## Unit 10: Nature Around the World

| | Title | Reading | Listening | Writing | Speaking |
|---|---|---|---|---|---|
| 1 | **Endangered Gazelles in Israel** | Informative Article | ---- | Description | Prior knowledge sharing |
| 2 | **Biblical Museum of Natural History** | --- | Interview | Personal preference | Associations |
| 3 | **Bird Migration in Israel** | Article and brochure | ---- | An ad | |
| 4 | **Animals** | ---- | Presentations | Description / informative | Pair discussion / categorizing // presentations |
| 5 | **Interesting Plants Around the World** | Description | Presentation / interview | Description | Sharing information |
| 6 | **The Power of Plants** | Informative article | ----- | Descriptive paragraph | Personal preference |
| 7 | **About Plants** | Short descriptions | ---- | Fact file on plants | Presenting findings |
| 8 | **Green Open Spaces** | Informative Article | --- | Description | Background Knowledge |
| 9 | **Protecting Nature** | Short story | Points of view | Letter of suggestion | Discussion / point of view // presentation |

Overall performance objectives:

1. Can discuss personal experiences
2. Can express opinion and preference
3. Can describe people, places, animals and things, orally and in writing
4. Can write a letter of suggestion, a description and a fact file
5. Can persuade and discuss a variety of topics orally

Vocabulary: New

| | | | | | |
|---|---|---|---|---|---|
| agriculture | ecological | human | massive | plucked | surgery |
| annually | edge | illustration | moist | primarily | symbolism |
| attract | efficiency | illustrations | multiple | prisoner | symbolize |
| categorized | employee | income | natural | produce (n) | threaten |
| category | exhibit (n) | increased | network | reference | threats |
| collection | exist | inherent | numerous | represent | torn |
| comprehensive | exploit | insights | observe | root | traditional |
| conflicting | fact | instructions | pain | route | transmit |
| currently | favorable | integrate | particularly | shady | trembled |
| desert | flock | interact | peaceful | shallow | unfavorable |
| development | fund (v) | interaction | petal | soil | violence |
| differentiate | gazelle | interactive | physical | stable | volunteer |
| diseases | global | lovely | plant (v) | sufficient | wild |
| domestic | guidance | | | | |
| drain | historically | | | | |

**Chunks, idioms and saying**

| | | |
|---|---|---|
| in need of | in view of | social ties |
| in the first place | made up of | stand out |
| in the long run | run out of | the wild |

**Reentered / Reviewed**

| | | | | | |
|---|---|---|---|---|---|
| achievement | critical | factors | medicine | relationship | survival |
| affect | decade | forest | mentally | release | survive |
| anxiety | decline | frequently | method | relieve (v) | suspect |
| appreciate | despite | function | minimal | rely | sustainable |
| aspects | destruction | fundamental | native | researcher | symbol |
| assist | develop | furthermore | nutrition | schedule | temporary |
| associated with | diversity | growth | observe | seek | territory |
| assume | easily | impress | ongoing | selection | to what extent |
| attractions | eastern | impressive | participants | senior citizen | trait |
| capability | efficient | in case of ... | physically | sensitive | trap (v) |
| cells | effort | in contrast to | population | setting | unfortunately |
| certain | emotions | in favor of | positive | severe | unique |
| characteristics | enable | increase | pressure | sight | urban |
| chemical | environment | influences | prevent | situation | useful |
| comprehensive | environment | inherently | protection | southern | various |
| concept | equipment | innovation | provide | specialize | vision (n) |
| conduct | exclusively | investment | publish | stress | *waste a minute/time* |
| consequently | expectation | landscape | quality | suffer | well-being |
| context | experience (v) + (n) | located | recommend | surface | |
| contradict | expert | major | recover | surprising | |
| creative | facilitate | majority | reduced | surrounded | |

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## 1 – Endangered Gazelles in Israel

1. Let's Talk! Have the students discuss the Gazelle Valley in Jerusalem. If they don't know anything about it, you can provide them with a little bit of information on your own and then discuss it.
If the students have been, let them share their experiences and thoughts with the class and then you can provide them with additional information if needed.

