

Scope and Sequence - Impact 4



	1 Pushing the Limits p. 8	2 It Takes a Village p. 24	3 Food Matters p. 42	4 The Footprint of Fun p. 58
THEME	Pushing mental and physical limits	Digital humanitarianism and crowdsourcing	Food sustainability	The environmental impact of entertainment
VOCABULARY STRATEGIES	· Prefix <i>un-</i> · Use a dictionary	· Suffixes <i>-ion</i> , <i>-tion</i> · Identify parts of speech	· Borrowed words · Use context of unit	· Prefix <i>pro-</i> · Use context of sentence
SPEAKING STRATEGY	Showing interest in a conversation	Making suggestions and agreeing or disagreeing	Offering advice and accepting or declining advice	Defending your opinion
GRAMMAR	Embedded clauses, questions, and commands <i>I think extreme sports are dangerous.</i> Adding emphasis <i>The reason (why) I won't go surfing is that I don't like swimming in the ocean.</i>	Future tenses: Describing events in the future <i>Over the next few years, people will look online to find volunteers to help with disaster relief.</i> Quantifiers: Expressing amounts <i>Half of/Fifty percent of the world's population is . . .</i>	Mixed conditionals: Expressing how things would be different <i>If I hadn't learned about overfishing, I would still be eating tuna.</i> Double comparatives: Describing outcomes <i>The more people there are in the world, the more food we need to produce.</i>	Passives: Describing actions and processes <i>What has been done by musicians to reduce their ecological footprint?</i> Verbs followed by gerunds or infinitives <i>Parks must continue coming up with/to come up with ways to reuse water.</i>
READING	<i>No Limits</i>	<i>Focus on the Future</i>	<i>Grow It Here, Eat It Here</i>	<i>Game Over</i>
READING STRATEGY	Summarize	Use text features for comprehension	Connect text to prior knowledge	Identify author's purpose
VIDEO	<i>A Tribute to Discomfort</i>	<i>Crisis Mapping</i>	<i>Should We Eat More Bugs?</i>	<i>The Footprint of Fans</i>
WRITING	Genre: Biography Focus: Identify chronological order	Genre: Persuasive essay Focus: Express point of view	Genre: Restaurant review Focus: Use facts and opinions to review	Genre: Problem and solution essay Focus: Present facts and personal reflection
MISSION	Test Your Limits National Geographic Photography Fellow: Cory Richards , Photojournalist	Do Your Part National Geographic Explorer: Patrick Meier , Crisis Mapper	Know Your Food National Geographic Explorer: Barton Seaver , Chef/Conservationist	Reduce Your Footprint National Geographic Ambassador to the Arts: Jack Johnson , Musician
PRONUNCIATION	Intonation in embedded yes/ <i>no</i> questions	Stress in compound nouns	The letter <i>t</i> between vowels	Expressing emotions with intonation
EXPRESS YOURSELF	Creative Expression: Graphic novel <i>The Adventures of Crisis Crusher</i> Making connections: Pushing limits while working to help others		Creative Expression: Online invitation <i>Reduce, Reuse, Recycle, Rock!</i> Making connections: Sustainable eating and fun	



