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# Los impactos de los seres vivos en el medioambiente (The Impact of Human Beings in the Environment) [2nd grade]

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# UNDERSTANDING BY DESIGN

## Unit Cover Page

**Unit Title:** Los impactos de los seres vivos en el medioambiente (The Impact of Human Beings in the Environment)

**Grade Level:** 2<sup>nd</sup>

**Subject/Topic Area(s):** Social Studies

**Designed By:** Graceanne Brim

**Time Frame:** 12 days

**School District:** Alamo Heights Independent School District

**School:** Woodridge Elementary

**School Address and Phone:**

100 Woodridge Dr.  
San Antonio, TX 78209  
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**Brief Summary of Unit** (Including curricular context and unit goals):

This unit is designed for a bilingual classroom, with instruction in Spanish, but much of the information is also translated into English. In this unit, students will learn about the positive and negative impacts humans have on their environments. The goal of this unit is to help students understand the importance of making positive changes to help our natural environments grow. Through class discussion, hands on experimentation, reading, and researching, the students will be able to develop an understanding of negative changes happening in our world. At the end of the unit, students will be expected to develop a short presentation that touches on one specific man-made disaster and how it affects one specific community.

## Stage 1 – Desired Results

<p>Social Studies 2.8 The student understands how humans use and modify the physical environment. 2.8A The student is expected to identify the ways in which people have modified the physical environment such as building roads, clearing land for urban development and agricultural use, and drilling for oil; 2.8B The student is expected to identify positive and negative consequences of human modification of the physical environment such as the use of irrigation to improve yields; and 2.8C The student is expected to identify ways people can conserve and replenish natural resources</p> <p>ELAR 2.26 Students clarify research questions and synthesize collected information. Students are expected to review the topic as a result of answers to initial questions. 2.27 Students organize and present their ideas and information according to the purpose or the</p>	<b>Transfer</b>	
	<p><i>Students will independently use their learning to...</i>                  Demonstrate how they would be personally affected if they lived in an environment where negative environmental impacts were taking place and develop a solution for how they can help improve the negative consequence taking place.</p>	
	<b>Meaning</b>	
	<p><b>Understandings</b>  <i>Students will understand that...</i></p> <ol style="list-style-type: none"> <li>1. As humans we need clean air, water and clean land in order to live healthily.</li> <li>2. The way that we use our natural resources impacts others and our surrounding environment.</li> <li>3. As human beings they have a duty to impact our surroundings in a positive way.</li> </ol>	<p><b>Essential Questions</b></p> <ol style="list-style-type: none"> <li>1. How do we impact our natural environment through the ways we live?</li> <li>2. What are positive and negative consequences to changes made in our physical environment?</li> <li>3. Why is it important that we know what changes occur in our physical environment?</li> <li>4. How can we make a positive impact on our physical environment?</li> </ol>
<b>Acquisition</b>		
<p><b>Knowledge</b>  <i>Students will know...</i></p> <ol style="list-style-type: none"> <li>1. Define the following terms:                         <ul style="list-style-type: none"> <li><b>medio ambiente:</b> una sistema formado por elementos naturales y artificiales</li> <li><b>Contaminación:</b> el proceso a crear un medioambiente tan sucia y peligroso</li> <li>consecuencias positivas: un resultado buen</li> <li>consecuencias negativas: un resultado malo</li> <li>recursos naturales: materiales industrial que han sido creado</li> </ul> </li> </ol>	<p><b>Skills</b>  <i>Students will be able to...</i></p> <ol style="list-style-type: none"> <li>1. How to research personal and provided questions World Book Kids, PebbleGo and library books.</li> <li>2. Describe how they can affect their physical environment.</li> <li>3. Describe physical changes that have been made to their own environments.</li> <li>4. Identify ways that they can personally conserve resources to positively impact their physical environment.</li> <li>5. Identify that man-made changes are: polución, tirar basura,</li> </ol>	

<p>research and their audience. Students (with adult assistance) are expected to create a visual display or dramatization to convey results of the research.</p>	<p>de la naturaleza</p> <p>hecho de humano: construido o creado de los seres humanos</p> <p>conservar: cuidar o guardar las cosas de la naturaleza</p> <p>reciclar: crear cosas nuevas de cosas que ya han usados</p> <p>reusar: usar cosas veces múltiples</p> <p>reducir: usar recursos naturales le menos que puedes</p>	<p>deforestación, extinción de animales, la sobrepesca.</p>
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**Stage 2 – Evidence**

