

Scope and Sequence - Impact 2

				
	1 Color Matters p. 8	2 Feeling Good? p. 24	3 Your Virtual Self p. 42	4 Underwater Mysteries p. 58
THEME	Color and its effect on people	Body and mind	Technology's impact on our lives	Underwater exploration and discovery
VOCABULARY STRATEGIES	· Suffix <i>-al</i> · Use context clues	· Suffix <i>-ness</i> · Use a dictionary: Sample sentences	· Prefix <i>inter-</i> · Use a thesaurus	· Prefix <i>pre-</i> · Use context of unit
SPEAKING STRATEGY	Correcting information	Checking in with friends and saying how you feel	Checking for understanding and responding	Making and responding to suggestions
GRAMMAR	Comparatives and superlatives: Comparing two or more things <i>Purple is a popular color. Green is more popular than purple. Blue is the most popular color in the world.</i> The: Identifying general and specific things <i>The sun is shining in the sky.</i>	Adverbs: Saying how and how often you do something <i>Many teenagers like to sleep often. They're always tired.</i> Make + adjective: Saying what affects mood and feelings <i>A lack of sleep makes you tired.</i>	Modals: Expressing obligation, advice, and permission <i>You have to protect yourself with a strong username and password.</i> Must, might, and can't: Expressing certainty <i>I checked the facts on three different websites, so they must be true.</i>	Used to and would: Talking about habits in the past <i>I never used to be interested in the ocean, and I didn't use to read much at all!</i> Simple past: Describing past actions <i>When did the village sink? It sank thousands of years ago.</i>
READING	<i>Purple Power</i>	<i>The Teenage Brain</i>	<i>Calm Down</i>	<i>Yonaguni Jima</i>
READING STRATEGY	Identify sequence of events	Summarize	Connect text to personal experience	Identify author's purpose
VIDEO	<i>Seeing Colors?</i>	<i>The Forgotten Organ</i>	<i>The Distance Between Two Points</i>	<i>Loch Ness Monster: Mystery Solved?</i>
WRITING	Genre: Descriptive paragraph Focus: Topic sentence	Genre: Classification essay Focus: Introducing categories	Genre: Fact and opinion essay Focus: Facts and opinions	Genre: Contrast essay Focus: Contrasting points of view
MISSION	Look for Opportunities National Geographic Photographer: Annie Griffiths	Take Care of Yourself National Geographic Explorer: Pardis Sabeti , Computational Geneticist	Connect with People National Geographic Explorer: Amber Case , Cyborg Anthropologist	Be Curious National Geographic Explorer: Katy Croff Bell , Oceanographer
PRONUNCIATION	Schwa /ə/ sound	Pronunciation of -s endings	<i>Have to</i>	Verb <i>use</i> vs. <i>used to</i> + verb
EXPRESS YOURSELF	Creative Expression: Song <i>One Truth</i> Making connections: How colors affect your body and mind		Creative Expression: Blog <i>Aboard the E/V Nautilus</i> Making connections: Technology's impact and ocean exploration	