	5 Why We Explore p. 76	6 Giants p. 92	7 Creative Problem-Solving p. 110	8 Art Connections p. 126
THEME	Why it's important to explore	Giant plants and animals of the past and present	Problems and how people creatively solve them	Art and our connection to it
VOCABULARY STRATEGIES	· Prefix <i>en-</i> · Use pronunciation	· Synonyms and antonyms · Use word parts	· Latin roots (<i>nov</i> , <i>flex</i>) · Identify antonyms	· Suffixes <i>-ic</i> , <i>-ive</i> · Identify collocations
SPEAKING STRATEGY	Hesitating or buying time when answering questions	Speculating about the past and the future	Asking someone to defend an opinion	Interpreting and expressing understanding
GRAMMAR	Narrative tenses: Telling a story <i>Barrington Irving had been preparing to become a pilot since he was 15.</i> Geographic use of the <i>I'm going to the Himalayas to climb Mt. Everest.</i>	Relative clauses: Defining and describing <i>Megalodon, which was a fierce predator, was able to catch the largest whales.</i> Reduction of relative clauses <i>My brother, (who is) a filmmaker, created a documentary about manta rays.</i>	Wish and if only: Expressing wishes and regrets <i>I wish I were at the technology fair right now.</i> Adverbs: Expressing different levels of intensity <i>Inventor Kelvin Doe is so clever. But he is rather shy.</i>	Reported speech: Describing what others say <i>He suggested that art should reflect the world we live in.</i> Two- and three-word verbs <i>Artists want to draw their viewers in. A true artist comes up with unique ways to express herself.</i>
READING	<i>The Explorer Gene</i>	<i>Discovering Spinosaurus</i>	<i>Great Failures</i>	<i>Microscopic Marvels</i>
READING STRATEGY	Make a personal connection	Make inferences	Take notes	Ask questions about a text
VIDEO	<i>Why Is It Important to Explore?</i>	<i>Super Tree</i>	<i>Sanga's Solution</i>	<i>A Photographer's Life</i>
WRITING	Genre: Compare and contrast essay Focus: Use transitions to compare	Genre: News report Focus: Include answers to the 5 Ws and <i>How</i>	Genre: Exemplification essay Focus: Use relevant examples to explain a topic	Genre: Art review Focus: Answer key questions to provide facts and opinions
MISSION	Learn by Doing National Geographic Explorer: Corey Jaskolski , Engineer/Inventor	Make Big Plans National Geographic Explorer: Nizar Ibrahim , Paleontologist	Don't Give Up National Geographic Explorer: Tan Le , Innovator/Entrepreneur	Connect Through Art National Geographic Photographer: Stephen Alvarez
PRONUNCIATION	Sounds of letter <i>x</i>	Pausing: Relative clauses	Variations in stress and intonation	Stress with two- and three-word verbs
EXPRESS YOURSELF	Creative Expression: Science-fiction story <i>A Journey to the Center of the Earth</i> Making connections: Exploration and discovery and giants past and present		Creative Expression: Contest Droidganizer Making connections: Creative problem-solving and art	

Pushing the Limits

Free-climbing the Dawn Wall in
Yosemite National Park, United States

**“We have to learn how
far we can go.”
—Cory Richards**

1. Look at the climber. Why would he choose to climb this rock? What are some of the risks he faces?
2. What is the most challenging sport you’ve ever tried?
3. Why should we challenge ourselves? What is a benefit of taking risks?

- 1 **Why do we take risks?** Discuss. Then listen and read. **TR: 2**

Have you ever **pushed yourself** to your **limit**? Do you know anyone who has? Do you ever wonder what can be gained by climbing a tall cliff—or jumping off it? Why do something that causes the body **pain**?

People can be transformed by pushing themselves. These experiences teach **determination**. Often, the desire to achieve our goal **enables** us to take risks. Many people take mild risks. Others feel a need to reach the unreachable. These **extreme** athletes test their own **mental** and **physical** boundaries.

In most traditional sports, athletes compete against one another. But in extreme sports, the biggest **opponent** is nature. In this photo, Olympic snowboarder Jussi Oksanen glides down the side of a glacier. Snowboarding on solid ice is **hazardous**, especially with a 12 m (40 ft.) drop below the glacier! But for extreme athletes like Oksanen, risk is just part of the job.



Extreme snowboarding



Big-wave surfing

The same is true for big-wave surfers. Animals such as sharks and jellyfish pose serious risks to surfers. Another **obstacle** that surfers must **overcome** is the force of the water. After this photo was taken, surfer Koa Rothman was taken under by the unbelievable force of the wave. So why do it? “The view I had right here was one of the most amazing things I have ever seen in my life,” says Koa. “Being in the middle of all that energy is unexplainable!”

Athletes who participate in the *Marathon des Sables*, or MdS, need to have incredible **endurance**. In this desert marathon, participants must cross a distance of approximately 250 km (155 mi.) over five or six days. The event takes place in the Sahara Desert, where temperatures can reach more than 50°C (122°F). It’s no wonder that the MdS is considered the toughest race on Earth!

The athletes shown in the photos are **role models** for anyone seeking adventure. Do they inspire you to push your own limits?



Desert-marathon running

- 2 **Learn new words.** Listen and repeat. **TR: 3**
- 3 **Work in pairs.** Which of these sports would you try? Why would you try it? What risks would you face?

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

determination	hazardous	mental	obstacle	opponent
overcome	pain	physical	push himself	role model

Photographer and adventurer Cory Richards is used to difficult conditions. Cory has _____ many difficult _____ to bring us some incredible outdoor action photography. Cory believes that pushing his _____ and _____ limits helps him to better connect with himself and with the world.