<b>CODE</b> (M or T)	<b>Evaluative Criteria</b> (for rubric)	
		<p>Performance Task(s)  <i>Students will demonstrate meaning-making and transfer by...</i>            Developing a presentation (in the format of their choice) that shows how a specific negative environmental consequence would impact them personally. Eg. If you lived on a farm that uses a river to grow your crops and the river becomes polluted from a factory built upstream how would you be personally impacted? How would your environment be impacted? What could you do to change the problem?  <u>Differentiation:</u>  <u>Level 1:</u> Give child ability to choose the man-made change and scenario.  <u>Level 2:</u> Give child ability to choose the man-made change and teacher chooses scenario.  <u>Level 3:</u> Teacher chooses man-made change and scenario for student.</p> <hr style="border-top: 1px dashed black;"/> <p>Other Evidence (e.g., formative)</p> <ul style="list-style-type: none"> <li>• Ticket out the door (Day 3)</li> <li>• Check-ins on project timeline</li> <li>• Home Connection homework page</li> <li>• Partner work (Day 4)</li> <li>• Pair and share forum</li> <li>• Project Self-evaluation (post presentations)</li> </ul>

**Stage 3 – Learning Plan**

Pre-Assessment		
<b>CODE</b> (A, M, T)	<p style="text-align: center;"><i>How will you check students' prior knowledge, skill levels, and potential misconceptions?</i></p> <p style="text-align: center;">Students will complete a formal pre-assessment (see page #) and will answer questions about the key vocabulary and that address the essential questions of the unit. This will help to determine what type of environment they will complete their project on as well as what types of environmental changes they will research.</p>	
A	<p><b>Learning Activities</b> <b>Day 1:</b> (20 min.) Give pre-assessment. This should happen at least one week before beginning the unit in order to understand what students already know and to determine how to then guide students towards their performance task.</p>	<b>Daily Independent Activity:</b>
M	<p><b>Day 2:</b> (40 min.) Start the day by asking the question: What are the necessities of a human being? (¿Qué son las necesidades de un ser humano?) Write that question on the board and begin creating a word web of ideas the students have. Once the students have exhausted their ideas begin reading "Yo soy un ser vivo". While reading, ask students why they think human beings need certain things. After the book work as a class to develop a graphic organizer, for the students to keep handy during the remainder of the unit, to answer the initial question of the day ¿Qué son las necesidades de un ser humano?)</p>	Graphic Organizer
A	<p><b>Day 3:</b> (40 min.) <b>Prep:</b> Set up materials for "Who Polluted the River?" interactive story. Start the day by introducing the first essential question: How do we impact our natural environment through the ways we live? (¿Como podemos impactar nuestro medioambiente por la manera que vivimos?). Read the interactive story "Who Polluted the River?" While students are adding different items to the "river" ask probing questions to help determine negative consequences that are occurring because of the different activities people are choosing to partake in. (How is the river changing when the humans participate in different activities?, Which activity affects the river most?, Is there an activity that you participate in that might negatively impact the river? (¿Cómo es el rio cambiando cuando los humanos participar in actividades diferentes?, ¿Cuál actividad afecta el rio mas?, ¿Hay una actividad que te participas que puede afectar el rio en una forma negativa?). After completing the "Who Polluted the River?" activity ask students to brainstorm as a class all of the ways we impact the environment on a daily basis.</p>	Students complete a ticket out the door writing about one way humans impact their natural environment.

