

UNIT B: LESSON 1

LEARNING TARGETS

INSTRUCTIONS FOR TEACHERS:

- Refer students to the standards and objectives.
- Review the standards and objectives with students one at a time.
- At the end of the lesson, ask students what they did in class to meet the standards.

INSTRUCTIONS FOR STUDENTS:

Listen as your teacher reviews the standards and objectives. Your teacher will call on an individual or pair to explain what they mean.

Learning Target:

I can **analyze** the **main** ideas and **supporting details** **presented** in in a video clip.

Learning Target:

I can **analyze** the basic **structure** of a **complex** sentence.

analyze – study

something and explain it

main – central or most important

supporting details – helping ideas

present – show

structure – the way parts of something are joined together

complex – something that has many different parts

ACQUIRING AND USING VOCABULARY

INSTRUCTIONS FOR TEACHERS:

- Review student instructions.
- Familiarize students with their glossary. It is located in Appendix A (Glossary; labeled “Appendix: Glossary” in the student version). Tell students to use the glossary throughout the lesson.
- Pre-teach the vocabulary selected for extended instruction, provided as word cards in Appendix B (Teacher Resources). This vocabulary is abstract and critical to understanding the text.

INSTRUCTIONS FOR STUDENTS:

Your teacher will pre-teach several key words. Use your glossary for the rest of the lesson to find meanings for words you don't know. Words that are **bolded** in the text and word banks can be found in the glossary. The glossary is located in the Appendix at the end of the lesson.

THINKING LOG

INSTRUCTIONS FOR TEACHERS:

- Read the guiding question and text aloud to students, modeling appropriate pace and intonation.
- During the read-aloud, define words and phrases in context that students are unlikely to know, drawing definitions from the glossary when you can. Translations, examples, gestures, and visuals also help.
- Ask students to read the text on their own and work with a partner to answer supplementary questions.
- Ask students to use their glossary to help them with word meanings.
- Call on pairs to answer the supplementary questions.
- Discuss the guiding question(s) as a group and then have students write the answer in their student chart.

INSTRUCTIONS FOR STUDENTS:

Your teacher will ask you a guiding question that you will think about as your teacher reads the text aloud to you. As your teacher reads the text aloud, listen and follow along in your text. After the text has been read aloud, work with a partner to reread the text and answer the supplementary questions. Use your glossary to help you. Your teacher will review the answers with the class. You will then discuss the guiding question(s) with your teacher and the class. Finally, you will complete a written response to the guiding question(s).

GUIDING QUESTION: *Why is it important to understand how valuable the resource of water is for all of us living on Earth?*

Why Care about Water?

[http://video.nationalgeographic.com/video/environment/freshwater/env-freshwater-whycare/.](http://video.nationalgeographic.com/video/environment/freshwater/env-freshwater-whycare/)

Water is the **basis** of life and only a tiny **share** of all the water on Earth is **fresh** and **renewed** by the water **cycle**. If you took all the water in the world and put it into a gallon jug, less than one teaspoon of it would be **available** to us.

We're **overusing** it. We're **overtapping** rivers and we're **overpumping** groundwater. We live at a time in history where over a **billion** people don't have **access** to safe drinking water and over three **billion** people have no **access** to **sanitation**.

Water is a **global issue** but it's also a very local **issue**. We forget that we live on a **hydrosphere** and that all of our water **resources** are **connected**. Water that runs in the

Ganges could also end up in the Hudson or could fall over the plains of Africa or could make a cup of tea in the Queen's palace.

To support the average American lifestyle today takes about twice the **global average**.

The great American lawn is a great example of one of the **myriad** of ways that we take water **for granted**. We can't continue to flaunt our water.

Agriculture is something that we really need to give thought to.

Seventy **percent** of all the water we **extract** from rivers, lakes, and aquifers goes to irrigated **agriculture**. To some extent we're using some of tomorrow's water to meet today's food **demands**.

When a large number of people I talked to learned that the Colorado River, the mighty force of nature, no longer reaches the sea, there's a look of shock in most people's faces. The Delta **literally** runs dry.