Information for you to share should you need it:
*In 1993, the wild gazelles that lived in that area of Jerusalem had their home blocked by the building of a new highway. The gazelles were trapped on the one side of the valley and couldn't escape so they were killed by other wild animals such as feral dogs and jackals. People drove the gazelles away from their natural habitat and the area was supposed to become a housing project.*
*Fortunately, a group of people who cared about the gazelles fought to save the gazelle habitat and in 2015 the Gazelle Valley Park was built.*

*Today there are over 40 gazelles living in the park and their numbers keep growing.*
*The park is free of charge but you must adhere to the rules. This is a wonderful place for families to spend the day, for children to learn about wildlife and for anyone who is interested in learning about the gazelles that are part of the Israeli landscape.*

**gazelle-** A gazelle is one of many antelope species in the genus Gazella. It includes three living species of Asian gazelles. Gazelles are known as speedy animals. 97 km/h (Maximum, In Short Bursts, Running)

**Option**: Read the Hebrew version of Perkei Avot, Chapter 5, Mishnah 20, and have the students tell you what they think it means.
Focus on the swiftness of the gazelle as this is the animal that will be discussed in the lesson.
If you'd like to work on the English translation, it's below:
*Yehuda the son of Teima would say: Be bold as a leopard, light as an eagle, fleet as a gazelle and mighty as a lion, to do the will of your Father in Heaven.*

2. a. Have the students choose the word that means the same as the word in bold.
Answers:

1. a
2. c
3. b
4. a
5. a
6. b
7. c
8. a
9. b
10. a
11. c
12. a
13. b

2.b. Have the students complete the passage with the words in bold from Exercise 2.a.
Answers:

1. network
2. unfavorable
3. particularly
4. wild
5. primarily
6. favorable
7. humans
8. stable
9. threats
10. diseases
11. development
12. exist

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3. Let's Write! Have the students write a short descriptive paragraph about an animal they like. They should write between 40-50 words in their notebooks, and use at least 6 of the words they used in Exercise 2.a. Encourage them to share their descriptions.

**Option**: Collect the descriptions and bind them into a class book. This could stay in the class and be shared among the students.

4. a. Read the text with the students. Discuss what type of text this is and what we can expect to find in it. Ask them to look at the pictures and think about what they might learn.
It's recommended that you read and discuss the context so that the text is understood by all the students. See example in TG, page iii, **Working with a Text**.
Ask questions while reading to ensure comprehension.

The article was adapted from: Dominik Doehler, ZAVIT* Environment and Science News Agency | Published courtesy of ZAVIT* Environment and Science News Agency

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5. Have the students answer the questions according to the article in Exercise 4, in their notebooks.
Answers:

a. it's caused a decline in their numbers
*b.* any two of the following: *diseases from farm animals, being hunted for food, being killed by wild dogs and wolves, small scattered populations, unfavorable environmental conditions*
c. 2
d. 1
e. Any two of the following: *it could help with repopulating the endangered species, it could help with growth of the forests, the ecological corridors will continue to exist, the gazelles spread seeds and help forests stay healthy*

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## 2 – Biblical Museum of Natural History

1. Let's Talk! Pair Work. Have the students work in pairs to discuss the pictures and what they think they might see on a visit to the Biblical Museum of Natural History. They should discuss the various animals that are there and why they think these are the animals they would see there.
Explain that the photo on the right is of the museum. Ask if anyone has ever been there.
Discuss their ideas as a whole class after a few minutes of discussion in pairs.

2.Have the students write the word for each definition from the box on the right.
Answers:

1. k
2. b
3. f
4. j
5. c
6. a
7. i
8. g
9. d
10. e
11. h

3a. Have the students read the sentences and decide if the word in bold is being used correctly so that the sentence makes logical sense. If not, they are to correct it in their notebooks.
Answers:

1. False -The telephone is **not a** new i**nnovation** that was invented recently.[ It was invented over one hundred years ago by Alexander Graham Bell.]
2. False- The book had few illustrations and many words
3. True
4. True
5. True
6. False – **two different** categories
7. True

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3.b. Have the students complete the sentences in their notebooks. Encourage the students to share their sentences.

4. Listening Comprehension.
Have the students listen to the interview between Rabbi Natan Slifkin and Yosef, the interviewer. Rabbi Natan Slifkin is the founder and director of the Biblical Museum of Natural History located near Beit Shemesh. They should then answer the questions in their books.
It's a good idea to have them read the questions prior to listening.
Play the interview twice to enable the students to check their answers.

*Interview Transcript*

**Yosef**: Good afternoon. Rabbi Nathan Slifkin. Thank you for agreeing to speak to me before this afternoons' tour. I see your museum has just opened; the elevator isn't working yet. Please tell us a little bit about the history of the museum.

**R. Slifkin**: My pleasure Yosef. Welcome. The museum was originally opened in 2014 to make a place where Torah comes alive. Actually, the museum has three different parts. It is part zoo, part natural history, and part Jewish education. Here the visitors are able to touch, feel and experience the natural world. It is a unique museum combining the love of Biblical history and nature by opening a window into life during Biblical times. The visitors learn about the animals that lived during the time of the Torah and their symbolism in the Torah text, the Midrash and in the Talmud. In addition, they gain a better understand of the plant life and wildlife in the Land of Israel and the importance it played in history. Baruch Hashem the museum was a tremendous success where tens of thousands of people have come. When we saw the great success, we planned to build a new building for the museum.

