

**GREEN** is a color that makes people feel at peace because it's the most common color in nature. The green in leaves and grass comes from something called *chlorophyll*. This word comes from the Greek khloros (green) and phyllon (leaf).

Green also symbolizes safety. Because of this, it's used in traffic lights to signal when it's safe to go.



the population is red-green **colorblind**: they can't clearly see the difference between

red and green.

**ORANGE** gets its name from the fruit. The word originally described the taste of the fruit's peel, but by the sixteenth century, orange was also the name of this **bright** color.



**INDIGO** is a dark color between blue and purple. Indigo clothing was a sign of luxury in the past because indigo **dye** came from a rare plant. It was very expensive, and few people could wear clothes made with this dye. Now we use indigo dye to make blue jeans.

**VIOLET** is a **light** purple color. It is one of the oldest colors in the world. There are violet cave paintings in France that are 25,000 years old! However in some countries, for example Thailand and Brazil, violet is the color of death.



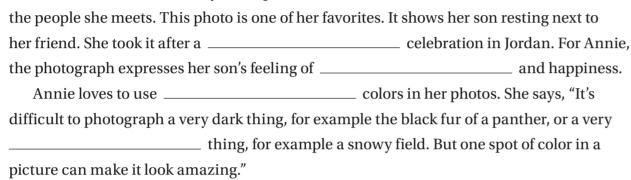
**3** Work in pairs. Which colors make you feel happy? Sad? Angry? Excited?

4 Read and write the words from the list. Make any necessary changes.

| bright | danger  | light | represent |
|--------|---------|-------|-----------|
| safety | visible | war   | wedding   |

Photographer Annie Griffiths has traveled all around the world. In many of the places she's visited, Annie has seen \_\_\_\_\_\_. However, Annie

chooses to focus on the beauty of the places and



**Learn new words.** Listen to these words and match them to the definitions. Then listen and repeat. TR: 4 and 5

| common | flag | luxury | to signal               |         |
|--------|------|--------|-------------------------|---------|
| 1      |      | to     | give a sign or a        | warning |
| 2      |      | ha     | appening often          |         |
| 3      |      | a      | special thing           |         |
| 4      |      | th     | the symbol of a country |         |

#### 6 Choose an activity.

1. **Work independently.** Choose a favorite photograph, and show it to the class. Describe the photo, and talk about its colors. Explain why you like it so much.

2. **Work in pairs.** Discuss the saying: *A picture is worth a thousand words*. What do you think this means? Do you agree with it? Why or why not?

3. **Work in groups.** Your teacher asks you to paint your classroom. Which colors will you choose for the walls, ceiling, desks, and chairs? Why? Create a design suggestion together.



#### SPEAKING STRATEGY TR: 6

#### **Correcting information**

The sky is blue. Actually, <u>it isn't blue</u>.

As a matter of fact, the light from the sun is lots of colors.

In fact, we see blue because blue light rays are shorter than light rays

of other colors.

After all, the sky changes from blue to red when the sun sets in the evening.

- Listen. How do the speakers correct information? Write the words and phrases you hear. TR: 7
- 8 Read and complete the dialogue.

| Jaime: | White is the most popular color for wedding dresses.                         |
|--------|--|
| Ana:   | , it isn't a popular color everywhere.                                       |
| Jaime: | Really?  |
| Ana:   | Yes, white is the color of death in China, Korea, and other Asian countries. |
| Jaime: | Wow, I didn't know that.   |
| Ana:   | , red is the color of weddings and celebrations in India and China.          |
| Jaime: | Interesting! I think red is a great color for wedding dresses.               |
|        | , it is a symbol of love in many cultures!                                   |

9 Work in pairs. Place all of the cards on the desk with the photos facing up. Both students take cards with matching photos. One partner reads information, and the other corrects it.



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Polar bears have white fur.

As a matter of fact, their fur isn't white. It's clear, but it reflects the light. This makes it look white.

**Work in groups.** When is it important to correct information? What do you need to consider when correcting what someone else says? How do the words and phrases above help you to communicate better?

# Comparatives and superlatives: Comparing two or more things Adjective Comparative

Purple is a **popular** color. Green is **more popular than** 

purple.

Green peppers are **tasty**. Red peppers are **tastier than** 

green peppers.

Red grapes are **good**. Red grapes are **better than** 

green grapes.

Superlative

Blue is the most popular color

in the world.

Yellow peppers are the tastiest

peppers.

Red grapes are **the best**.

**Read.** Choose the correct word or phrase to complete the paragraph.

hungrier larger most delicious sweeter worse

When you see your favorite food on a red plate, you probably feel hungry. But you feel

when it's on a white plate. Why? Research shows that colors can really affect our feelings about food. For example, when you add red dye to water, it tastes

than normal water, as if you've added sugar. The food that you think is the

will probably taste

to you if you change its color to blue. This is because blue is a very unnatural color for food.

