Climate and Clothing

SAISD Social Studies Department
406 Barrera Street • San Antonio, Texas • 78210

Reproduction rights granted only if copyright information remains intact.
Lesson Plan

Lesson Description:

In this 4-5 day lesson students will investigate how climate affects what we wear and how different cultures use different materials to adapt to their environment. Students will have opportunities to learn about adaptation, climate, and culture during various investigations.

TEKS Connections (Social Studies)

- (17a) Culture. identify and describe how culture traits such as trade, travel, and war spread
- (17a) Culture. identify and define the impact of cultural diffusion on individuals and world societies
- (21a) Social studies skills. differentiate between, locate, and use valid primary and secondary sources such as computer software; interviews; biographies; oral, print, and visual material; and artifacts to acquire information about various world cultures
- (21b) Social studies skills. analyze information by sequencing, categorizing, identifying cause-and-effect relationships, comparing, contrasting, finding the main idea, summarizing, making generalizations and predictions, and drawing inferences and conclusions
- (21c) Social studies skills. organize and interpret information from outlines, reports, databases, and visuals, including graphs, charts, timelines, and maps
- (22a) Social studies skills. use social studies terminology correctly
- (22b) Social studies skills. incorporate main and supporting ideas in verbal and written communication based on research
- (22c) Social studies skills. express ideas orally based on research and experiences
- (22d) Social studies skills. create written and visual material such as journal entries, reports, graphic organizers, outlines, and bibliographies based on research
- (22e) Social studies skills. use standard grammar, spelling, sentence structure, and punctuation

Reading Process Standards:

- Fig. 19 (E) summarize, paraphrase, and synthesize text in ways that maintain meaning and logical order within a text and across text

Objective:

Given information on the influence of climate on what people wear, the student will be able to evaluate the influence on global climate on how people dress in different cultures.

Given information on the influence of climate on what people wear, the student will be able to create a global catalogue to help people plan what they are going to wear when visiting different places around the world.

Materials:

- What Would You Wear? Placards (Set of 6)
- Word Wall Poster
- Dino-Sort-Us Cards (16)
- Dino-Sort-Us QCE Graphic Organizer
- Adaptation GO
- What Is… Placards (Set of 3)
- TOWZE Handout
- TOWZE Folder Game
- TOWZE GO
- Weather/Climate GO
- Clothing Materials/Textiles Chart
- Comparing/Contrasting Textiles GO
- Understanding Climographs Placard
- Practicing Climographs Handouts
- What Do You Think? placards (20)
- What Do You Think? Graphic Organizer
- Markers / Colors / Map Pencils
- San Antonio Is Like… GO
- Los Angeles Climogaph Practice
- Blue painter’s tape
Lesson Plan

Lesson Plan Day 1: 45 Minutes

- **Plan:**
  - Run off the word wall poster and post in your classroom.
  - Run off 20 sets of the Dino-Sort-Us, cut out the pieces, and place each set in a separate ziplock baggie.
  - Run off 1 Dino-Sort-Us QCE GO per student.
  - Run off 2-3 Sets of the What Would You Wear Placards
  - Run off 1 Adaptation GO per student.
  - Organize your room so students are placed into teams of three as they enter the classroom.