**Yosef**: Please tell us about the new building.

**R. Slifkin**: The Biblical Museum of Natural History has moved to a brand-new location just outside Beit Shemesh. It has seven exhibit halls with a total of 1400 square meters**.** But I want to point out that this isn't a museum in the traditional sense.

**Yosef**: What do you mean by that?

**R. Slifkin**: Well, most museums are usually the "Look and don't touch!" types. But our museum is more children friendly. We have many "Please Touch!" boxes, although there are some exhibits that are in "Don't touch!" category.

**Yosef**: That is very interesting. Can you please explain what the main goals of the museum are?

**R. Slifkin**: Sure, there are five aspects of biblical natural history which we try to integrate in our museum. The first is vision. We want the visitors to be amazed by the beauty and wonder of nature. The second one is identification. We want the visitors to understand how biblical animals were identified over history. The third aspect is symbolism. This explains the traits and concepts that Biblical animals represent. The fourth aspect is laws from the Torah actually exhibited and shown. The tour helps the visitors understand law as related to the animal kingdom. The fifth aspect is interaction. We present the understanding of our relationship with animals to the visitors and they are able to touch and interact with some animals at the museum.

**Yosef**: That seems like a difficult task. How do you do it?

**R. Slifkin**: The exhibits include many items, some live and others feature live and that look real. The exhibits are not behind glass so people who are looking around can walk up close to see a lion, a cheetah, or a wolf, for example.

When I am giving a tour, first I explain everything and then I take the group into the auditorium with the exhibits and explain everything. The participants are free to ask questions and will always receive explanations. It is truly a unique experience that you can only have in Israel. We want to encourage the participants to interact with the exhibits. Children of all ages can hold the animals, so visitors must keep an eye on the little ones.

**Yosef**: Can you please give me some examples of some of the different exhibits?

**R. Slifkin**: Sure! We have an exhibit of snails that produce Techelet. Visitors learn about the birds, the quails, that were given to Bnei Yisrael when they complained about the manna. Visitors with courage can hold a snake, the Boa Constrictor. This hand on experience enables children and other visitors touch lizards, snakes, and hamsters. People can also learn about the differences between animal eggs. There is also an unbelievable shofar collection from a variety of animals from all over the world.

**Yosef**: That is a real wide variety of exhibits. What made you interested in running a museum? Has it always been something you wanted to do?

**R. Slifkin**: Well, it all began when I was a little boy in Manchester, England. I went to a regular charedi yeshiva. My favorite hobby was collecting animals. I had them in the house, in the yard or wherever I could keep them. My family wasn't too happy with that. I told everyone, "When I grow up, I want to have a zoo." In Yeshiva I learned what the Torah said about the animals and I wanted to dedicate my profession to zoology. The museum was my idea; therefore, I am called the “Zoo Rabbi”.

**Yosef**: How did you learn all about the animals? You seem to be a real professional zoologist.

**R. Slifkin**: When I came to Israel after finishing my studies where I got smicha at Yeshiva Or Sameach, I volunteered and took a course at the Jerusalem Biblical Zoo. I noticed they knew a lot about the animals but not so much about their connection to the Tanach. I volunteered to design an innovative learning program at the zoo to connect the animals to their pasuk in the Tanach. I ended up traveling to different zoos all over the USA and gave talks in the zoos about the animals in the Tanach.

**Yosef**: That’s very impressive. Another thing I was impressed by is the book I saw on display. Can you please tell us something about it?

**R. Slifkin**: Yes, I have exciting news. You can now buy a copy of "The ***Torah Encyclopedia of the Animal Kingdom***", which I have written. The book presents every reference to the animal and its pasuk in the Torah, Talmud and Midrash. There is a discussion of each animal and insights from modern zoology. There are beautiful photographs and illustrations. It is an important reference book to have in any home. The children will love to look at the photos and they will love to learn about the animals.

**Yosef**: That book sounds so impressive. It's the perfect way to end our interview. I am very grateful to you, Rabbi Slifkin, for sharing all this meaningful information with me and I am sure the people who read this interview will be just as impressed and interested. Thank you again.