In 2011, Cory successfully climbed an 8,000 m (26,000 ft.) peak in the middle of winter. However, due to the _____ conditions, this challenge nearly cost him his life. On the way down, Cory and his team were caught in a major avalanche. “Once the avalanche took us, there was no more fear,” says Cory. Although this experience scared him, he still takes risks to get a great photo. Cory’s _____ and endurance make him a great _____.

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

to achieve	boundary	unbelievable	unreachable
------------	----------	--------------	-------------

- _____ 1. incredible
- _____ 2. limit
- _____ 3. to do
- _____ 4. impossible

Cory Richards



6 Choose an activity. Work in pairs.

1. Talk about characteristics that adventurers like Cory need to have. Which of these characteristics do you have? Which would you like to have?
2. Role-play an interview between a TV reporter and an extreme athlete who has just completed a new challenge.
3. Invent an extreme sport. Work together to make a poster describing a competition for this sport.

SPEAKING STRATEGY TR: 6

Showing interest in a conversation

Statement	Responses
I love to surf.	Wow! What’s that like? No way! I never knew that <u>you could surf</u> . What can you tell me about <u>surfing</u> ? Tell me more about <u>how you learned to surf</u> . What about you? Do you like <u>extreme sports</u> ? You’re <u>a surfer</u> ? Me, too!

7 Listen. How do these speakers show interest in the conversation? Write the phrases you hear. TR: 7

8 Read and complete the dialogue.

Lee: What are you doing, Jon?
Jon: I’m getting ready for my next mountain bike race.
Lee: No way! _____ you raced.
Jon: Yeah, I’ve been racing for about three years.
Lee: _____
Jon: It’s very cool. _____ Do you practice extreme sports?
Lee: Yeah, I like rock climbing. And I’m getting ready for my first extreme ironing competition.
Jon: _____ what it’s like to do extreme ironing.
Lee: I can’t yet—I’ve never done it!

9 Work in pairs. Toss the cube. Make a statement about the topic on the cube. Your partner uses the phrases above to maintain the conversation. Then switch roles.



Go to p. 153.

10 Work in groups. Do you take risks? Share stories about risks you have taken. Tell one true story and one false story. See if your group can guess the true story. Use the phrases above to maintain the conversations.

GRAMMAR TR: 8

Embedded clauses, questions, and commands

I think . . . Extreme sports are dangerous.

I think extreme sports are dangerous.

I wonder . . . What obstacles has Cory overcome?

I wonder what obstacles Cory has overcome.

Do you know . . . Can we climb that mountain in winter?

Do you know if we can climb that mountain in winter?

I'm asking you . . . Try downhill mountain biking.

I'm asking you to try downhill mountain biking.

- 11 Work independently.** Listen to the speakers. Then complete the embedded clause, question, or command. Remember to change the order of words when necessary. TR: 9

1. She's guessing _____
2. He's wondering _____
3. You're telling me _____
4. I think _____
5. I'm asking you _____

- 12 Work in pairs.** Make sentences to form embedded clauses, questions, and commands.

- | | |
|--------------------|--|
| I wonder | Wear a helmet when you ride your bike. |
| I think | Had Cory been in an avalanche before? |
| I'm asking | Teach your brother how to surf. |
| I'm telling | How many countries has Cory visited? |
| Do you remember if | You could try ice climbing. |

1. _____
2. _____
3. _____
4. _____
5. _____



- 13 Learn new words.** You've learned about physical challenges. Now listen and read about a mental challenge. Then listen and repeat. TR: 10 and 11

A **nontraditional** sport, such as ice climbing, can really push us to our physical limits. But, have you ever done anything that pushes you to your mental limits? Around the world, students participate in tough academic competitions, such as Math Olympiads. These **events** require a lot of training, just as an extreme sport does. The competitions often require students to **struggle** with complex problems. Sometimes it takes over an hour to complete just one!

Nur Muhammad Shafiullah knows first-hand how the Math Olympiads can push mental limits. He is the youngest student ever to compete in the International Mathematical Olympiad. At 15, Nur Muhammad went to the international competition to **represent** his native country, Bangladesh. He competed against students from 125 countries and took the bronze medal! The next year he did it again. The year after that he earned a silver medal. Nur Muhammad's math skills are really unbelievable. What about you? Do you think the International Mathematical Olympiad is beyond your mental limits?