				
	5 Life in the Extreme p. 76	6 Are You Going to Eat That? p. 92	7 Art in the Open p. 110	8 Don't Panic! p. 126
THEME	Extreme environments	Food and food waste	Public art	Being prepared for dangerous situations
VOCABULARY STRATEGIES	· Synonyms · Use photos as context clues	· Antonyms · Use antonyms to find meaning	· Greek and Latin roots (<i>mur</i> , <i>poli</i>) · Find definitions	· Suffix <i>-tion</i> · Identify synonyms
SPEAKING STRATEGY	Expressing and responding to strong opinions	Asking for repetition and repeating information	Asking for more information	Telling a story and showing interest
GRAMMAR	Present perfect: Describing past experiences that connect to the present <i>I have studied many extreme environments, but I've never been to Antarctica.</i> As . . . as: Making comparisons of equality <i>The Pacific hagfish is just as important as other fish.</i>	Going to, will, and present progressive: Talking about the future <i>I'm going to start making my own lunches.</i> Conditionals: Talking about cause and effect <i>If we make a smoothie from these old bananas, it will be delicious.</i>	Simple past vs. present perfect: Talking about the past <i>Shannon Galpin has biked in many different countries. In 2009, she went to Afghanistan.</i> Indefinite pronouns: Talking about people, places, and things without giving details <i>Someone has painted a mural on the wall of our school. I think it's great, but not everyone loves it.</i>	Simple past vs. past progressive: Talking about the past <i>My cat was trying to hide when the storm started.</i> Present perfect vs. present perfect progressive: Expressing the duration of activities <i>He has fought many fires in his career as a firefighter. He's been fighting this fire for several hours.</i>
READING	<i>Weird and Wonderful</i>	<i>Clean Your Plate!</i>	<i>The City That Loves Street Art</i>	<i>The Power of Snow</i>
READING STRATEGY	Categorize information	Scan for information	Identify main idea	Visualize
VIDEO	<i>Photographing Parasites</i>	<i>What Makes Food Appealing?</i>	<i>Streets of Afghanistan</i>	<i>A Day in Pompeii</i>
WRITING	Genre: Persuasive essay Focus: Introducing reasons	Genre: Cause and effect essay Focus: Introducing causes and effects	Genre: Process essay Focus: Sequencing words	Genre: Narrative essay Focus: Concluding paragraph
MISSION	Ask Questions National Geographic Explorer: Kevin Hand , Planetary Scientist/Astrobiologist	Take Only What You Need National Geographic Explorer: Tristram Stuart , Author/Campaigner	Learn from Art National Geographic Explorer: Shannon Galpin , Adventurer/Humanitarian	Be Prepared National Geographic Explorer: Jimmy Chin , Climber/Photographer
PRONUNCIATION	Linking	<i>Going to, want to</i>	Word stress with suffixes	Sentence stress
EXPRESS YOURSELF	Creative Expression: Flash fiction <i>A New Beginning</i> Making connections: Extreme environments and food waste		Creative Expression: Public art <i>What Are You Waiting For?</i> Making connections: Public art and being prepared	

Color Matters

“When multiple colors dance across the same scene,
the result can be a carnival.”

—Annie Griffiths

1. Name all of the different colors that you see in the photo. Which is your favorite?
2. Would you like to be at the place in the photo? Why or why not?
3. Imagine this photo in black and white. What would you think of it? What would be lost?

1 Your brain can see 7 million colors. How many of them can you name? What do different colors make you think of? Discuss. Then listen and read. TR: 2

RED is a symbol of **good luck** in many cultures. It is the traditional color for **wedding** dresses in China and India. But many cultures associate red with **danger**. This is why we see it on **emergency** vehicles and warning signs. Eight percent of the population is red-green **colorblind**: they can't clearly see the difference between red and green.

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.

BLUE is the most popular color in the world. More than half the world's flags have blue in them. Blue is also the most common color used by businesses. Many businesses use the color blue to **represent** them in logos and advertisements. This is because blue helps us feel like we can **trust** them.

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.

YELLOW is the color of taxis and school buses because it's the most **visible** color on the road. Like red, yellow is also used to **warn** people of dangerous situations. Because it attracts attention, yellow is used for highlighter pens. The bright color activates different parts of the brain that help the reader remember the highlighted text.

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**.

2 Learn new words. Listen and repeat. TR: 3

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 the people she meets. This photo is one of her favorites. It shows her son resting next to her friend. She took it after a _____ celebration in Jordan. For Annie, the photograph expresses her son’s feeling of _____ and happiness.

Annie loves to use _____ colors in her photos. She says, “It’s difficult to photograph a very dark thing, for example the black fur of a panther, or a very _____ thing, for example a snowy field. But one spot of color in a picture can make it look amazing.”



Photographer
Annie Griffiths

5 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
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- _____ to give a sign or a warning
- _____ happening often
- _____ a special thing
- _____ the symbol of a country

6 Choose an activity.

- 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.
- 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?
- 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, it isn't blue.
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.

7 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.

10 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?

GRAMMAR TR: 8

Comparatives and superlatives: Comparing two or more things

Adjective	Comparative	Superlative
Purple is a popular color.	Green is more popular than purple.	Blue is the most popular color in the world.
Green peppers are tasty .	Red peppers are tastier than green peppers.	Yellow peppers are the tastiest peppers.
Red grapes are good .	Red grapes are better than green grapes.	Red grapes are the best .

- 11 **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?



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

- Dark green vegetables are _____ (high/low) in vitamin C than light green vegetables.
- Yellow bananas are _____ (salty/sweet) green bananas, but green bananas are _____ (good/bad) for you.
- Blue is _____ (common/unusual) color for food.
- _____ (healthy/popular) diet includes foods of many different colors.