**R. Slifkin**: My pleasure. I look forward to seeing everyone at the museum.

Answers to the questions:

a. at the new museum
b. 4
c. 3
d. 2
e. 3

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## 3 – Bird Migration in Israel

1. Let's Talk! Group Work. Have the students work in small groups of 3-4 to discuss the questions relating to bird migration. Encourage them to ask questions of each other. Make sure the students understand that these are maps of bird migration and try to have them use previous knowledge of this subject.
If you can, bring pictures of different birds that migrate over Israel.
If you discover that your class has no previous knowledge of this topic, do this as a whole class discussion.

Maps taken from: *Flywaysmusic.org*

2. a. Have the students match the idiom to the meaning in their notebooks. These are all idioms about birds. They might not know much about birds, so there is some information below that might help you.
Answers:

a. night owl
b. birds of a feather flock together
c. the early bird catches the worm
d. like a duck to water
e. free as a bird

*Extra information for you to share with the class: Birds have various habits and these lead to the idioms.*

- *Because birds can fly, they are often symbols of freedom with their ability to quickly and easily escape from troubles, dangers, or complications.*
- *Many birds are sociable and gather together in flocks They are not always just a single type of bird and mixed flocks are common, especially in winter.*
- *Many birds seek food early in the day and are more likely to successfully find food before other birds or animals are feeding.*
- *They can swim within hours of hatching without extensive instruction or the mother of father's guidance. They naturally know how to swim easily and are right at home in the water.*

2.b. Have the students write the correct idiom to complete each sentence.
Answers:

1. birds of a feather flock together
2. the early bird catches the worm
3. night owl
4. free as a bird
5. like a duck to water

3. Have the students write the correct word that means the same as the word in brackets in each sentence.
Answers:

a. massive
b. annually
c. guidance
d. comprehensive
e. flock
f. currently
g. observed
h. collection
i. fund (v)
j. income
k. instructions
l. produce (n)
m. route

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4. Read the text with the students. Discuss what type of text this is and what we can expect to find in it. Ask them to look at the title and think about what they might learn. Have them scan the text and note that there is a smaller text as well. Discuss what that might be.

Look at the pictures and discuss what they see, the captions below, what they mean.

It's recommended that you read and discuss the context so that the text is understood by all the students. While reading, make sure to relate to the pictures as well.
See example in TG, page iii, **Working with a Text**.
Ask questions while reading to ensure comprehension.

*The information in the article in the Student Book was taken from the following articles:*

*1.Bird Migration over Israel - Times of Israel.*

*2. **It's for the birds-**Top five birds to look for now, as they wing their way southwest*
*By **JESSICA STEINBERG** 12 October 2012, 12:29 pm*
*3. The Nili and David Jerusalem Bird Observatory-Times of Israel*
*4. First Stork Migration Sighted- August 11, 2019 | Israel Today Staff*
*Eagle: Yoav Perlman/Israel Ornithological Center, Society for the Protection of Nature in Israel)*

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5. Have the students answer the questions in their notebooks, according to the text in Exercise 4.
Answers:

a. *it's in just the right location and has the climatic diversity that varies from dry desert in the south to a cooler mountainous area in the north*
b. *There is a large quantity of food, the weather and the surrounds are good*
c. 2
d. The following:
    1. *500 million- the number of birds that migrate/fly over Israel.*
    2. *550- the number of species of birds that fly over Israel*
    3. *200 – the number of species that pass over Israel a day*
    4. *100,000 - the number of eagles that fly over Israel in 10 days*
    5. *40, 000-the number of pelicans that fly over Israel twice a year*
    6. *31, 000 -the number of storks flying over Israel*
    7. *millions- the number of small birds flying over Israel during migration*
    8. *24 - hours a day the hours the Jerusalem Bird Observatory is open*

e. The birds eat the farmers' produce so having their own source of food doesn't harm the crops the farmers plant.
f. There are so many birds that it seems like a highway full of cars at rush hour.
g. 1

6. Group Work. Have the students work in small groups to create an ad for the Nili and David Jerusalem Bird Observatory (JOB). Have them use the information in the text and the smaller

text. They should include the relevant information you would find in an ad. They should decorate the ad and then present it to the class.
You can assess the students using the **Speaking Rubrics** on page x in the TG.

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## 4 – Animals

1. a. Let's Talk! Pair Work. Have the students work in pair to list animals that belong to each category. Encourage them to find at least 2-3 animals for each category.

1.b. Let's Talk! Have the students work together with the same partner to answer and discuss the questions. They should refer to their lists to give them something to work with. These are options for the questions, to help them along should they need a boost.

