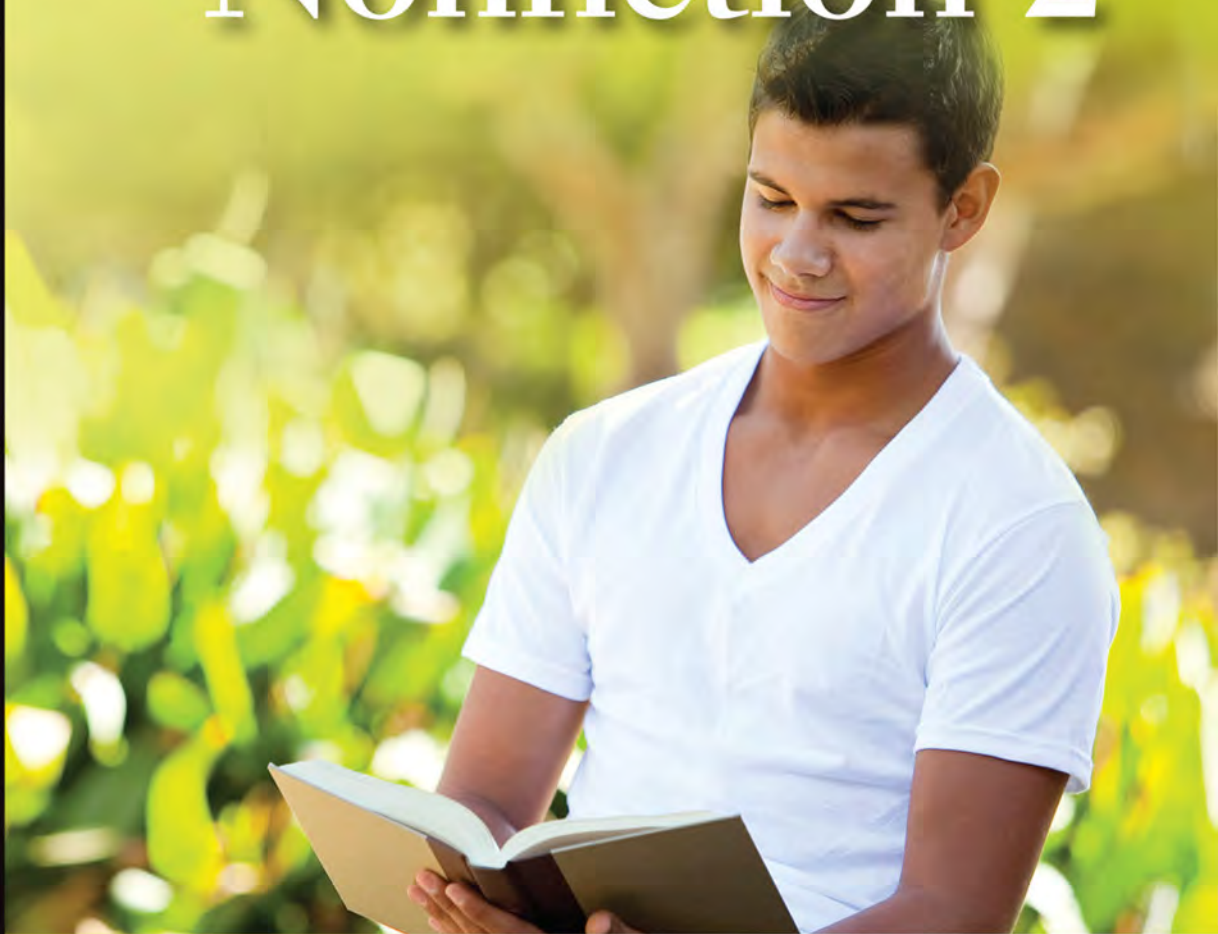


# Nonfiction 2



## Topics Include:

Fingerprints, Quicksand,  
The Fountain of Youth, Shutterbug,  
Flesh-Eating Foliage, and More