Color can also affect how much we eat. In one experiment, people were asked to serve themselves some pasta with white sauce. The people with red plates took a small portion, while the people with white plates took a much portion. Can you guess why this happens?

Read. Complete the sentences with the correct comparative or superlative forms. Then listen and check your answers. TR: 9

- 1. Dark green vegetables are \_\_\_\_\_\_ (high/low) in vitamin C than light green vegetables.
- 2. Yellow bananas are \_\_\_\_\_\_ (salty/sweet) green bananas, but green bananas are \_\_\_\_\_\_ (good/bad) for you.
- 3. Blue is \_\_\_\_\_\_ (common/unusual) color for food.
- 4. \_\_\_\_\_ (healthy/popular) diet includes foods of many different colors.
- Work in pairs. Make a list of your five favorite foods.

  Then share your list. Make comparisons about those foods.

Apples are better for you than cookies, but cookies are sweeter!

Learn new words. Listen and read to find out about colors and moods. Then listen and repeat. TR: 10 and 11

We make strong **connections** between colors and feelings.



GREEN RELAXED



**NERVOUS** 

BLUE DEPRESSED

**15 Work in pairs.** Discuss how you feel when you see these things.



I feel relaxed when









I feel nervous when I see red lights on a car.

Work in groups. Compare your answers to Activity 15 with another pair. Then choose two other colors and say how they make you feel.

Me, too! But I feel more relaxed when I look at blue artwork.

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# PURPLE POWER

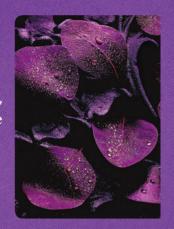
THE HISTORY OF ONE OF THE MOST POPULAR COLORS

Purple is one of the most popular colors today. There are purple clothes, purple handbags, purple bicycles, purple furniture, even purple computers! But in the past, purple was a very expensive and unusual color.

Let's take a look at the rich and sometimes dangerous history of the color purple.

#### THE VERY BEGINNING

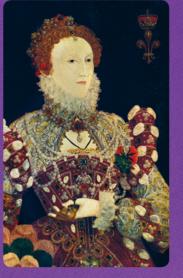
Some scientists believe that the first organisms to appear on Earth over 500 million years ago probably looked purple, not green. Plants today are green because they use green chlorophyll to produce energy. But these early organisms probably used something called *retinal*, which is a dark purple color.



#### **500 YEARS AGO**

In sixteenth-century England, purple was only for royalty. Queen Elizabeth I's

clothes were purple, but ordinary people were not allowed to wear the color.



#### **150 YEARS AGO**

In 1856, William Perkin, an 18-yearold science student, noticed something strange while conducting an experiment. The chemicals he used to clean his equipment combined with the chemicals he used in his experiment, and produced a bright purple color. This discovery led Perkin to start a company using this chemical combination to make purple dye. The dye was much cheaper than



- 17 **Before you read, discuss in pairs.** Look at the photos and the timeline. What do you think the reading is about?
- Learn new words. Find these words in the text.

  Use the other words in the sentences to guess each word's meaning. Then listen and repeat. TR: 12

company to notice ordinary royalty

- 19 While you read, think about the order of the events. TR: 13
- 20 After you read, discuss in pairs.
  - 1. Why do scientists think that the earliest organisms were purple?
  - 2. Why was the color purple so expensive during the Roman Empire?
  - 3. Who usually wore purple in England in the sixteenth century?
  - 4. How did William Perkin discover a way to make purple dye? What advantage did his discovery have?

#### **3,000 YEARS AGO**

During the time of the Roman Empire, it was very difficult to make purple dye. The dye came from sea snails. But 10,000 dead sea snails got you just one gram of purple dye . . . as well as a very bad smell! This special purple dye was called *Tyrian purple*, and it was the preferred color of emperors.

Read the text again. Number the events in the order that they happened.Only Queen Elizabeth I wears purple clothes.

Sea snails are used to make purple clothes for emperors.

\_\_\_\_ Many of the Earth's plants appear to be purple, not green.

\_\_\_\_\_ Anyone can wear purple clothes.

\_\_ William Perkin discovers how to make purple dye.

#### 22 Discuss in groups.

- 1. What color clothes do you like to wear? Why?
- 2. In Roman and Elizabethan times, purple was a sign of luxury. What color means luxury to you? Does the color purple have any special meaning in your culture?
- 3. Why do some people like to have luxury items, such as clothing? Are luxury items important to you? Why or why not?

