6 Where does food come from?

Key Words

1 6.1 **Preview the Key Words.**

savory

feast (n)

guru

crunchy

channel (n)

organic

traditional

hashtag

2 **Complete the sentences with the Key Words.**

a I like _____ snacks, like cheese and crackers.

b They are doing a folk dance wearing _____ clothes.

c She has a cooking TV show on _____ four. You can find her recipes online using this _____: #DianaCooks.

Pre-reading

3 **Look at the pictures on pages 77–81 and circle the correct options.**

a The story is about a **boy** / **girl** who learns how to **cook** / **scuba dive**.

b There are many types of **food** / **animals** in the story.

c The characters in the story are **happy** / **sad**.

4 6.2 **Listen and read.**

#AbuelaCooks

By Kellie Dundon • Illustrated by Daniela Martín del Campo

It was going to be the worst summer ever. Mom and Dad told me about a scuba diving vacation in Mexico, where Mom grew up. The problem was that *they* were the ones going scuba diving. I was going to stay with Abuela—that's Spanish for "Grandma"—in a small village in Mexico. The last time I was there, we didn't even have Internet access!

Don't misunderstand me—Abuela is amazing. She makes the most delicious Mexican food, and she gives the biggest hugs because she misses me most of the year. But my best friend Andy was going to spend the summer in Europe. And my friend Paula was going to New York! I was the only one who wasn't going to do anything interesting.

A week later, we had taken a plane, two buses, and a taxi to get to Abuela's house. The taxi shook as it drove over the cobblestone roads. Every house on the street was painted a different color. I ran up to Abuela's door to be the first one to get a hug.

"*Diego, mi amor!*" (Diego, my love!) she said and wrapped me in her arms. We all sat down to eat her delicious *tamales*. *Tamales* are dumplings made with corn flour. Abuela makes savory ones with meat and red sauce. And for dessert, she makes sweet *tamales* with lime and sugar.

Yesterday, Mom and Dad left. So now it's just Abuela and me. Well, Abuela, me, and lots of visitors. I think they just come over to the house to eat the feast she makes each day. Most of the time, I sit on the couch playing games. I check a video site for tips and Abuela looks over my shoulder.

"Is that your friend?"

"Who?"

"This one here, talking to you. Is that your friend?"

"No, Abuela. He's a YouTuber."

"What's a YouTuber?"

"YouTubers post videos on YouTube. They know about lots of different things, like video games, movies, art, makeup ... whatever. They're like gurus."

Abuela looks at the screen. "He is very young to be a guru. Come," she says, "put your YouGurus away and come to the market with me."

The local market isn't anything like where we buy groceries in San Diego. Abuela's market is outside. There are no shopping carts, barcodes, or cash registers—just colorful fresh produce, neatly piled in stands along the street. We pass someone selling little bags of reddish-brown snacks. "Try one!" Abuela says. I pick one up and pop it in my mouth. It's crunchy and salty.

"Yum! What is it?"

"Fried crickets," she says with a big smile.

"Insects?!"

She buys a small bag of them from the lady and gives it to me. Maybe I'll try just one more.

At the market, they call Abuela *Doña Elsa*—that means Lady Elsa. It sounds so formal and polite. She points to all the things she wants, with both hands, like she's conducting an orchestra. The market vendors weigh the food. When they tell her it costs 20 pesos, she says it should be ten, so they sell it to her for 15 pesos. They both smile, like it's a game. I've never seen *that* happen at the supermarket at home.

Later on, at her house, I'm playing the best round of Jungle Slayer in my life when I hear a cry. I drop my tablet and run to see what has happened. Abuela is holding her hand under running cold water. She says the neighbor's cat bit her, but not too hard. I remembered a first-aid channel I'd seen on YouTube a while ago. I run to get the first-aid kit. Abuela watches me in surprise.

"You say you learned to do this a year ago? And you still remember?"

"Sure, I guess so."

After I clean and cover the wound, Abuela says, "Come to the kitchen. We have lots of cooking to do."

"I don't know how to cook! I'm ten!"

"Well, I can't cook with my sore hand. You're ten, but I'm 60. With my head and your body, we can cook!"

In the kitchen, there are chopped organic tomatoes, corn kernels, avocados, and freshly cut bright green limes. I can see tortillas in three different colors!

Now, this is where it gets a bit crazy. Abuela starts pointing to things and telling me long sentences about what to do ... in Spanish! And, oh boy, she is bossy in the kitchen! It's a lot of work, but it's also a lot of fun. Abuela watches me and says, "If only your mother could cook our country's food like this!"

The next day, I have an idea. "Abuela, wait here!" I run to get my tablet. When she sees it, she shakes her finger in the air. "No GameGuru now! We are cooking!"

"No, Abuela, you don't understand. I'm going to make you a YouTuber!"

She's too distracted tasting our red rice to listen. So I set up the tablet so we're both visible on the screen and hit the record button. "Today, we're making *mole*," she says.