NOTE: **These are ABSOLUTELY NOT the only answers.** This is here to help you out should the students need ideas.
*1**. Possible answers** – cows, goats, sheep, donkeys, chickens, horses – They can be trained to work with people, and rely on people for their food. They are used to seeing the other farm animals and do not attack them.*
*2. Gazelle, deer, coyote, fox, etc. The wild animals are usually afraid of humans, and will hide from them, but if they feel threatened, they may be dangerous. They do not usually interact with other wild animals, unless they hunt them for food.*
*3. Some threats to the survival of wild animals are hunters, other animals who use them for food, lack of rain, hunger, disease, and losing their natural home because of human development.*
*4. Some animals and birds have positive characteristics, such as strength, speed, will power, and faithfulness. We can learn from these characteristics.*
*Examples- Eagles are quick and they protect their young ones, so they represent speed and protection. The deer and gazelle are quick, and symbolizes speed. The lion symbolized strength, the pigeon dove ("Yonah") is faithful and symbolizes the Jewish people.*

2. a. Have the students match the word to its meaning.
Answers:

1. c
2. e
3. f
4. g
5. b
6. h
7. d
8. a

2.b. Have the students complete the table with the correct part of speech for each row.
Answers:

| | Noun | Verb | Adjective | Adverb |
|---|---|---|---|---|
| 1 | **illustration** | illustrate | illustrative | --- |
| 2 | symbol | **symbolize** | symbolic | symbolically |
| 3 | --- | --- | **domestic** | domestically |
| 4 | exploit/ exploitation | **exploit** | exploitable | --- |
| 5 | threat | **threaten** | threatened/ threatening | threateningly |
| 6 | **characteristic** | characterize | characteristic | characteristically |

| | | | | |
|---|---|---|---|---|
| 7 | differentiation | **differentiate** | differentiable | --- |
| 8 | interaction | **interact** | interactive | interactively |
| 9 | **protection** | protect | protective | protectively |
| 10 | --- | --- | inherent | **inherently** |

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3. Pair Work! Have the students work in pairs to write a short paragraph, 5 sentences, about problems animals might have. They are to use as many of the words in the chart in Exercise 2.b. as possible.
Encourage them to share their paragraphs.

4. a. Have the students look up the expressions using in. You've taught at least 2 of these in previous units, in case of and in contrast to. Remind the students of those and have them continue on their own.
Possible Answers:

1. compared to
2. when a situation arises
3. lacking something, not having, without
4. in the end, over time
5. taking into consideration, considering
6. firstly, to begin with

4. b. Have the students complete the passage using the expressions with the preposition 'in' Exercise 4.a.
Answers:

1. In the first place,
2. in contrast to
3. in need of
4. in case of
5. In view of
6. in the long run

5. a. Let's Write! Have the students work in pairs to prepare a presentation on one of the animals they've chosen. They have to relate to the questions presented in the exercise. They should write their ideas and information together in their notebooks.

5.b. Let's Present! Have the students present their animal and their findings orally to the class. They should include visuals to make their presentation more interesting.
You can assess the students using the **Speaking Rubrics** on page x in the TG.

5.c. Let's Write! After having listened to their friends, have them write their opinion on which animal was the most interesting and why. They should write between 40-60 words in their notebooks. You can use the **Writing Templates** on page v in the TG to help you teach and review this. You can use the **Writing Rubrics** on page vi in the TG to help you grade this.

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## 5 – Interesting Plants Around the World

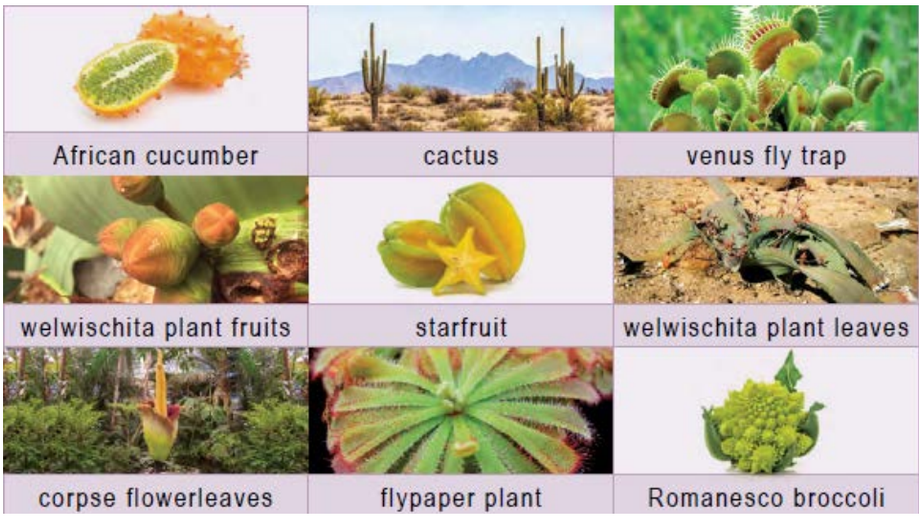
1. a. Have the students answer the questions about the pictures on their own, in their notebooks.
Answers:

a. None of these plants grow naturally in Israel, although the I is grown here.
b. Plants grown for food – A, E, I
    a. I is called Romanesco Broccoli, and is a vegetable similar to broccoli or cauliflower.
c. B, D - It has very long roots, so it finds water deep in the ground.
d. C, H
e. D, F

