tell, readers about phobias. But the writer’s style had another purpose. What was that? (to make or persuade people to feel a certain way)

3. Discuss with students how the writer’s style affected how they felt as they read the article. (short sentences; active voice; heavy use of adjectives and comparisons; written from reader’s point of view; or in second person)

4. Tell students to think of a time when they felt extremely scared. Have them write a short story describing what happened, how they felt, and why they reacted this way. Encourage students to use the same techniques this writer did to achieve the same affect.

5. Invite volunteers to share their stories with the class.

Extend Writing

Using Drama to Make Connections
1. Point out to students that one common phobia among people is the fear of public performance. Explain that drama, or acting scenes out, is one technique that therapists use to help people overcome this phobia.

2. Divide the class into small groups. Ask each group to select one section from the article. Tell them to brainstorm a story line and then write a script acting out the scene. Each student must have an active part.

3. Have groups present their scenes to the class.

Science

Explore Science

Reacting to Fear

1. Have students review the diagram on page 7 of the projectable edition. Read through the steps and discuss how a person processes information about the environment around them and what happens to the human body when it reacts to fear.

2. Point out to students that while the steps in the diagram are numbered, in reality the entire process is almost instantaneous.

3. Ask students to imagine that they have a phobia. At which step would this sequence of events end? (Step 9) Why? (A phobia is an extreme and lasting reaction. People with phobias are not able to easily recognize that the situation is safe. Their brains do not allow their bodies to return to normal so quickly.)

4. Have students use the Activity Master below to describe how people with phobias might feel if faced with certain trigger situations, what they might do, and how their bodies might react.

The Role of Perception

1. Have students study the two images in the box on pages 4-5 of the projectable edition. How are the images alike? How are they different?

2. Invite a volunteer to read aloud the information in the box. As a class, discuss how perception can affect how a person feels about a situation. Why does perception play such an important role for people with phobias?

To Fear or Not to Fear

1. Prior to this activity, gather two or three small boxes and the same number of small bowls. You will also need items to put in the bowls. These should be items that feel strange to the touch, such as cooked spaghetti or peeled grapes. If any students have food allergies, substitute other items.

2. Place the items in the bowls and put the bowls inside the boxes. Don’t let students see what is in the boxes.

3. Show students the box. Tell them that each of these boxes holds a surprise. You cannot guarantee that it is a pleasant surprise.

4. Select one volunteer to feel inside each box. Tell the volunteers that they must touch what is inside the box, but they cannot tell classmates what they find.

5. As volunteers feel the contents inside each box, ask them what they think they are touching. Monitor how students’ (both volunteers and participants) reactions change as different guesses are made. Point out that what people think is in a box, or their perception of the situation, will greatly affect their reaction.

Extend Science

How the Brain Processes Fear

1. Access the following website: http://www.fearexhibit.org/brain. Click on the section "Brain Structures."

2. Review with students how different areas of the brain process information about fear.

3. Allow students to browse other areas of the site to learn more about the connection between the brain and how it processes fear.

Evaluating Phobias

1. Remind students that phobias are an anxiety disorder that can be treated if people seek help.

2. Have small groups select a phobia and research it. Tell them they must identify the phobia, its symptoms, possible causes, and potential methods of treatment.

3. Have groups share their results with the class.

Activity Master: Reacting to Fear

Read about each situation. Describe how people with phobias might feel in each situation, tell what they might do, and explain how their bodies might react.

<table>
<thead>
<tr>
<th>The Situation</th>
<th>Describe</th>
<th>Tell</th>
<th>Explain</th>
</tr>
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<tbody>
<tr>
<td>Enrique is climbing a ladder. He looks down and suddenly notices how high he is.</td>
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</table>
Assessment

Read each question. Circle the correct answer.

1. What is a phobia?
   A. the ability to become aware of what is around you through the use of your senses
   B. an extreme and lasting fear that is not based on reason
   C. a behavior or action that is natural from birth instead of learned

2. Why does a spider look bigger to someone who has a phobia of spiders?
   A. Fear changes the person's perception of the spider.
   B. The person is standing too close to the spider.
   C. People with phobias have better vision.

3. How are people with phobias most likely to react if faced with a trigger situation?
   A. They will try to enjoy the situation.
   B. They will freeze.
   C. They will remain calm.

4. Which of the following happens first when you see something that scares you?
   A. Adrenaline races through your body.
   B. Nerves carry the information to your brain.
   C. Your lungs pump extra oxygen.

5. What causes you to feel nauseous when you are scared?
   A. Your heart races.
   B. Your blood vessels shrink.
   C. Your digestive system shuts down.

Answers

Activity Master: Reacting to Fear

Answers will vary but should reflect that a person with a phobia will react with extreme fear to each situation, or avoid it altogether. They might freeze up or even flee the situation. Their hearts will race, they may shiver. They may also get a stomachache or become extremely tense.

Assessment


Citations

MLA 8

APA 6