- **Hook (Dino-Sort-Us)**
  - As students enter class, divide them into triads.
  - When the bell rings, explain to students that you are going to have them examine 16 different types of dinosaurs in order to compare and contrast how the are the same and how they are different.
  - Distribute one set of the Dino-Sort-Us cards to each team.
  - Explain to students that once you tell them to begin, they are to sort out and group the dinosaurs based on their common features.
  - Explain to students that once their team is done, they are to signal (such as a “Thumbs Up) that they are ready to teach you (the teacher) about their sorting process. (Why did they group the dinosaurs together they way they did)
  - Have students begin their sorting.
    - Teachers Note - The front of each card has a picture of a dinosaur with the name and how to pronounce the name on the back.
    - Teachers Note - The point of this exercise is to help students sort objects by commonalities and then explain how things are the same and how they are different.
  - Once teams raise their signal, go over and have teams explain their sorting strategies. (You can use sentence stems such as: “We grouped them together based on...” and “The things that all the dinosaurs in the group have in common are...”
  - Once all teams have reported out, explain to students that dinosaurs can be classified by what they ate.
  - Provide the example, “Meat eaters are known as Carnivores, plant eaters are known as Herbivores and those who eat both are known as Omnivores.”
  - Have students examine their dinosaur groupings and ask students to explain what dinosaurs that eat plants might look like and what those who ate meat looked like.
  - Have students predict resort their dinosaurs by either being meat eaters (Carnivores) or plant eaters (Herbivores).
  - Once sufficient time has passed, have students report out how and why they sorted the dinosaurs the way that they did.
  - Once teams have the opportunity to report out, explain to students that the Carnivores are facing towards the left and the herbivores are facing to the right.
  - Have teams reshuffle their cards if needed.
  - Have teams discuss the common characteristics of the carnivores and herbivores.
  - Explain to students that both carnivores and herbivores adapted over time either for protection or for hunting.
  - Explain to students that in science, adaptation means a slow change over time in order to survive in an environment.
  - Have teams give a characteristic for each side that might be considered an adaptation.
  - Distribute one copy of the Dino-Sort-Us QCE to each student.
  - Review the Guiding Question with students and explain that based on their Dino-Sort, they are to make a claim to answer the guiding question in the right-hand column.
  - Allocate sufficient time for students to discuss their claim and then write their claim in the appropriate box.
  - Once time has expired, explain to students that in the bottom box, they are to write the evidence to support their claim. Provide the sentence stem, “Dinosaurs who were (herbivores/carnivores) adapted to their environment by...”
  - Allocate sufficient time for students to complete their QCE graphic organizers.
  - Once time has expired, explain to students that humans adapt as well including what we wear to protect ourselves from our surrounding environment.
  - Explain to students that they are about to launch an investigation into different climates and what people wear from around the world.
Lesson Plan

Lesson Plan Day 1: 45 Minutes
• **Guided Practice (Investigation)** Students will investigate how animals adapt over time and how humans can quickly adapt to their environment through the use of protective clothing.
  - Keep students in their triads.
  - Distribute one of the six “What Would You Wear?” placards (A-E) to each team. (You will have groups that have the same letter)
  - Explain to students that they are looking at a place in the world that has a certain climate and it is their job to determine what people who live there would wear based on the picture.
  - Using the “Ex” (Example) placard, have students look at the picture of the island.
  - Have students give one detail from the picture of what they see.
  - Have students predict what people who live there wear based on the evidence they see.
  - Explain to students that they are going to repeat the same process with the picture that their group has to examine.
  - Allocate 2 minutes for students to examine their picture and then determine what they would need to wear in order to survive there.
  - Once time has expired, give teams the following sentence stems that they will use to report out with:
    - Based on our photograph, we think that the weather here is like...
    - Our evidence for our claim is based on...
    - We think that people who live here wear...
    - We think that they wear ________ because...
  - Allocate five minutes for students to complete their sentence stems.
  - Once time has expired, have teams report out.

• **Independent Practice (Contemplation/Evaluation)**
  - Once all teams have reported out, distribute one copy of the Adaptation GO to each student.
  - Explain to students that they are to individually complete the graphic organizer:
    - Explain their definition of “adaptation” connect the previous activities to their definition.
    - Apply the concept of adaptation to dinosaurs.
    - Apply the concept of adaptation to people.
Lesson Plan

Lesson Plan Day 2: 45 Minutes

- Plan:
  - Open a browser window to [http://tinyurl.com/lhbvxxc](http://tinyurl.com/lhbvxxc) to preload the video.
  - Make sure that your computer is connected to speakers so students can listen to the video.
  - Run off copies of What is Weather? Think It-Draw It handout - 1 per student.
  - Run off What is... Placards (A-C) on Cardstock (10 sets).
  - Run off My Climate Information GO - 1 per student.
  - Run off 5 Factors of Climate - TOWZE Placards on Cardstock (10 copies).
  - Run off 10 sets of the TOWZE - Factors of Climate Folder Game and create 10 folders. (See How To Make Folder Games Instructions).
  - Run off copies of the TOWZE graphic organizer - 1 per student.

- Hook (Think It-Draw It)
  - As students enter your classroom, distribute one copy of the What is Weather? Think It-Draw It handout to each student.
  - Explain to students that they are to think of the word “weather” and then create an original graphic that explain what they think weather is.
  - Allocate coloring materials to students.
  - Explain to students that once they finish, they are to get a strip of painter’s tape from you to place their work on (a wall / on the board / the door…) to display their vision of weather.
  - Allocate sufficient time for students to complete their graphics and place it in the allocated space within your classroom.
  - Once time has expired, review the different graphics to demonstrate how students can look at different pieces of information to draw a conclusion. (Based on all of your drawings, I think weather means…)
  - Explain to students that since they investigated Adaptation last lesson, they are going to find out the differences between weather and climate.
  - Explain to students that understanding the difference between the two help us better understand what people wear in where they live and what climate has to do with it.