We are using and **abusing** our water **resources** in ways that are completely **unsustainable**, and unless we think about it that way and we start taking action at an **individual** level, then I don't really see how we'll be able to **overcome** so many of the **issues** that we're going to be faced with in the next 50 years. This is our time in history to do something about it.

WORD BANK:

action	fresh	important	seventy
Africa	full gallon	lawn	tea
agriculture	Ganges	local	teaspoon
clean	global	myriad	tiny
crops	for granted	renewed	too much
drinking	green	resources	unsustainable
Earth	ground	rivers	water
extract	Hudson	sanitation	

SUPPLEMENTARY QUESTIONS:

1. According to the video text, what is the basis of life?

The basis of life is water.

2. *The water cycle is when water evaporates, or turns into steam, becomes clouds, and then rains or snows back to earth. How much water on Earth is fresh and is renewed, or comes back to us by the water cycle?*

There is only a tiny amount of water on Earth that is fresh and renewed by the water cycle.

3. *What example does the author use to describe how much water on Earth is available to us?*

The author uses the example of a full gallon jug. Only one teaspoon of the jug would be water that is available to us.

4. *What does it mean to overuse, overtap and overpump?*

The prefix over- means too much. We are using too much water. We are tapping, or taking, too much water from rivers. We are pumping too much water from under the ground.

5. *At this time in history, what is it that a billion people do not have?*

At this time in history, a billion people do not have access to clean water for drinking.

6. *At this time in history, what do three billion people not have?*

At this time in history, three billion people do not have access to sanitation.

7. *What is another way of saying that water is an issue, or problem, around the world and an issue where we live?*

Water is a global issue but it's also a local issue.

8. *The next sentence says, "We forget that we live on a hydrosphere and all of our water resources are connected." What does this mean?*

It means that we forget that Earth is a hydrosphere, where water in one place can end up in another place.

9. *What example is given for the way water is connected all over the earth?*

The same water that was in the Ganges River could over time be in the Hudson River or could fall as rain in Africa or be used to make tea for the Queen of England.

10. *The text says, "To support the average American lifestyle today takes about twice the global average." Does this mean that most Americans use more or less water than most people around the globe (the earth)?*

It means that most Americans use more (more/less) than most people around the globe.

11. *What is an example of the many ways Americans use a lot of water and take water for granted?*

The great American lawn is a one example of the myriad (many) ways that we take water for granted.

12. *Why is the great American lawn a symbol for not appreciating the value of water?*

The great American lawn (a large area of green, green grass) uses a lot of water to stay green. If Americans value, or care about, water, why would they use it for this purpose?

13. *What do we need to give thought to (think about)?*

We need to give thought to agriculture.

14. *Why do we need to give thought to agriculture?*

We need to give thought to agriculture because seventy percent of water we extract (take) from rivers, lakes, and aquifers is used for irrigating crops (plants grown for food).

15. *Is 70% a lot of water or just a little bit of water?*

Seventy percent is a lot (a lot/a little bit) of water.

16. *Why do you think the Colorado River becomes dry before it reaches the sea?*

The Colorado River runs dry because so much of the water in the river is used for agriculture.

17. *How will we be able to overcome the water issues we will face within the next 50 years?*

We need to understand how our use of water is unsustainable, and we need to take action as individuals.

18. *What is the author's intent in ending the video text with, "This is our time in history to do something about it?"*

The author wants the listener to understand how important it is that we do something now to save our very valuable water resources.

RESPONSE TO GUIDING QUESTION(S):

Why is it important to understand how valuable the resource of water is for all of us living on Earth?

Suggested Response: Water is the basis of life on Earth. People, especially Americans, are not using water in a sustainable way. We need to value our water resources and take action as individuals to change the myriad ways we use water.