# CONTENTS

Against the Odds: Athletes Who Wouldn't Quit .....	1	Movie Credits .....	51
Fingerprints .....	3	The Last Great Race on Earth .....	53
Hummingbirds: Fascinating Feathered Friends.....	5	Whys and Wherefores .....	55
Pok-a-Tok: Mayan Sport of the Gods .....	7	Quicksand .....	57
Miranda Rights: You Have the Right to Remain Silent .....	9	Drummer Boys.....	59
What's the Truth About the Common Cold? .....	11	More Whys and Wherefores .....	61
Congratulations, Captain Clark!.....	13	A Memorable Moment at the Plate.....	63
The Healing Power of Horse Therapy.....	15	Rating the Big Winds.....	65
At the Turn of the Century .....	17	Flesh-Eating Foliage .....	67
Is It Organic?.....	19	Beyond the Bright Lights .....	69
Bats: Echoes in the Night .....	21	Holiday Whys and Wherefores .....	71
The History of the Frisbee .....	23	Abebe Bikila: The Barefoot Olympian.....	73
Fascinating Facts About Flies .....	25	Socrates (469–399 B.C.).....	75
Code Talkers .....	27	Greyfriar's Bobby.....	77
The Sense of Smell.....	29	SOS .....	79
A Great Man's Dream .....	31	Some Hair-Raising Information.....	81
Shutterbug .....	33	Star Trek's Lieutenant Uhura.....	83
Flea Circuses .....	35	The Lady with the Lamp.....	85
The Japanese Tea Ceremony .....	37	The Fountain of Youth .....	87
Breaking Barriers .....	39	Spy Stories .....	89
Our Expendable Organs.....	41	Looking for Yourself? Check the Internet. ....	91
Tragedy at the Triangle Shirtwaist Factory .....	43	Handling Stress .....	93
Erroneous Eye-deas.....	45	Typhoid Mary.....	95
All the World Loves a Clown.....	47	Some Final Whys and Wherefores .....	97
The Bone-Builder.....	49	Flying Doctors: Help Is on the Way!.....	99
		Answer Key .....	100

## Against the Odds: Athletes Who Wouldn't Quit

Life presents many challenges. For some, daily life is an obstacle course. Only a very few people meet their challenges so heroically that they become inspirations. They are people we can look at and say, "If they can do that, I can surely do this!" You may recognize the following names. Each person listed has gained fame and success against the odds.

- **Lance Armstrong:** The courageous American cyclist fought back from cancer. Armstrong, a young husband and new father, won the grueling Tour de France bike race. The champion offered this advice: "There's one thing I say to those who use me as their example. If you ever get a second chance in life, you've got to go all the way!"

- **Jim Abbott:** Abbott went straight to the major leagues from college baseball. He pitched the United States to a gold medal in the Olympics. He was voted best left-handed pitcher and threw a no-hitter for the New York Yankees. In 1995, he won the Hutch Award. This honor is bestowed on a major leaguer who shows fine character, competitive desire, and fighting spirit. Jim Abbott, known for his cheerful "Hi, how you doing?" greeting, was born without a right hand.



the 1,500-meter race, Marla lost track of the other runners. She finished in eighth position. Marla Runyan may not have won a medal, but she became famous for being the first legally blind athlete to compete in the Olympics.

- **Terence Parkin:** Another athlete in the 2000 Olympics was South African swimmer Terence Parkin. The talented 20-year-old won a silver medal in the breaststroke. Terence has never heard a starter's signal. Born deaf, he uses a flashing light to signal the beginning of the race.

- **Henry Holden:** Best known as a TV actor, Holden is also an amateur athlete. He caught polio at age four during the 1952 epidemic. To this day, he still wears leg braces. Despite his disability, Holden is a skier, scuba diver, and bowler. He has ridden in horse shows and run marathons. Holden lives by his motto: "Attitudes are the real disability!"

- **Marla Runyan:** This fine American runner represented the United States in the 2000 Olympics. In the finals of

**Against the Odds: Athletes Who Wouldn't Quit (page 2)**

**COMPREHENSION:** Circle one or more letters.

1. What do the people in the reading have in common?
  - a. They are all athletes.
  - b. They are all wealthy.
  - c. They've all faced disabilities.
2. What experience did Terence Parkin and Marla Runyan share?
  - a. Both swam in the same pool.
  - b. Both competed in the Olympics.
  - c. Both learned to read lips.
3. Why was Jim Abbott an unlikely star pitcher?
  - a. He was blind.
  - b. He only had one hand.
  - c. He preferred playing football.

**NOTING DETAILS:** Underline the answer.

1. The disease that struck Lance Armstrong was ( cancer / polio ).
2. Henry Holden is best known as an ( actor / athlete ).
3. Marla Runyan is a ( swimmer / runner ).
4. Terence Parkin won a ( blue ribbon / silver medal ).
5. Parkin uses a ( flashing light / whistle ) to signal the start of a race.