NOTE: Picture A is of an African cucumber. This is a type of melon. It's bright orange on the outside and green and yellow inside. It forms geometric shapes with its seeds.

Picture E is of the starfruit, or also known as carambola. It has a waxy skin and can be eaten unripe for a tangier flavor or ripe for a sweet and sour taste. When cut up, the pieces have a star shape.

1.b. Let's Talk! Discuss their findings / answers. Then go on to the question presented. Encourage the students to express their ideas.
Answers:




2. a. Have the students choose the correct meaning for the words in bold.
Answers:

1. a
2. a
3. a
4. b
5. a
6. a
7. a
8. b

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2.b. Have the students match the word to the definition.
Answers:

1. d
2. f
3. e
4. c
5. b
6. a

3. a. Have the students complete the passage using the words in the word bank. Remind them that they might have to make changes to some of the words to complete the sentence properly.
Answers:

1. numerous
2. diverse
3. petals
4. edge
5. lovely
6. desert
7. root
8. torn
9. running out of
10. wild
11. transmitted

3. b. Have the students answer the question about the short text. This helps ensure comprehension of what they've worked on.
possible answer:
*it was an adventure / it was scary / many exciting events happened / accept anything logically connected*

3. c. Have the students write examples of the descriptions provided in their notebooks. Encourage them to share their ideas. Accept any logical example to show comprehension.

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4. Listening Comprehension.
Have the students listen to the presentation by Anat Gross, an expert on plants and questions by the teacher. They should then answer the questions in their books.
It's a good idea to have them read the questions prior to listening.
Play the presentation twice to enable the students to check their answers.
NOTE: In order to answer question a, the students have go back to page 225, Exercise 1 to look at the pictures. Give them time to listen and look at the pictures and then do the second round to ensure they have a chance to listen again.
*Interview Transcript*

**Teacher**: Good morning, girls. I am happy to tell you that we have a special lesson today. Instead of our usual class, we will listen to a lecture from Anat Gross, who is an expert on plants, and who will talk to us about unusual plants from all over the world. Welcome, Anat, and thank you for coming to speak with us.

**Anat**: Thank you for inviting me.

**Teacher**: For the past few weeks, we have been learning about the importance of plants to the world. We discussed the fact that plants often provide food for animals and human beings, and that plants and trees are homes to many animals and birds. We also learned that plants clean the air by releasing oxygen.

**Anat**: That is certainly true. But I want to stress another point, and that is that plants and trees add color and beauty to the world. When we think about the numerous kinds of plants with their different characteristics, diverse colors and various shapes, we can catch a hint of the kindness of Hashem who made the world such a lovely and fascinating place.

**Teacher**: That is certainly true. I understand that you are going to tell us about interesting and unusual plants that do not usually grow here in Israel.

**Anat**: That is correct. I would like to begin by telling the students about one of the most interesting plants in the world, called the “corpse flower”.

**Teacher**: Corpse? As in a dead animal? Why would a flowering plant be called “a corpse flower”?

**Anat**: That is a very good question. The reason for this unusual name comes from the very strong smell that the flower has, similar to the smell of a dead animal. This smell attracts certain flies and other bugs, and these flies assist the plant in various ways.

**Teacher**: Do we have any of these plants here in Israel?

Anat: No, we don’t. In nature, the corpse flower grows in only one place in the world, in the rainforests of Indonesia. The plant grows a tall leaf every year, and sometimes it has one very big flower, which can grow two or even three meters high. The flower stands out because of its large size and its attractive colors, a cream-colored petal that has a deep red color on the upper edge.

**Teacher**: How often do these flowers grow?

**Anat**: In the wild, the plant does not flower very frequently, and often seven or even ten years can pass until the large flower grows again. Today, the plant is grown by professional gardeners in various gardens in the United States and England, and in some cases, these plants can produce a flower once in every two or three years. Many of these gardens are open to the public, and people from all over the worlds come to see the “corpse flower” in full bloom.