"What's that?"

"*Mole* is a traditional Mexican sauce with a lot, and I mean A LOT, of ingredients. Our recipe uses chocolate, chili, tomatoes, dried fruits, spices, and nuts. Every family has secret ingredients. We crush all the ingredients together until we have a powder, or a paste. That's *mole*. Then, we can cook meat in it."

Abuela claps her hands. "Let's cook!"

For the next hour, she shouts orders at me in Spanish, waving her arms. We make the best *mole* sauce. And I record the funniest *mole* cooking lesson ever. I upload it to YouTube and send the link to Mom and some of my friends. The next day, I record Abuela's *tamales*-making lesson. The day after, I record her making peppers stuffed with meat and nuts, and a cream sauce on top.

It's almost the end of my vacation in Mexico. I check my tablet to see if Mom has watched the cooking lessons. I nearly drop the tablet when I see the screen! There are more than 3,000 likes! I guess people think Abuela is as much fun as I do! A lot of people are trying her recipes and posting the photos. Someone has even given her a hashtag: #AbuelaCooks.

The next time we go to the market, some tourists see us, and one yells out, "Look, it's AbuelaCooks!" A week after that, Abuela and I are interviewed on a morning TV show. And now that I'm back at school, everyone keeps asking about my famous Abuela!

So I guess my summer wasn't so bad after all. Abuela tells me it wasn't becoming a "YouGuru" that makes her so proud. She's proud because her grandson showed the whole world how to cook the food of our ancestors.

Key Words

1 Read the definitions and write the Key Words.

a *adjective* hard and making a loud noise when eaten ___ ___ ___ ___ ___ ___ ___

b *adjective* grown without artificial chemicals ___ ___ ___ ___ ___ ___ ___

c *noun* a person who knows a lot about a particular subject ___ ___ ___ ___

d *noun* a special meal with large amounts of food and drinks ___ ___ ___ ___ ___

Comprehension

2 Circle the correct option to complete the questions. Then, write the answers.

a **Where** / **Who** is going to New York for the summer?

_____

b **Who** / **What** are *tamales*?

_____

c **Where** / **What** do Abuela and Diego buy groceries?

_____

d **How** / **Why** old are Diego and Abuela?

_____

e **What** / **When** does Diego check his tablet to see if Mom watched the video?

_____

f **Why** / **Who** are Abuela and Diego interviewed on TV?

_____

3 List the ingredients for each of the following dishes in the story.

a Savory *tamales* _____

b *Mole* _____

4 Read and write *D* (Diego) or *A* (Abuela).

a gives great hugs ☐

b eats something for the first time ☐

c gets bitten by a cat ☐

d plays a computer game ☐

e knows first aid ☐

f knows people at the market ☐

Digging Deeper

5 **Write questions about something in the story you want to know more about. Then, research the information and write the answers.**

Why ... ? **How ... ?** **Who ... ?** **What ... ?**

What other traditional foods are from Mexico? _____

_____

_____

_____

6 **Read the section of the story on pages 80–81 again. Then, complete the graphic organizer.**

#AbuelaCooks Chain of Events

This happened ...

A cat bites Abuela's hand.

Causing this to happen ...

Finally, this happened ...

Personalization

7 **Describe a YouTuber you watch or want to watch.**

a What's the name of the YouTuber or program? _____

b What is it about? _____

c Why do you like it? _____

8 **Imagine you are a YouTuber. Give yourself a hashtag name. Be inventive!**

_____

6 Where does food come from?

Key Words

1 6.3 **Preview the Key Words.**

beef

protein

laboratory

cell

requirement

reproduce

lean (adj)

predict

2 **Read the glossary entries and write the Key Words.**

a _____ *noun* something that is needed

b _____ *noun* a place where science experiments are done

c _____ *noun* a very small part that forms all living things

d _____ *verb* to make a copy of something; to make a baby

Pre-reading

3 **Look at the pictures and read the captions on pages 85–87. Then, mark (✔) the themes of the article.**

a The effects on the environment caused by eating meat ☐

b Burgers made from vegetables ☐

c Buying a new kind of meat ☐

d Making meat in a laboratory ☐

4 6.4 **Listen and read.**

Are You Ready to Try … Meat Made in a Laboratory?

By Susana Ramírez Félix

Do you love a juicy hamburger? Have you ever considered not eating meat? Would it be easy or difficult for you to stop eating it?

Some people worry about the negative effects that raising animals for meat has on our planet. Others worry that animals suffer. And some say there will not be enough food to feed everyone. All these things have inspired people to look for new ways to produce meat.

Did you know?

An estimated 15,944 liters of water are needed to produce just one kilogram of beef. This is what is called the water footprint of beef production.

Environmental destruction caused by meat production

Raising animals for meat pollutes the environment and uses up valuable resources. It causes a huge amount of greenhouse gas emissions. Approximately a quarter of the world's land is used to produce food for the livestock that gives us meat. That means we cut down forests and there are fewer trees to make oxygen.