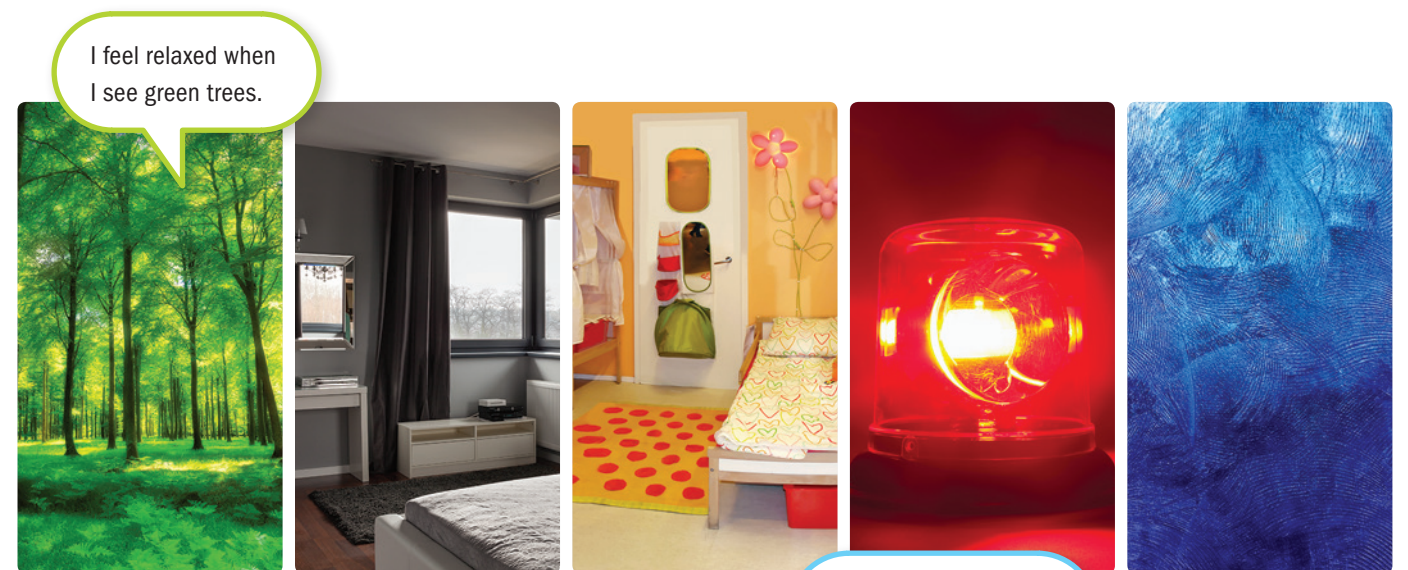
Apples are better for you than cookies, but cookies are sweeter!

- 14 **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.



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



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

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

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

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-year-old 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 the sea-snail dye. Thanks to Perkin, now anyone can wear purple clothes.



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.



17 Before you read, discuss in pairs. Look at the photos and the timeline. What do you think the reading is about?

18 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?

21 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?

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.