**Teacher**: That is amazing!

**Anat**: Yes, it is. There are many interesting plants. Another plant that attracts flies is called “The Venus Fly Trap”. However, there is a fundamental difference between the two plants. While the flies in “the corpse plant” can go in and out whenever they want to, the unfortunate flies who come too close to the Venus Fly Trap will be trapped inside the plant and become its food.

**Teacher**: I’ve heard of small bugs and animals that eat plants, but I never heard of a plant that eats animals. How does the plant know that a fly is nearby?

**Anat**: The plant has hairs on its petals, which are sensitive to touch. If a fly touches two of the hairs, the two parts of the petal close suddenly, trapping the fly so that it cannot escape. We aren’t sure why that happens, but we suspect that it has to do with chemicals that transmit messages to the plant.

**Teacher**: Where does the Venus fly trap grow?

**Anat**: It grows in North and South Carolina, which is located in the south-eastern part of the United States.

**Teacher**: Are there other plants that attract and eat flies or bugs?

**Anat**: There are several others. One of them is called “the flypaper plant”, because the surface of the flower is sticky, and it can trap mosquitoes and other small bugs.

Actually, I want to move on to another type of plant. I want to tell you about an unusual plant that grows in the desert, called Welwitschia.

**Teacher**: That is an interesting name.

**Anat**: The plant is named after a researcher from Austria, who found the plant growing in the desert in central and southern Africa. The people who live in the area call the plant Onyanga, which means “onion of the desert”, because the leaves of the plant can be used as food.

**Teacher**: What is so unusual about the plant?

**Anat**: First of all, the fact that a plant with long leaves can survive in the desert for many years is unusual. A Welwitschia plant can live for a long time, and some plants may be older than a thousand years old. The plant has only two leaves, which grow longer and longer until they become three or four meters long. The two leaves may become torn by the wind, so that the plant often seems like a pile of dry leaves, but the plant itself remains alive, thanks to its very deep roots which pull out moisture that is found several meters underground.

[school bell in the background]

There are many other interesting plants, fruit trees, and vegetables that I would like to tell you about, but I am afraid we have run out of time.

**Teacher**: That was a fascinating talk, Anat. I thank you so much for coming and sharing all this interesting information with us. We are looking forward to hearing more the future.
**Anat**: Thank you for your interest. I would love to come again to speak about other interesting plants.

Answers to questions:

a. G C H D
b. 2
c. 1
d. 4
*e. they eat bugs / catch flies/bugs*
*f. in the desert*
g. 3

5. Let's Write! Have the students write a paragraph in their notebooks about a plant or tree that they feel is really important or interesting. They should incorporate 4 of the new words from this lesson. Encourage them to share. They should write between 50-70 words.

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## 6 – The Power of Plants

1. Let's Talk! Pair Work. Have the students work in pairs to talk about the questions presented. Encourage them to really think about how they feel and what the different views or areas make them feel.

2. a. Have the students choose the word that has a different meaning than the word in bold.
Answers:

a. making furniture
b. angry
c. boss
d. local
e. in recent times
f. anxiety

2. b. Have the students match the word in Column A to the meaning in Column B.
Answers:

1. c
2. g
3. a
4. f
5. b
6. d
7. e

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3. a. Have the students match the question with its answer.

1. c
2. f
3. a
4. e
5. b
6. g
7. d

4 Read the text with the students. Discuss what type of text this is and what we can expect to find in it. Ask them to look at the title and think about what they might learn.

It's recommended that you read and discuss the context so that the text is understood by all the students. See example in TG, page iii, **Working with a Text**.
Ask questions while reading to ensure comprehension.

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5. Have the students answer the questions in their notebooks according to the passage in Exercise 4.
Answers:

a. 2
b. Any of the following for each:
    1. *cities / urban areas*
    2. *live on farms / work in agriculture / live in small villages*
c. (*Those/ People) who work at gardening feel more relaxed and more satisfied with their lives. / Planting helps sad people develop a more positive outlook on life.*
d. 4
e. The following:
    1. *in 16 companies around the world*
    2. *hospital patients who were recovering from surgery*
    3. *the workers have a higher degree of satisfaction / they suffer from fewer headaches /they stay at their jobs longer*
    4. *they suffered less from pain*
f. 1, 5

6. Let's Write! Have the students write a short passage in their notebooks about a place they feel close to nature. They should describe the place and how they feel when they are there. They should write between 50-70 words and use at least 5 of the words from Exercise 2.

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## 7 – About Plants

1. Let's Talk! Pair Work. Have the students work in pairs to decide which plant goes where. They should read the description and decide if the plant is an indoor plant or an outdoor plant.
Answers:

| Usually Indoor Plants | Usually Outdoor Plants |
|---|---|
| Aloe vera | Aloe vera |
| orchids | Canna Lily |
| Chamaedorea | Lavender |
| Cactus | Cactus |

Discuss the answers and the passages.
**NOTE**: This passage contains new words that are in italics. They are all explained through context. Have the students identify the meanings through context.