**CHARACTER STUDY:** Circle four words that describe the people in this reading.

courageous	lazy	meek
admirable	dishonest	timid
determined	athletic	angry

**LOOK IT UP:** Write the dictionary definition.

*obstacle:* \_\_\_\_\_

*grueling:* \_\_\_\_\_

**VOCABULARY:** Complete the sentences with words from the article.

1. A \_\_\_\_\_ is a metric measure of length equal to 39.37 inches.
2. The rapid spreading of a disease is called an \_\_\_\_\_.

**SYNONYMS OR ANTONYMS?** Write S or A.

1. \_\_\_\_\_ inspiration / motivation
2. \_\_\_\_\_ outstanding / ordinary
3. \_\_\_\_\_ accomplishments / deeds
4. \_\_\_\_\_ amateur / professional

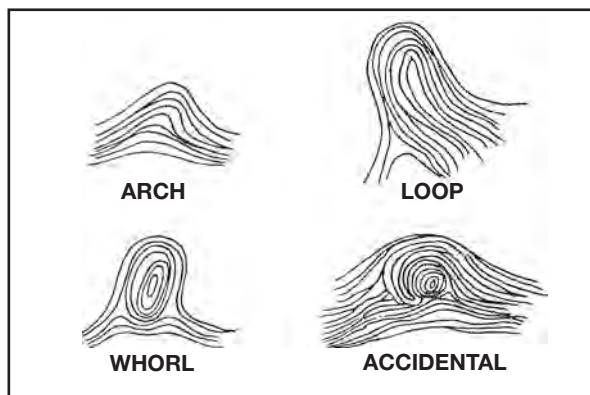
**PICK A PROJECT:** Work on the back of this sheet.

- Write two or three sentences about someone you know of who successfully faced a challenge.
- In your own words, explain Henry Holden's motto: "Attitudes are the real disability." Tell how you could apply this motto to your life.

## Fingerprints

Mike and Ike are identical twins. From all appearances, they are just alike. But one thing is sure to be different about the two. Each boy has unique fingerprints. In fact, no two people have the same patterns on their fingers. That is why fingerprints are so useful in identifying people.

Fingerprints are grouped in three categories. The *loop* is most common. Lines that form a loop begin on one side of the finger, curve around, and end on the same side. In the *whorl* pattern, lines make a complete, enclosed circle. The third design is the *arch*. In this formation, lines reach from one side of the finger to the other, rising high in the center. Some fingertips have loops, whirls, *and* arches. This is called an “accidental” pattern.



Police officers may identify a criminal by the fingerprints at a crime scene. Often, these are invisible to the naked eye. To uncover the latent, or hidden, prints, investigators use a method similar to the one described below. Try the process yourself.

- Rub your fingers through your hair.
- Hold a clean, dry drinking glass in that hand for one minute.
- Place the glass on an open sheet of newspaper.
- Using a powder puff or soft brush, gently brush baby powder, bath powder, or cornstarch on the glass.
- Gently press clear sticky tape (not the frosted kind) wherever the powder sticks to the glass.
- Next, stick the tape down on a piece of black paper.
- Examine the pattern on the tape with a magnifying glass.

If the activity was successful, your hand left small amounts of the oil from your hair on the glass. You were able to lift the fingerprints with the tape because the powder stuck to the oil. Can you see the tiny, curved lines of your own prints?



**Fingerprints****(page 2)****COMPREHENSION:** Circle a word.

1. Fingerprints are often used to  
( identify / intimidate ) people.
2. Identical twins have ( the same /  
different ) fingerprints.
3. The most common fingerprint pattern  
is the ( loop / whorl ).
4. ( Police officers / Teachers ) often use  
fingerprints in their work.

**NOTING DETAILS**

1. Name the three fingerprint patterns.
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
2. What fingerprint pattern combines all  
three print categories?
  - \_\_\_\_\_
3. Write six items you would need to  
perform the fingerprint activity.
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_

**PUTTING STEPS IN ORDER:** Write the letters of the  
following three steps in chronological  
order.

- a. Hold a clean, dry drinking glass for  
one minute.
- b. Gently brush baby powder, bath  
powder, or cornstarch on the glass.
- c. Rub your fingers through your hair.