WATER NOTE-CATCHER

INSTRUCTIONS FOR TEACHERS: <ul style="list-style-type: none"> Review student instructions. 	
INSTRUCTIONS FOR STUDENTS: Work with a partner. Use your water note-catcher to write down key, or important, information from the text. You will write down main ideas and some details, or specific information, about each main idea. You can use information from your Thinking Log. Some information is already filled in for you.	
WORD BANK: access, agriculture, Americans, available, billions, change, connected, dry, global, lawns, life, little, overusing, much, resources, water	
Brief background: Water is the basis of <u>life</u> . But there is really very <u>little</u> water <u>available</u> for us to use.	
Main idea: Water is a <u>global</u> issue or problem.	Supporting details: All of our water <u>resources</u> are <u>connected</u> . <u>Billions</u> of people do not have adequate, or enough, <u>access</u> to water.
Main idea: <u>Americans</u> are <u>overusing</u> our water. Americans use too much water.	Supporting details: <u>Americans</u> use more water than the <u>global</u> average. We use water for <u>lawns</u> . We use water for <u>agriculture</u> . We use so much water that the Colorado River is <u>dry</u> .
Conclusion: Americans use too <u>much</u> water. We need to <u>change</u> the way we use <u>water</u> .	

FUNCTIONAL ANALYSIS

INSTRUCTIONS FOR TEACHERS:

- Review student instructions for functional analysis with the whole class.
- Complete the functional analysis with the whole class.
- Have students work with a partner to rewrite the sentence in their own words.

INSTRUCTIONS FOR STUDENTS:

Work with your class to analyze an important sentence(s) from the text.

- Every sentence has someone or something that *does* something. First you determine this *who* or *what*.
- Every sentence has something that they *do* or *did*. Figure that part out next. Now you have the most important parts of the sentence in place.
- Then you will figure out what they did the action *to* or *for*.
- Finally, you will write the descriptive details.
- Write your answers in the spaces below.
- When you are done, write the sentence again in your own words.

You may want to use definitions from the glossed text in the sections above.

Functional Analysis:

We forget that we live on a hydrosphere and that all of our water resources are connected.

WHO (Actor): We

WHAT HAPPENS (Action): forget

WHAT: that we live

WHERE (Detail): on a hydrosphere

CONNECTOR: and that

WHO (Actor): all of our water resources

WHAT HAPPENS (Action): are connected

What the sentence says:

My own words:

we

all of us

forget

forget

that we live on a hydrosphere

that we _____

and that

and we forget that

that all of our water resources

all _____

are connected

are _____

Write the sentence in your own words and then explain it to your partner.

We forget that _____.

And we forget that _____.

EXIT TICKET

INSTRUCTIONS FOR TEACHERS:

- Review student instructions with the whole class.

INSTRUCTIONS FOR STUDENTS:

This graphic organizer will help you keep track of information about water for all of the readings. Each day you will write down new information from each reading.

- First, write information about why water sustainability is important. Think of at least three reasons.
- Next, write what else you want to learn about water sustainability.

Water sustainability means using water without using it up. Why is water sustainability important?

Water is the basis of _____.
Many people in the world do not have enough water to _____.

What else do I want to learn about water sustainability?

Appendix A: Glossary

Word	Definition	Example
abuse (abusing)	misuse; use in a bad or incorrect way	We are using and abusing our water resources.
<i>access</i>	the right or ability to use something	Over a billion people do not have access to safe drinking water.
agriculture*	the science or activity of farming; agriculture includes raising crops and animals for food	Seventy percent of all the water we extract from rivers, lakes, and aquifers goes to irrigated agriculture .
available	possible to get something	If you took all the water in the world and put it into a gallon jug, less than one teaspoon of it would be available to us.
average	a) usual or normal b) the mathematical mean (obtained, or gotten by adding several numbers and dividing the sum of the numbers by the quantity of numbers)	a) To support the average American lifestyle today b) takes about twice the global average daily water usage.
basis	foundation; main component, or part	Water is the basis of life.
billion	1,000,000,000	We live at a time in history where over a billion people don't have access to safe drinking water and over three billion people have no access to sanitation.
connected	joined together	We forget that we live on a hydrosphere and that all of our water resources are connected .