In addition, researchers say that we eat four times more food than we did 50 years ago. In 2018, people around the world ate about 59 billion kilograms of beef. By 2050, specialists say we will need around 455 billion kilograms per year to feed everyone! Can you imagine all the land and water we will need to produce that much meat? Think of all the damage this does to the environment!

If we continue eating as much meat as we are eating now, there soon will not be enough land or water to feed the animals. By 2050, there will be enough food to feed only half of the world's population!

Instead, the land and water that is being used to raise animals could be used to grow plants. That way we would have enough plant-based food, like fruits and vegetables, and do much less damage to the planet. Easy, right?

Well, no. Many people around the world like meat and want to keep eating it. They say it tastes delicious, and they like it better than fruits and vegetables. Or at least they don't want to *only* eat plants. Meat also has a lot of nutrients, like proteins, fat, and minerals. It can be hard to get enough of those nutrients in plant-based foods. That is especially the case with iron, which we need for our blood. Meat has iron, but not a lot of plants do.

If we can't or don't want to give up meat, what can we do?

The answer might be to make meat in a laboratory! Around a decade ago, scientists started to think about how to produce real meat that uses fewer resources and without harming the environment so much. They came up with the idea of cell-based meat.

Making meat in a lab

What is cell-based meat? Well, it's exactly what it sounds like—meat that grows from meat cells like any other meat. But, instead of growing in an animal on a farm, it grows in a laboratory. Imagine eating a hamburger, and, while you are eating it, the cow the meat comes from could still be alive, looking at you! Although it might sound a little bit weird, it's not science fiction. In 2013, scientists produced the first burger made from cell-based meat.

How is cell-based meat produced?

There are four basic requirements to grow cell-based meat:

1. A sample of cells from an animal—this sample only has to be the size of a sesame seed, but it contains millions of cells that can reproduce many times.
2. Something the cells can stick to.
3. Some food for the cells to "eat" so they grow and reproduce themselves.
4. Something for the meat to grow in.

Looks like meat, tastes like meat!

Specialists say that this cell-based meat tastes the same as lean meat we get from traditional sources because it is, well, meat. The only difference is that it does not grow like a muscle of an animal, it grows in a lab. We'd no longer need to hurt an animal to eat its meat. We just have to borrow some of its cells. We'd no longer need to use up so much land for farm animals. We wouldn't use thousands of liters of water. And we wouldn't generate so much pollution. That's why cell-based meat is also called clean meat.

It sounds pretty good, right? So, what are we waiting for? Some companies say they are ready to sell cell-based meat in markets around the world. They are just waiting for the governments to approve it. Scientists predict that cell-based meat will be found in stores by 2022. Are you ready to try it?

Coming to a store near you!

Key Words

1 Find the Key Words. Then, complete the sentences.

P	T	Z	B	D	I	P
R	R	X	M	V	R	R
E	D	C	L	R	Q	O
D	F	B	E	E	F	T
I	C	B	A	R	M	E
C	W	D	N	H	Q	I
T	V	W	T	A	F	N

a _____ is the meat from a cow.

b The doctor told me I can eat _____ meat—meat without fat.

c There is a lot of _____ in meat, milk, eggs, and beans.

d The weather forecasters can _____ the temperature.

Comprehension

2 Match the sentence halves.

1 One quarter of the world's land …
2 We eat four times more food …
3 It is difficult to get enough nutrients …
4 To grow cell-based meat, …

a than we did 50 years ago.
b is used to raise livestock.
c from plant-based foods.
d you need cells from an animal.

3 Circle the correct option to answer the questions.

1 What is the name for the amount of water we use to produce beef?
a water production b water footprint c water emissions

2 By 2050, how many people in the world will not have enough food?
a 50 percent b all of them c those who don't eat meat

3 What do we need to grow cell-based meat?
a sesame seeds b iron c a container

4 Read the article on pages 85–87 again. Circle the author's purpose.

a The author wants to give you facts about how much meat we need to eat.
b The author wants to make you think about the advantages of cell-based meat.
c The author wants to encourage you to stop eating all types of meat.
d The author wants to show you how to buy cell-based meat.

Digging Deeper

5 **Complete the Venn diagram.**

tastes like meat grows on an animal	uses a lot of water doesn't use land	grows in a lab contains animal cells

Cell-Based Meat | Both | Meat

6 **Circle the correct option to complete each sentence.**

1 The author of the article says that regular meat is …

a delicious. b bad for the environment. c expensive.

2 The author of the article says that cell-based meat is …

a not tasty. b good for the environment. c in stores now.

7 **Write three advantages of cell-based meat.**

a _____

b _____

c _____

Personalization

8 **Do you think cell-based meat is a good idea? Why or why not?**

_____

_____

9 **Do you want to try cell-based meat? Why or why not?**

_____

_____