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_

**SYNONYMS:** Draw a line to make each match.

- |             |                  |
|-------------|------------------|
| 1. pattern  | a. group         |
| 2. unique   | b. hidden        |
| 3. category | c. design        |
| 4. latent   | d. process       |
| 5. method   | e. one-of-a-kind |

**DRAWING CONCLUSIONS**

Why could police investigators use crime  
scene fingerprints to identify one person  
as the criminal?

---



---



---

**PICK A PROJECT:** Work on the back of this sheet.

- Think about ways government and  
businesses might use fingerprinting.  
Write two or three sentences telling  
about one of these uses.
- Using an inkpad, transfer the  
fingerprints of some classmates or  
friends to the back of this sheet. Try to  
identify the type of each pattern.

## Hummingbirds: Fascinating Feathered Friends

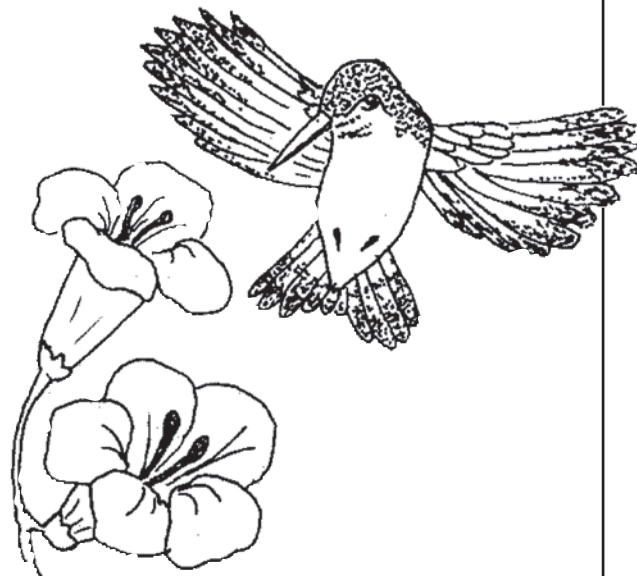
“Hmmmmm, hmmmmm, hmmm....”

That sound is made by the wings of the world’s smallest bird. Because of its humming wings, the creature is called a hummingbird. If you live in the Western Hemisphere, you may have seen a hummingbird. Of the 300 species known, 19 varieties live in the United States. All but one of these are found in the western and southwestern states.

The hummingbird’s wings move differently from those of other birds. They beat faster—up to 80 times a second! And unlike most birds, hummingbirds can beat their wings in a circular motion. This allows them to hover like a helicopter. Hummingbirds are also the only birds that fly backward. It’s a good thing that hummingbirds have exceptional flying skills. In contrast to most birds, they can’t move on land. While they can use their legs to cling or perch, they cannot walk.

Spotting a hummingbird can be a treat! Some species are among the most brightly colored birds on earth. They may have spots of emerald, violet, or scarlet. Their long, slender bills are also distinctive. If you spot a hummingbird, look quickly! It can dart away in an eyeblink.

Like many birds, hummingbirds live mainly on a diet of insects. They use a specialized feeding method to collect



nectar from flowers. Most hummingbirds feed three to five times per hour. They need lots of food to fuel their rapid wing movements and heart rate. The smaller the animal, the faster its heart beats. A hummingbird has the exceptionally high heart rate of about 1,200 beats per minute. (In comparison, an elephant’s heart beats about 25 times per minute.)

Is your neighborhood a home to hummingbirds? If so, you might attract the hungry birds with a feeder. Hummingbirds like red—so use a red feeder. Mix one part sugar with four parts water. Bring the mixture to a boil. Then let it cool. After you hang your filled feeder, be patient. It may take some time to attract the first birds. But once they find you, the fascinating creatures will be sure to come back for more!

**Hummingbirds: Fascinating Feathered Friends (page 2)**

**COMPREHENSION:** Write Y for *yes* or N for *no*.

The article discusses the hummingbird's

- |                |                          |
|----------------|--------------------------|
| 1. ____ size.  | 4. ____ natural enemies. |
| 2. ____ color. | 5. ____ flying skills.   |
| 3. ____ song.  | 6. ____ nest.            |

2. How are hummingbirds similar to most other birds?

- a. They eat insects.
- b. They cannot walk.
- c. They flap their wings.
- d. Their wings make a humming sound.