A	<p><b>Day 4:</b> (20 min. lesson, 15 min. partner work, 5 min. share)  Begin the day by connecting back to the activity that the students participated in yesterday and bring up the word pollution (contaminación). Talk about how in the activity a few people mentioned that word, but in order to really understand the importance of that word we need to have a good working definition of what it means. <i>Develop a class definition of pollution.</i> Tell the students that today you are going to read a book about things that can happen when we don't think seriously about the way we are polluting the environment. Read "The Lorax" as a class. Afterwards have the students work individual or in pairs to come up with three ways that the "Once-ler" made a choice to impact the environment negatively. Spend the last 5 minute of class allowing students time to share their responses.</p>	Students will complete a journal entry about the "Once-ler".
A, T	<p><b>Day 5:</b> (40 min.)  Introduce the performance task and the questions that they will be answering. As a class to work through one man-made problem scenario. First introduce the problem: over fishing. Ask students: How can taking too many of one fish out of the ocean cause a negative environmental effect? (¿Como puede pescando mucho para solamente un pez crea un efecto negativo en el medioambiente?). Once students have a good hypothesis of why this might be a problem show them how to navigate finding this YouTube video "Ecosistemas marinos y pesca en el norte peruano". As the video is playing stop and show students how you might take notes to help you remember the information from the video (this is meant to serve as a time for the students to see how to develop their own research). Afterwards show the students how you have already done some researching on your own to look for more information about overfishing ("El rey del plata" article). Show them how to find the Spanish National Geographic website (where you got the article) and they show them that you've already read the article and have highlighted important information that you think answers some of the research questions. Remind them that you are answering the questions as if you are a person that lives on a beach so you have to use your imagination. Fill in a copy of the research question paper as an example and have students give input for things they think should be included. Tell students that tomorrow they will get to choose their own man-made problem to research and present about.</p>	
	<p><b>Day 6:</b> (20 min. lesson, 20 min. independent work)  Write the following words on the board: pollution, littering,</p>	Work on research questions.

<p>A, M, T</p>	<p>deforestation, animal extinction, and over fishing (polución, tirar basura, deforestación, extinción de animales, la sobrepesca.) Write the definition for overfishing under the word and then tell students that they are going to help create the definitions for the other words through their own research. Tell them that today they get to choose which man-made problem they want to research (have some of the suggested books available for students to look at and a research website for students to browse through, as well as printed out copies of the research questions page). Students will spend the day looking through the different resources to determine what they want to research (You should choose for students that might have difficulty making the decision on their own). Students should start answering questions on the research page as much as possible.</p>	
<p>M, T</p>	<p><b>Day 7: (10 min. mini lesson, 30 min. research)</b> Begin the day with a quick mini lesson about how to research. Tell the students that you've been looking at books that you've been looking at different sources and think you have enough information to start creating your project. Now that you've answered all of the questions you want to know how to decide what you put on your project. Create a web on the board and have students help you determine what you should include in your research. Once students have exhausted their ideas thank them and tell them you will make sure to think about all of those things as you go into creating your poster. Spend the remainder of your time allowing the students to research their man-made change and possible effects it might have, spending your own time moving about the classroom to assist/answer questions.</p>	<p>Work on research questions.</p>
<p>M, T</p>	<p><b>Day 8: (15 min. mini lesson, 25 min. research)</b> Begin the day by showing the students a basic outline of a poster (pre-write your title, the research questions and have a few pictures already printed and cut out but not on the poster). Ask the students: What do you think about this poster so far? What is it missing? (¿Qué piensan de mi cartel? ¿Algo perdido?). Show them the pictures that you have cut out and ask them if they would help add to the poster. Talk about using bullet points to add information to the poster rather than writing full sentences. Wrap up the mini-lesson by having each student turn and talk to a partner (pair-share) about their research goal for the day and how they are going to start thinking about creating their own presentation. Spend the remainder of your time allowing the students to research their man-made change and possible effects it might have, spending your own time moving about the classroom to assist/answer questions.</p>	<p>Pair and Share; Work on research questions.</p>

**Day 9 (10 min. mini lesson, 30 min. research)**

Begin the day by showing the class your finalized poster. Start by introducing the title and giving information about the first research question. Ask the students if they can then help you present about the following research questions and describe the pictures that you chose to include. Ask students to stop, close their eyes and think about one goal that they have for today. Encourage them to start moving into the presentation development portion of the project. Spend the remainder of your time allowing the students to research their man-made change and possible effects it might have, spending your own time moving about the classroom to assist/answer questions and help students develop their performance pieces.

**Day 10**

This should be the last day of project research and development. Focus on helping students wrap up loose ends and allow students that are finishing or have finished their projects to spend time researching/reading about a mad-made change that they did not study for their project. If time allow 10 minutes to begin presentations at the end of your social studies time.

**Day 11-12**

Spend these two days allowing students to present presentations to class, and wrap up on day twelve by having students fill out the personal evaluation.