2. Have the students choose the correct word to complete each sentence.
Answers:

a. sufficient
b. drain / moist
c. shallow
d. soil
e. shady

3. Have the students write about the conditions needed to grow plants indoors and outdoors. They should reread the passages in Exercise 1 to help them. Their explanation should be detailed and clear. They are to use at least 3 of the new words from Exercise 2.
Encourage the students to share their ideas.

4. Have the students discuss the different plants shown and what uses they know of for these plants.

NOTE: Some information for you:
*Some of the plants above can be used as a kind of medicine. The aloe vera plant is good for burns and cuts and is good for the digestion; the lavender plant's scent, which is made into an oil, helps people relax and sleep better. The leaves can be used to make a drink and help you feel better if you have stomach problems. Peppermint is used as a drink, the oil is good for soothing headaches, joint pain and itching. It helps reduce stress and can be used to ease coughs.*

5. a. Let's Write! Have the students work in pairs to look up and write about an additional plant that could be used for medicinal purposes. They should write about where it grows, what conditions it needs to survive and what it can be used for. They are to write between 120-140 words in their notebooks.
Some options might be, just in case: eucalyptus, ginger, echinacea, garlic, chamomile, valerian root, coconut
You can use the **Writing Templates** on page v in the TG to help you teach and review this.
You can use the **Writing Rubrics** on page vi in the TG to help you grade this.

b. Have the students present their plant and their findings.
You can assess the students using the **Speaking Rubrics** on page x in the TG.

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## 8 – Green Open Spaces

1. Let's Talk!
a. Have the students write as many associations as they can for the colors red, blue, yellow, black, in their notebooks.
b. Have the students share their associations with the class and discuss what comes up.

2. a. Have the students match Column A to Column B.
Answers:

1. c
2. e
3. a
4. g
5. b
6. d
7. h
8. f

2.b. Have the students complete the sentences using the words in Exercise 2.a.
Answers:

1. violence
2. multiple
3. social ties
4. conflicting
5. physical
6. categorize
7. ecological
8. increased

3. Have the students give examples of something or someone that they can relate to based on the descriptions. Encourage them to share.

4. Read the text with the students. Discuss what type of text this is and what we can expect to find in it. Ask them to look at the title and think about what they might learn.

It's recommended that you read and discuss the context so that the text is understood by all the students. See example in TG, page iii, **Working with a Text**.
Ask questions while reading to ensure comprehension.

*based on: http://aocarastirmalari.arch.metu.edu.tr/files/2014/07/AOC_ARCH714MohammadShahri_2.pdf

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5. Have the students answer the questions according to the article in Exercise 4, in their notebooks.
Answers:

a. The answer should show that they understood that the writer is asking them to notice the green around them, what's green and to focus on the fact that there are green spaces where they live.
b. They provide a wide range of social settings and have ecological, social and health benefits.

c. 2
d. It is discussed as an example of a social benefit.
e. They attract residents and businesses as long as the cities keep air quality high and clean water and open spaces. / They add to energy savings in terms of air conditioning cost and pollution.
f. 3
g. 2, 4

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## 9 – Protecting Nature

1. Let's Talk! Have the students review the unit by writing one interesting fact that they remember from the unit in their notebooks.
Give them a few minutes to work and then encourage them to share their ideas.
Accept any logical and directly connected point they present.

**Option**: Have the students work in small groups. Each group has to come up with a few facts, say 3, for each topic. Then they share and compare if the groups chose similar things.

2. a. Let's Talk! Have the students read the short passage about the story about Rav Arye. Then have them discuss the importance of nature in Judaism. Encourage them to express their ideas.

2. b. Have them write, in their notebooks, the definitions of the two words as explained in the passage.
Answers:

- pluck – pull from the gound
- trembled – shook

3. Have the students complete the sentences about green living in their notebooks. They should answer what is true for them, as much as possible.

4. Let's Write! Have the students write a letter to the Israel Nature and Parks Authority, suggesting an idea for a good way to protect nature.
Encourage them to use vocabulary from this unit. You might want to review a few words that might be useful, depending on your class.
They should include the idea, the explanation and examples.
They should write between 120-140 words in their notebooks.
You can use the **Writing Templates** on page v in the TG to help you teach and review this. You can use the **Writing Rubrics** on page vi in the TG to help you grade this.

5. Have the students share their ideas with the class. Which idea was the best? Why?