**NOTING DETAILS**

1. What are two things the hummingbird eats?

- \_\_\_\_\_
- \_\_\_\_\_

2. How many varieties of hummingbirds live in the United States? • \_\_\_\_\_

3. How did the hummingbird get its name?

- \_\_\_\_\_
- \_\_\_\_\_

4. What is a good color for a hummingbird feeder? Why?

- \_\_\_\_\_
- \_\_\_\_\_

**MAKING INFERENCES:** Write T for *true* or F for *false*.

1. \_\_\_\_ If you live on the west coast of the United States you might see a hummingbird.
2. \_\_\_\_ A hummingbird has the ability to fly backward out of a flower.
3. \_\_\_\_ If a hummingbird lost its wings, it could still get around.
4. \_\_\_\_ Hummingbirds are different from other birds in many ways.

**SYNONYMS:** Draw a line to make each match.

- |                |                |
|----------------|----------------|
| 1. species     | a. red         |
| 2. circular    | b. green       |
| 3. fascinating | c. round       |
| 4. emerald     | d. purple      |
| 5. violet      | e. interesting |
| 6. scarlet     | f. variety     |

**COMPARE AND CONTRAST:** Circle one or more letters.

1. How are hummingbirds different from most other birds?

- a. They can fly.
- b. They are smaller.
- c. They are fiercer.
- d. They are more brightly colored.

**PICK A PROJECT:** Work on the back of this sheet.

- Describe a bird that you would be likely to see in your yard. Tell how it is similar to and different from a hummingbird.
- Write a how-to paragraph. Give directions for making some type of bird feeder.



## Pok-a-Tok: Mayan Sport of the Gods

The Maya were an incredible people. In ancient times, they populated the Yucatan in southern Mexico and much of Central America. While most inhabitants of the new world were wandering nomads, the Maya built a great civilization. They set up cities and built pyramids as temples to their gods. They studied the stars. They developed their own system of writing in symbols, or hieroglyphics. These appear on the ruins of buildings and stone monuments. The Mayans' hieroglyphics have helped historians learn about their world.

Along with temples and pyramids, Mayan ruins hold large ball courts. These range from the size of a volleyball court to as large as a football field. Spectators gathered at the courts for an event that was more than entertainment. It was a way to honor their gods.

Two teams competed in the ball courts. They played a fierce game called pok-a-tok. The object of the game was to drive a solid rubber ball through a stone ring that hung from the court wall. Pok-a-tok players were heavily muscled and powerful. Rules allowed them to use any part of their bodies—except their hands or feet—to move the ball.



“Pok, pok, pok!” was the sound the hard rubber ball made when it hit the court and bounced off the players’ bodies. Team members wore helmets and pads to protect themselves. There were, however, many injuries.

Bruises and wounds were minor dangers of pok-a-tok. Remember that the Maya saw this sport as a religious ceremony. To them, it was a battle of good against evil. Winners were treated as forces of “good.” Spectators rewarded them with items of their own clothing and jewelry. The “evil” losers were not treated so well. At the game’s end members of the losing team often served as human sacrifices to the gods!

The Maya civilization declined suddenly around A.D. 900. At that time, homes, temples, pyramids, and ball courts were mysteriously left deserted! To this day, no one is sure why the great Mayan cities were abandoned.

## Pok-a-Tok: Mayan Sport of the Gods (page 2)

**COMPREHENSION:** Write T for *true* or F for *false*.

1. \_\_\_\_\_ The Maya lived in the ancient Middle East.
2. \_\_\_\_\_ The Maya were wanderers who did not settle in one place.
3. \_\_\_\_\_ Pok-a-tok was a Mayan ball game.
4. \_\_\_\_\_ The object of pok-a-tok was to kick a field goal.
5. \_\_\_\_\_ Pok-a-tok losers might be put to death.

**NOTING DETAILS**

1. In what two regions did the Maya live?
  - \_\_\_\_\_
  - \_\_\_\_\_
2. It was against the rules of pok-a-tok for players to use which two body parts?
  - \_\_\_\_\_
  - \_\_\_\_\_
3. What two things did pok-a-tok players wear as protection?
  - \_\_\_\_\_
  - \_\_\_\_\_
4. What two items were used in the sport of pok-a-tok?
  - \_\_\_\_\_
  - \_\_\_\_\_

**YOUR OPINION, PLEASE**

What modern sport does pok-a-tok most remind you of? Why?