**Possible Resources:**

“Who Polluted the River?” link to PDF <http://www.greeneducationfoundation.org/institute/lesson-clearinghouse/138-Who-Polluted-the-River.html> (in English)

“Ecosistemas marinos y pesca en el norte peruano” video: <https://youtu.be/roj1rJpZtgo>

“El rey del plata” article: <http://www.ngenespanol.com/naturaleza/animales/14/07/02/rey-plata>

“Hacia un mundo verde” by David and Patricia Armentrout

“Use las plantas” by Sharon Katz Cooper

“El plástico” by Cassie Mayer

“El camión de papel” by Roberto Aliaga

“Cuida tu planeta” by Lauren Child

“Océanos y ríos contaminados” by Angela Royston

“Desastres ecológicos: los derrames de petróleo y el medioambiente” by Daniel R. Faust

“El lorax” by Dr. Seuss

“Los osos scouts Berenstain y el bague que tose” by Stan Berenstain

“Crisis de basura en la tierra” by Alexander Stadler

## Prueba de Impactos Humanos

Para números 1-3 circula la letra de la respuesta correcta:

1. El medio ambiente:
  - a. Es un tipo de fruta.
  - b. Es una forma de comunicación.
  - c. Es la combinación de la naturaleza junto con cosas artificiales.
  - d. Son todas las cosas del mundo que podemos tocar.
  
2. Los recursos naturales son:
  - a. Cosas de la naturaleza que se pueden usar otras veces.
  - b. Solamente cosas que se pueden comer.
  - c. Solamente cosas que usamos en la clase.
  - d. Cosas que han sido hechos por los estados unidos.
  
3. Conservar es:
  - a. Crear una cosa nueva.
  - b. Tomar una cosa para comer.
  - c. Guardar con cuidado.
  - d. Llamar a una persona sobre algo importante.
  
4. Explica una consecuencia positiva y una consecuencia negativa sobre el impacto de los humanos en el medio ambiente físico.

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5. Describe una manera en que podemos conservar en nuestra comunidad.

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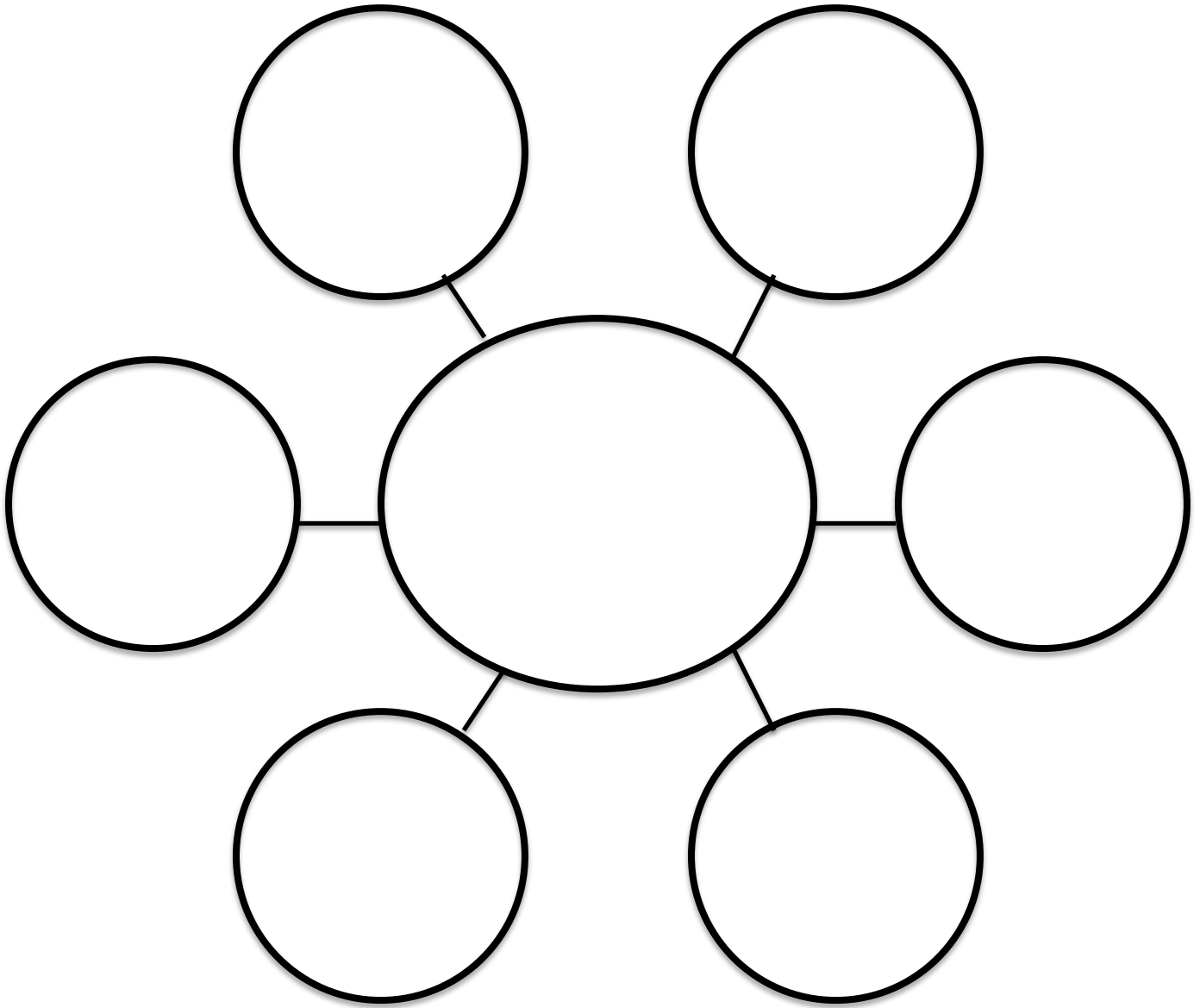
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Nombre: \_\_\_\_\_