Word	Definition	Example
<i>cycle</i>	a circle of events that starts from the beginning again and again	Water is the basis of life and only a tiny share of all the water on Earth is fresh and renewed by the water cycle .
demand	requirement or need	We're using some of tomorrow's water to meet today's food demands .
<i>extract</i>	remove	Seventy percent of all the water we extract from rivers, lakes, and aquifers goes to irrigated agriculture.
<i>for granted</i>	assume, or think, that something will always be there without any effort or work	The great American lawn is a great example of one of the myriad of ways that we take water for granted .
fresh	not salty	Water is the basis of life and only a tiny share of all the water on Earth is fresh .
global	worldwide	Water is a global issue but it's also a very local issue.
hydrosphere*	all the waters on the earth's surface, such as lakes and seas, and sometimes including water over the earth's surface, such as clouds	We forget that we live on a hydrosphere and that all of our water resources are connected.
<i>individual</i>	a single human being; person	We need to start taking action at an individual level to overcome the issues that we're going to be faced with in the next 50 years.
<i>issue</i>	an important topic or problem	Water is a global issue but it's also a very local issue .
literal (literally)	true to fact	The Delta literally runs dry.
myriad*	many	The great American lawn is a great example of one of the myriad of ways that we take water for granted.

Word	Definition	Example
overcome	win against; defeat	We need to start taking action at an individual level to overcome the issues that we're going to be faced with in the next 50 years.
overusing	using too much	We're overusing it.
<i>percent</i>	one part of each hundred, sometimes written %	Seventy percent of all the water we extract from rivers, lakes, and aquifers goes to irrigated agriculture.
pump	to move water using a pump (a special machine)	We're over-tapping rivers and we're over- pumping groundwater.
renew	restore or return to an original condition	Water is the basis of life and only a tiny share of all the water on Earth is fresh and renewed by the water cycle.
<i>resource</i>	a useful thing that grows or exists in the world	We forget that we live on a hydrosphere and that all of our water resources are connected.
sanitation	keeping healthy through clean living conditions; Sanitation includes removing trash and keeping drinking water clean	Over three billion people have no access to sanitation .
share	portion or part	Only a tiny share of all the water on Earth is fresh.
<i>sustainable</i> (<i>unsustainable</i>)	using a resource without using it all up (<i>unsustainable is the opposite; it means to use a resource in such a way that you will use it up</i>)	We are using and abusing our water resources in ways that are completely unsustainable .
tap	draw, or pull, water out of something	We're overtapping rivers and we're overpumping groundwater.

**Vocabulary from the Expeditionary Learning lessons.
Italicized words are from the Academic Word List.*

Appendix B: Teacher Resources

for granted



- Look at the first picture. This girl knows that she can have water every time she turns on a faucet. She can take water for granted; she does not have to worry about water.
- Now look at the second picture. These girls have to carry water from far away. They have to carry all of the water for their family every day. They do not take water for granted. They have to work hard for water.
- To take something for granted is to assume, or think, that it will always be there without any effort or work.
- Partner talk: Can you think of something you take for granted?

resource



- Look at the pictures. These are all pictures of natural resources.
- A resource is something good or helpful that we are able to use. Natural resources are useful things that grow or exist in the world.
- Partner talk: Look at each of the pictures. What do we use these resources for? What will happen if we use them all up? Are there replacements if these things disappear? What might they be?

sustainable/unsustainable



- Look at the first picture. These are wind turbines. They create energy from wind. Wind can never be used up. Wind energy is a type of sustainable energy.
- The second picture shows oil drills. We also get energy from oil. But we might use up all of the oil. Oil energy is a type of unsustainable energy.
- Sustainable means that we use something we need without using it up. Unsustainable means that we use something we need until we use it all up.
- Partner talk: Decide if these behaviors are sustainable or unsustainable. Explain, or say why.
 - Saving water from the bath to water plants.
 - Running your car engine while waiting for a friend.
 - Watering your lawn during a dry summer.
 - Recycling glass and plastic containers.