- 14 Work in pairs.** Write sentences using the words below. Include an embedded clause, question, or command in each sentence.

1. wonder / time / event I wonder if the event takes much time.
2. guessing / struggle / difficult _____
3. think / student / prepare _____
4. telling / nontraditional / sport _____
5. asking / represent / country _____

- 15 Work in groups.** Think of other competitions that provide mental challenges. What do you know about them? What questions do you have? Discuss in your group, using embedded clauses, questions, and commands as much as possible.

16 Before you read, discuss in pairs. Look at the photos, caption, and title. What do you think this reading is about?

17 Learn new words. Find the words below in the reading. What do you think they mean? Use a dictionary to check. Then listen and repeat. **TR: 12**

beyond consequence in control limb peak performance

18 While you read, pause after each paragraph to write what it's about in your own words. **TR: 13**

19 After you read, work in small groups to answer the questions.

1. How did Amy lose her legs?
2. What other negative consequences did Amy suffer from meningitis?
3. What happened the first time Amy tried to go snowboarding again?
4. What did Amy learn about limitations?
5. How does Amy work to help others?
6. If she could, would she go back to her former life? Why or why not?



Amy Purdy snowboarding

No Limits



AMY PURDY SEES HER LIMITATIONS AS A GIFT THAT HAS HELPED HER DO AMAZING THINGS.

Amy Purdy is a world-class athlete, model, and actress. She has achieved amazing success in her life and hasn't let anything

slow her down—even the loss of both legs! In fact, some of Amy's greatest achievements came after she lost them.

When Amy was 15, she started snowboarding. After finishing high school, she moved to the mountains, where she could easily spend her free time snowboarding. She felt totally in control of her life. But then at 19, she contracted meningitis, a horrible disease that left her with only a two-percent chance of survival. Amy survived, but there were terrible consequences. She lost a kidney, the hearing in her left ear, and both legs below the knees.

For a long time Amy felt depressed. But when she closed her eyes, she could still see herself snowboarding. She decided not to let this situation take over her life. By the time she was 21, she was back on her board, wearing artificial legs she had built herself. The first time she tried to use them, she fell off, but her legs kept going down the hill without her! After a few years of hard training using her new legs, Amy was able to reach her peak performance level. She became the Para-Snowboard World Champion in 2012, and she later won the bronze medal in the 2014 Paralympic Games.

Amy's new life was beyond what she expected. Suddenly, she had become a celebrity, a fashion model, and an actress. She was even on the hit TV show *Dancing with the Stars*. Most importantly, she started helping people like her do the sports they love. She started a company that makes artificial limbs and she created an organization that introduces people with physical disabilities to action sports.

Now, if you ask Amy, "Would you want to change your situation?", she would say no. Losing her legs has enabled, not disabled, her. According to Amy, "It's facing our fears head on that allows us to live our lives beyond our borders."

20 Work in pairs. Reread the text. Then without looking, take turns saying what you remember. Use your own words.

21 Discuss in groups.

1. How did getting meningitis impact Amy's life? Identify positive and negative impacts.
2. Do you agree that disadvantages can become advantages? Explain.
3. Do you think anyone can overcome an obstacle like Amy has? Why or why not? Give examples.

22 Before you watch, discuss in pairs.

1. Describe a time when you experienced an uncomfortable or dangerous situation.
2. What do you do when you feel stressed? What do you think Cory does?
3. Think of a photo that has taught you something. Describe the photo and what you learned from it.

23 Work in pairs. The title of this video is *A Tribute to Discomfort*. Using the title and what you already know about Cory, predict what you think the video will be about.

24 While you watch, take notes. Preview the questions in Activity 25. **Watch scene 1.1.**

25 After you watch, discuss in pairs.

1. What is adventure for Cory?
2. Why does Cory take photos in extreme places?
3. What is Cory's most important tool for connecting with the people he photographs?
4. How has Cory's photography changed since he started?

26 Work in pairs. Cory says that education can come from observing. With a partner, take time to really observe another person, animal, or group. Look closely at all of the details. Then write a list of five things that you noticed by closely observing. Discuss what you wrote. Take note of what surprises you.

27 Work in groups. In the video, Cory mentions the "richness of struggle." Try something that will cause you to struggle or to be uncomfortable. Discuss the positives of this experience.

Cory Richards takes risks to get a good shot. This photo was taken from the top of the 8,034 m (26,360 ft.) Gasherbrum II, in Pakistan.