Fecha: \_\_\_\_\_

## Las necesidades de un ser humano



## Ticket out the Door

Escribe al menos una oración sobre un impacto de los ser humanos en el medio ambiente.

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Escribe al menos una oración sobre un impacto de los ser humanos en el medio ambiente.

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Escribe al menos una oración sobre un impacto de los ser humanos en el medio ambiente.

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# Preguntas para la investigación

1. Basado en tu tema de investigación, ¿cómo pueden impactar los seres vivos el medio ambiente?

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2. Basado en tu tema de investigación, ¿cuáles son algunas consecuencias positivas y negativas en el medio ambiente?

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3. ¿Por qué es importante crear cambios positivos en nuestro medio ambiente físico?

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4. ¿Cómo puedes impactar el medio ambiente de una manera positiva y personal? Enfócate en el cambio que has investigado.

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# Home Connection

**Parent Note:** Parents over the last few weeks the students have been learning about natural resources and their importance. Over the past few days the students have started to understand the ways humans can impact our environment negatively when they don't take care of those natural resources. Please take this into account answering the following questions with your students.

Ask your parents what is one way that people have impacted the environment negatively? How have they been personally impacted by that negative change in the environment?

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# Teacher Project Grading Rubric

	Exceeding	Meeting	Approaching	Not Quite
Presentation	I developed a presentation that is easy to understand, fun to look at and brings new knowledge to the classroom.	I developed a presentation that is easy to understand and fun to look at.	I developed a presentation that is slightly hard to follow, or I don't understand some of my information.	I did not develop a presentation, or cannot explain any of my information to the class.
Identifies man made changes	N/A	I answered all of the questions correctly about the man-made problem that I researched.	I answered some of the questions about the man-made problem that I researched but was unclear about others.	I was unable to answer the questions about the man-made resource that I researched, or was unclear in all of my explanations.
Makes personal connection and suggestions	I was able to identify how the man-made problem would personally affect me and could give multiple suggestions for future conservation.	I was able to identify how the man-made problem would personally affect me and could give at one suggestion for future conservation.	I was able to identify how the man-made problem would personally affect me but could not make a suggestion for future conservation.	I was unable to identify how the man-made problem would personally affect me and could not make a suggestion for future conservation.
Preparation	I used my time wisely and was able to pace myself to meet all of the deadlines on the timeline.	I used my time wisely and followed my project timeline. I needed only a few reminders to pace myself	I met some of the dates on my timeline but was unable to meet some of the other deadlines.	I was unable to meet the deadlines on my timeline and was not prepared in time.



## Evaluación personal

	Súper	Bueno	Muy Cerca	Necesita más trabajo
<b>Presentación:</b> Hice mi mejor trabajo.				
<b>Identificación de los cambios:</b> Yo tengo un buen entendimiento del impacto de los cambios hechos por humanos.				
<b>Conexiones personales:</b> He identificado conexiones entre los cambios y cómo puedo impactar el medio ambiente de una manera positiva.				
<b>Investigación</b> He usado todo mi tiempo para trabajar y planear mi presentación.				

Mi parte favorita de este proyecto fue: \_\_\_\_\_

\_\_\_\_\_

Yo podría haber trabajado más en: \_\_\_\_\_

\_\_\_\_\_