- Guided Practice (Investigation) Students will investigate weather and the five factors of climate to better develop the concept of climate and how it can affect people.
  - Divide students into triads.
  - Have students number of 1-3 within their groups.
  - Distribute one copy of the My Climate Information GO to each student.
  - Distribute 1 copy of Placard A (What is Weather) to each team.
  - Explain to students that Team Member 1 will read the Placard A to the team.
  - Explain to students that Team Members 2 and 3 will be responsible for summarizing what was read and what they are going to write in the section labeled “I understand that Weather means…” on their graphic organizers.
  - Allocate sufficient time for students to read and write their responses.
  - Once time has expired, have Team Member 2 report out their response.
  - Distribute Placard B (What is Climate) to each team.
  - Explain to students that Team Member 2 will read the Placard B to the team.
  - Explain to students that Team Members 1 and 3 will be responsible for summarizing what was read and what they are going to write in the section labeled “I understand that Climate means…” on their graphic organizers.
  - Allocate sufficient time for students to read and write their responses.
  - Once time has expired, have Team Member 3 report out their response.
  - Distribute Placard B (Why Does Climate Matter?) to each team.
  - Explain to students that Team Member 3 will read the Placard C to the team.
  - Explain to students that Team Members 1 and 2 will be responsible for summarizing what was read and what they are going to write in the section labeled “Understanding climate is important because…” on their graphic organizers.
  - Allocate sufficient time for students to read and write their responses.
  - Once time has expired, have Team Member 1 report out their response.
  - Summarize with students what weather is, what climate is, how they are different, and why we study the climate of different places to help understand the culture of those who live there.
Lesson Plan Day 2: 45 Minutes

- **Guided Practice (Investigation)** Students will investigate weather and the five factors of climate to better **develop the concept of climate and how it can affect people.**
- **Option:** Show the National Geographic video found at [http://tinyurl.com/lhbvxxc](http://tinyurl.com/lhbvxxc) to review climate and weather.
- Lead a brief discussion on the climate of San Antonio using sentence stems such as:
  - What are summers in San Antonio like?
  - What are the winters in San Antonio like?
- Have students complete the 4th quadrant, “I adapt to the climate of San Antonio by...” on their own.
- Allocate sufficient time for students to complete the 4th quadrant.
- Once time has expired, call on random students to report out.
- Explain to students that they are now going to investigate (or review) the Five Factors of Climate by using the acronym TOWZE.
- Distribute one TOWZE placard to each team.
- Review with students each of the five factors:
  - T stands for Topography or the physical geography of a place.
  - O stands for Oceans and Large Bodies of Water.
  - W stands for Wind or air masses.
  - Z stands for Zones of Latitude.
  - E stands for Elevation and Altitude.
- Provide examples of each of the five factors for students.
- Explain to students that they are going to now sort out examples for each of the five factors of Climate by working as a team to complete a word sort.
- Distribute 1 TOWZE - Factors of Climate Folder Game to each team.
- Explain to students that there 16 examples of factors and it is their job to match each example to a factor.
- Explain to students that they are to work as a team and they are also required to justify each classification. (Example, “We said that Mountains belonged in ___________ because...”)
- Allocate sufficient time for students to shuffle the examples to where they think each one belongs.
- Once time has expired, have teams report out on how they classified each example using the following sentence stems: *(The important piece of this exercise is whether students can justify their choices or use “just because” reasoning)*
  - Under Topography, we placed... because...
  - Under Oceans and Large Bodies of Water we placed... because...
  - Under Wind or air masses, we placed... because...
  - Under Zones of Latitude we placed... because...
  - Under Elevation and Altitude we placed... because...

- **Independent Practice (Evaluation)**
  - Once all teams have reported out, distribute one copy of the TOWZE Graphic Organizer to each student.
  - Explain to students they are to complete the TOWZE graphic organizer based on the evidence that they gathered during their last two investigations. (Weather & Climate and 5 Factors of Climate)
Lesson Plan

Lesson Plan Day 3: 45 Minutes

• **Plan:**
  - Run off sufficient copies of the following handouts:
    - San Antonio is like... (1 per student)
    - Climographs - Charting the Data (1 per student)
    - Characteristics of Textiles (1 per student)
    - What Do You Think? GO (1 set per student)
    - What are Climographs Placard (1 per team)
    - Clothing Materials (Textile) Placard (1 per team)
    - What Do You Think? Placards 1-12 (2 or 3 sets)
    - What Do You Think? Placard S (2 or 3 copies)
  - Set aside one area in your classroom as the information station where students will be able to deposit and withdraw one informational placard at a time during the Independent Practice phase.