28 Choose an activity. Work in pairs.

1. Research Cory's photography. Share and describe your favorites of his photos with the class.
2. Photography gives Cory a voice. Take a photograph to teach others about someone or something. Share your photo with a partner. Discuss your partner's reactions.
3. Compare and contrast Amy Purdy and Cory Richards. How does each person push him/herself? What obstacles has each person overcome?

GRAMMAR TR: 14

Adding emphasis

My sister loves to hike in the Himalayas.
The place (where) my sister loves hiking **is** the Himalayas.

I won't go surfing. I don't like swimming in the ocean.
The reason (why) I won't go surfing **is that** I don't like swimming in the ocean.

He loves yoga because it makes him feel relaxed.
The thing (that) he loves about yoga **is that** it makes him feel relaxed.

I like snow kiting. It pushes me to my physical limits.
What I like best about snow kiting **is that** it pushes me to my physical limits.

29 **Read.** Then rewrite the sentences to add emphasis.

- I prefer snowboarding to skiing because I need less equipment.
The reason why I prefer snowboarding is that I need less equipment.
- José really enjoys climbing in the Andes.
The place _____
- I love the excitement of kite surfing.
The thing _____
- Maria likes trying extreme sports.
The person _____
- You should try tae kwon do. It really helps you focus.
The reason _____

30 **Work in pairs.** Take turns choosing cards from each pile. Discuss the sport pictured on your card. Add emphasis.

The thing that Carolina really loves is practicing yoga.

The reason why she loves it is that it's relaxing.

The thing that...



Go to p. 155.

WRITING

A biography tells the story of a person's life. Here are some useful words and phrases to connect ideas when writing a biography:

afterwards	at first	eventually
later on	more recently	ultimately

31 **Read the model.** Work in pairs to study the writing model. What words does the writer use to organize the biography? Underline them.

Yuko Arimori is an Olympic marathon runner. She was born in Japan, in 1966. At first, Arimori had difficulty walking because of a problem with her legs. Other children made fun of her. Her gym teacher helped her to gain confidence, and Arimori learned to try new things, such as running track. Through hard work, she became one of the best high school runners in her city.

Eventually, Arimori tried to join a top track team in Japan. When a spot opened for a marathon runner, Arimori saw her chance. She had never been fast, but speed wasn't as important as endurance, which Arimori had. Ultimately, she became one of the best female marathon runners in the world. In 1992, at the age of 26, she participated in the Barcelona Olympics, where she won the silver medal. Afterwards, in the 1996 Olympics, Arimori won the bronze.

Later on, in 1998, Arimori decided to go beyond just running. She started Hearts of Gold, a volunteer organization to help land mine victims in Cambodia. Hearts of Gold sponsors the Angkor Wat International Half Marathon. Runners from around the world compete to raise money to buy artificial limbs for those who lost arms and legs because of land mines. In fact, many of the victims join the race!

More recently, Arimori was a United Nations Good Will Ambassador. Today, she's the President and CEO of Special Olympics Nippon. She continues to help people in Cambodia and other parts of the world.



32 **Work in pairs.** Identify four phases of Yuko's life.

33 **Write.** Write a biography of an athlete who is a role model for others. Use the words and phrases above to help you organize the biography.



Test Your Limits

“Adventure is anything that puts us outside our comfort zone.”

—Cory Richards

National Geographic Photography Fellow, Photojournalist

1. **Watch scene 1.2.**
2. Cory gets out of his comfort zone by climbing the tallest mountains in the world—in the winter! What takes you out of your comfort zone? Discuss with a partner.
3. How could you get more adventure from your life? What do you think you might learn about yourself by trying something new?

Make an Impact

A Try something new!

- Do something you’ve never done before.
- Write a paragraph to describe your experiences. What did you do? Did it take you outside of your comfort zone? What were the benefits and challenges of this new experience?
- Present a summary of your experience to the class.

B Create an instructional video.

- Choose a particular sport that pushes your limits, such as yoga, martial arts, or distance running.
- Create a video about the sport. Describe how to do the sport. Talk about its mental and physical requirements.
- Film your video and share it with the class.

C Interview a role model.

- Choose a person in your community who is a role model for teens.
- Write at least five questions to use in your interview. Ask about the person’s life, what obstacles he/she has overcome, and how he/she has pushed him/herself.
- Conduct your interview. Then, summarize what you learned about the person for your classmates. Share a photo if possible.