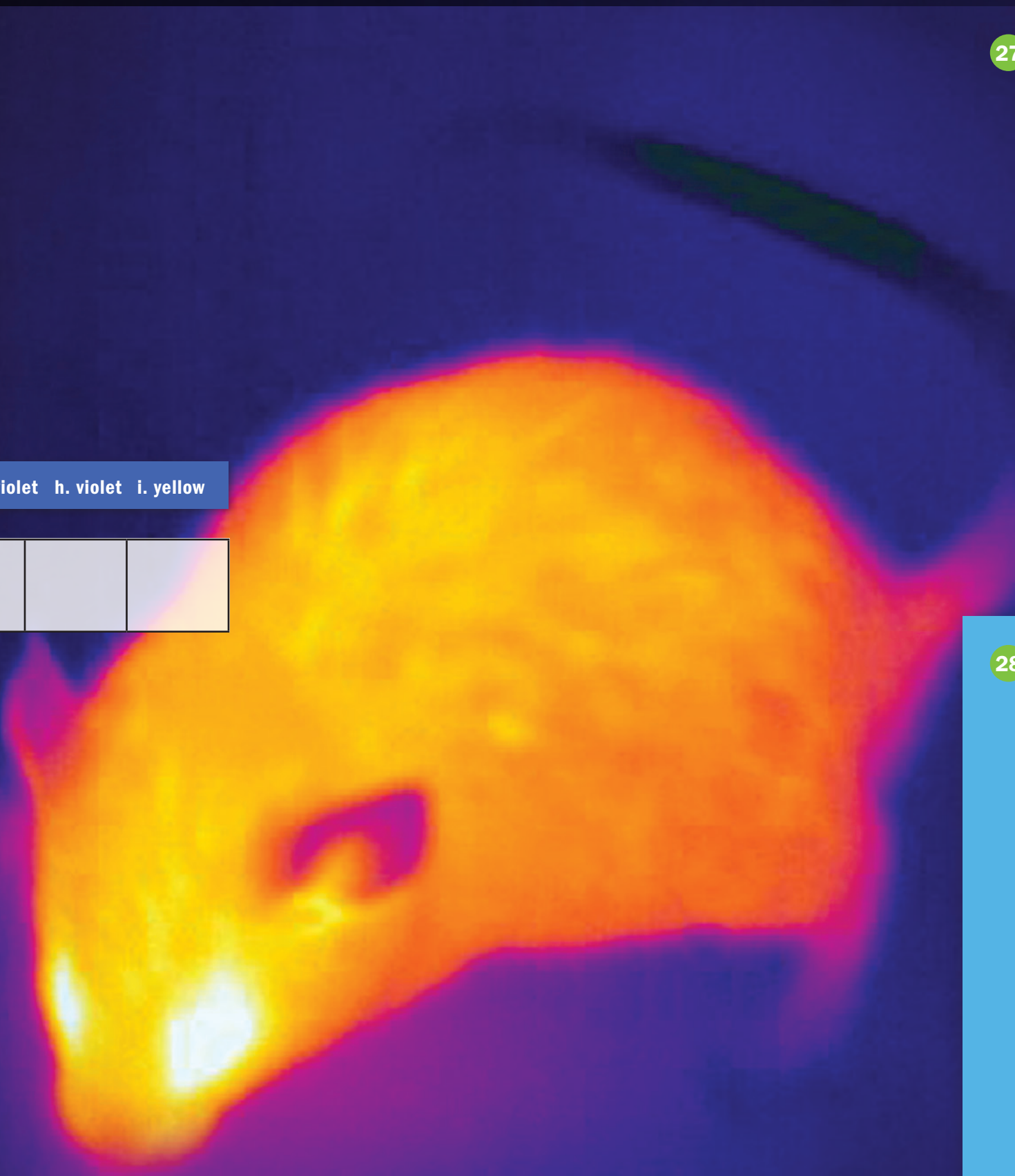
24 Work in pairs. You're going to watch a video called *Seeing Colors*? Look at the photo. How many different colors can you see? Do you think that all animals see colors the same as you do?

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

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- 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?



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

27 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

- 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.

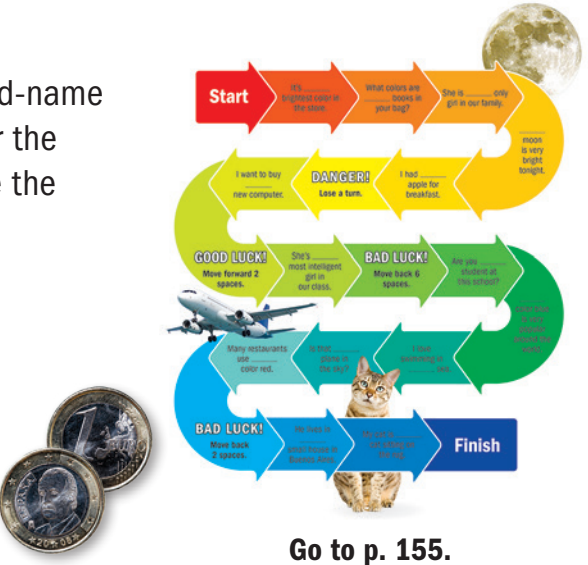
Do you want to go someplace exciting and lively? Then you will probably choose The Coffee Machine. Many companies use *the / a* color red because it seems bright and fun, and it attracts young people.



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

30 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?

31 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!

33 Work in pairs. Make a list of the things that the writer connects with his/her favorite color. Do you think his/her ideas are effective? Why or why not?

34 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.

C 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.