### **VIDEO**

- 23 **Before you watch, discuss in pairs.** How do we use color in our life? Think about ways that color warns or informs us about things.
- Work in pairs. You're going to watch a video called Seeing Colors? Look at the photo. How many different colors can you see? Do you think that all animals see colors the same as you do?
- 25 Watch scene 1.1. While you watch, write the letter for each color in order, based on the range of visible light.

a. dark blue b. green c. infrared d. light blue e. orange f. red g. ultraviolet h. violet i. yellow

- 26 After you watch, work in pairs to answer the questions.
  - 1. Why don't insects and animals see colors like most humans do?
  - 2. What can bees see in flowers that is invisible to humans?
  - 3. How can a snake see a mouse in the dark?
  - 4. What color is infrared light to a snake?
  - 5. What percentage of men are color-blind? What percentage of women are color-blind?

Work in pairs. Choose one of these gadgets, and find out how it uses infrared light. Share your answer with the class.

TV remote control supermarket check-out scanner night-vision goggles car keys

A mouse visible in a *thermogram*, an image that shows an object's temperature

#### 28 Choose an activity.

- 1. Work independently. Find pictures of things in nature that match each color in the range of visible light. Arrange the pictures in order on a sheet of paper, and glue them. Then label each item and its color.
- 2. Work in pairs. Go online to find out why you see a rainbow when it rains on a sunny day.

  Make a presentation to explain the science.
- 3. Work in groups. How important is color in your life? Can you imagine a life without color? What problems might there be? List at least three.

#### **GRAMMAR TR: 14**

The: Identifying general and specific things

There's a coat in my closet. **The** coat is red.

The sun is shining in the sky.

People often feel depressed when they see the color black.

29 Read. Circle the correct word.

#### *The / A Colors of Success*

Imagine you're at a shopping mall. You want to go to the / a café and get the / a drink and the / a snack. There are two different cafés in the mall. How do you choose the / a café you want to visit? You probably look at the prices and the menus. But the / a colors that the / a café uses are also very important.



Do you want to feel calm and relaxed? Then you will probably choose The Coffee Place.

The / A green color makes you think of nature and peace.

Do you want to go someplace exciting and lively? Then you will probably choose The Coffee Machine. Many companies use the / a color red because it seems bright and fun, and it attracts young people.



Think about your favorite brands. Which colors do they use? What do those colors mean to you?

- Work in pairs. Take turns naming familiar brand-name products. Can your partner name the colors for the brand? Why do you think the companies chose the colors for each product?
- Work in pairs. Take turns. Use a coin to move. (Heads = 1 space; tails = 2 spaces) Complete each sentence with the or a / an.



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#### WRITING

A topic sentence introduces the main idea of a paragraph. The topic sentence is usually the first sentence of the paragraph. It explains:

· why you are writing

what you want to say

Look at these examples of topic sentences:

In this article, I'm going to discuss the history of the color orange.

When taking a photograph, it's important to think about light and color.

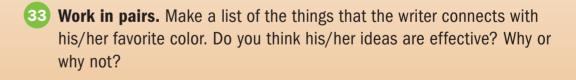
32 Read the announcement and the response. Underline the topic sentence.

### **COMPETITION**

Write and tell us about your favorite color.

What color do you want to see at home and around town this season? Tell us what the color means to you.

I would like to tell you about my favorite color and explain why I think it's perfect for this season. My favorite color is orange. I think it's a warm and bright color, and it makes me feel happy and safe. When I see this color, I think of fall. Although it gets cooler and the days are much shorter, I love the fall. When I go outside, I enjoy walking through the dark orange leaves and listening to the sound they make under my feet. I also think of the smell of fire when I see this color. It's great to be at home and sit by the warm fire with my family. Orange is also the color of my favorite food—pumpkin soup. It's so delicious! This warm and beautiful color should be everywhere this season—outside, in our homes, and even on our plates!



**Write.** Write a paragraph about your favorite color and what you associate with this color. Use a strong topic sentence.





## **Look for Opportunities**

"Look around and ask yourself, 'Who needs pictures? Who needs help?' With photography, the opportunities are endless . . ."

—Annie Griffiths

**National Geographic Photographer** 

- 1. Watch scene 1.2.
- 2. Discuss how photographers can use their skills to help other people.
- 3. Think about issues or social problems in your area. How could you use photographs to teach others about these issues?

## Make an **Impact**

- A Plan and create an art presentation.
  - · Research the use of color in Aboriginal art.
  - · Draw an object from your own culture using Aboriginal art techniques.
  - · Present your drawing to the class. Explain why you chose the colors you used.
- B Plan and make a presentation about color and taste.
  - · Choose five foods. Use food coloring to change each food's color.
  - · Ask friends and family to taste and react to the foods.
  - · Present the results to the class.
- Blog about colors in your community.
  - · Find colorful people, places, and things in your community. Take photos of them.
  - · Write a blog about your photos. Explain why you took each photo and how the colors make you feel.
  - · Publish your blog and respond to your classmates' comments.