---



---



---

**SYNONYMS:** Draw a line to make each match.

- |                 |              |
|-----------------|--------------|
| 1. nomads       | a. rite      |
| 2. civilization | b. audience  |
| 3. spectators   | c. abandoned |
| 4. ceremony     | d. wanderers |
| 5. deserted     | e. society   |

**ANTONYMS:** Write a word from the article to complete each sentence.

1. The opposite of *good* is \_\_\_\_\_.
2. The opposite of something *modern* is something that is \_\_\_\_\_.
3. To be *punished* is the opposite of being \_\_\_\_\_.
4. \_\_\_\_\_ and *major* are opposites.

**LOOK IT UP!** Write the dictionary definition.

*hieroglyphics:* \_\_\_\_\_  
 \_\_\_\_\_

**PICK A PROJECT:** Work on the back of this sheet.

- Look up *pyramid* in a dictionary or encyclopedia. Draw a pyramid and write one or two sentences about it.
- Write a paragraph describing the dangers of a sport you have watched or participated in.

## Miranda Rights: You Have the Right to Remain Silent

The United States Constitution protects individual rights. The rights of people suspected of a crime, however, have sometimes been violated. In the 1960s, the United States Supreme Court decided to clearly define the rights of crime suspects. They studied many cases.

Among the cases that the Court reviewed was that of Ernesto Miranda. When the police arrested Miranda, they questioned him until he confessed. His conviction was based on that confession of guilt. No attorney had been present during the questioning. No one had advised Ernesto Miranda of his rights.

In 1966, Chief Justice Earl Warren announced that the Supreme Court was reversing Miranda's conviction. They also reversed the convictions of four other prisoners. Justice Warren said that a confession could be called voluntary only if suspects were advised of and understood their rights. According to the Fifth Amendment, a person cannot be forced to speak against himself or herself. The Court ruled that this right must be clearly stated before police questioning begins. Suspects must be reminded of their right to remain silent. And they must be advised that they can have an attorney present at the questioning.

Ernesto Miranda's case, along with the other cases, were retried in court.

*You have the right to remain silent. I suggest you take it.*



Without the use of their confessions, all the suspects were convicted a second time. But the Supreme Court decision changed the way police handle routine questioning. It guaranteed that the individual rights of all—including those suspected of a crime—are protected.

The practice of advising suspects of their rights continues today. The police read suspects some version of these Miranda warnings:

- You have the right to remain silent.
- Anything you say can and will be used against you in a court of law.
- You have the right to consult with a lawyer and to have the lawyer present during questioning.
- If you cannot afford a lawyer, the court will provide one for you.

**Miranda Rights: You Have the Right to Remain Silent (page 2)****COMPREHENSION:** Circle a letter.

1. What do Miranda warnings protect?
  - a. the rights of those suspected of a crime
  - b. a crime victim's rights
2. Which of the following is *not* a Miranda right?
  - a. the right to an attorney
  - b. the right to a speedy trial
3. Who was Ernesto Miranda?
  - a. a man convicted of a crime
  - b. a police officer

**SUPPORTING DETAILS**

1. What Supreme Court Chief Justice announced the Miranda decision?
  - \_\_\_\_\_
2. The Miranda decision has been in force since what year?
  - \_\_\_\_\_
3. What amendment to the Constitution states that people do not have to speak against themselves?
  - \_\_\_\_\_

**FACT OR OPINION?** Write **O** for *opinion* or **F** for *fact*.

1. \_\_\_\_\_ The Supreme Court made a wise decision in the Miranda case.
2. \_\_\_\_\_ Ernesto Miranda was convicted of a crime.

3. \_\_\_\_\_ Earl Warren was the Supreme Court's Chief Justice in 1966.
4. \_\_\_\_\_ Some police officers were probably unhappy with the Miranda decision.

**SYNONYMS:** Circle a synonym.

1. *attorney* = ( judge / lawyer )
2. *confession* = ( admission / question )
3. *guilt* = ( blame / innocence )
4. *amendment* = ( announcement / revision )

**WORD ANALYSIS**

1. When added to the beginning of a word, the prefix re- means \_\_\_\_\_.
  - \_\_\_\_\_
2. Write a word from the fourth paragraph that begins with the prefix re-.
  - \_\_\_\_\_
3. Write three more words that begin with the prefix re-.
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_

**PICK A PROJECT:** Work on the back of this sheet.

- Look up *Supreme Court* in an encyclopedia. Write three facts about the United States Supreme Court.
- List four rights that you think students in your school should be guaranteed.