• **Hook (Think It-Draw It)**
  - As students enter class, hand them one copy of the San Antonio is Like... handout.
  - Explain to students that they are going to complete the three sentence stems on the page and create an illustration for each of the sentence stems to better explain what they said.
  - Allocate 2-3 minutes after the final bell for students to complete their sentence stems and illustrations.
  - Divide students into triads and have them share out their sentence stems and illustrations.
  - Once all students have had an opportunity to share explain to students that they are now going to take what they know about weather and climate and apply it to what geographers call climographs.
  - Explain to students that they are also going to use their knowledge of climate to investigate what different people from around the world wear to protect themselves from the elements.

• **Guided Practice (Investigation)** Students will investigate climographs to determine climate of different regions and how it can affect people.
  - Keep students in their triads.
  - Distribute one copy of the What Are Climographs? placard to each group and review the main characteristics and pieces of climographs.
  - Clarify with students why climographs are useful when studying different places in the world.
  - Distribute one copy of the Los Angeles Climograph Practice sheet to each student.
  - Guide students through the interpretation of the bottom graph and how to place the data on the blank grid so it reflects the information presented.
  - Once students have finished their practice graph, call on random groups to explain what kind of weather does Los Angeles experience during different times of the year.
  - Have students explain when they think summer occurs in Los Angeles and have them present their supporting evidence. *(Example: Summer occurs during the months of... I know this because...)*
  - After teams have reported out, distribute one copy of the Clothing Materials (Textile) placard to each team.
  - Explain to students that based on different types of climate and what is available to people, they will either make their own clothes (cottage industry) or buy clothes that were mass-produced.
  - Explain to students that they are going to examine different types of materials that people use to make clothing from.
  - Have students read the introduction piece.
  - Once sufficient time has passed, ask students to explain what the introduction was about.
  - Demonstrate how to analyze the bottom portion of the placard:
    - What are natural materials?
    - What three types of natural materials do people use?
    - What are examples from the three different types of natural materials?
    - What are some of the man-made materials listed?
  - Have students refer to the chart on the back-side of the placard and answer the following questions:
    - Do you recognize any of the materials?
    - Which of the materials do you have for clothing?
    - What are common ingredients found in man-made materials?
    - What do the choices in what people use for clothing material tell you about the climate of where they live?
  - Distribute one copy of the Characteristics of Textiles GO to each student.
Lesson Plan Day 3: 45 Minutes

- **Guided Practice:**
  - Have students work as a team to discuss the characteristics of natural materials and man-made materials and complete the compare and contrast chart.
  - Allocate sufficient time for students to complete their graphic organizers.

- **Independent Practice:**
  - Keep students in their triads.
  - Using the “S” Placard from the What Do You Think? set, explain to students that they are looking at four different pieces of information about San Antonio:
    - (1) The map in the upper left-hand corner shows where Texas is in the United States.
    - Have students tell you what continent that the United States is located in.
    - (2) The picture shows a scene from San Antonio.
    - Have students use their visual analysis processes to relate several details from the photograph that they can see.
    - Have students describe what clothing is being worn by the people in the picture.
    - (3) The textual information on the lower-left side explains what they are looking at.
    - Have students explain how the text is connected to the picture.
    - (4) The climograph on the lower-right side demonstrates the average monthly temperature and precipitation for San Antonio.
    - Have students explain how their experiences with San Antonio weather relates to the climograph on the placard.
  - Explain to students that all of the information will help them:
    - determine the climate of what they are examining.
    - gain an idea of why type of clothing is common to the area
    - determine where the place is located
    - relate how the picture and the climograph can both tell us during what time of the year the photograph was taken.
  - Distribute one copy of the What Do You Think? GO to each student.
  - Explain to students that they are going to be given one placard from a specific place from one of the continents.
  - Explain to students that they are to work as a team to analyze their place using all four pieces of information to fill in their graphic organizer.
  - Explain to students that as soon as they finish with one placard, one team member is to silently come to the information station, deposit the placard that they just examined and pick up one copy of one place they have not examined yet.
  - Explain to students that they can also use Clothing Material (Textile) Placards to infer what type of materials would be useful for each of the places they are investigating.
  - Allocate sufficient time for students to complete their examination.
  - Once time has expired, hold up a placard and call on random teams to report out:
    - how they determined the climate of what they are examining.
    - explain an idea of why type of clothing is common to the area
    - demonstrate where the place is located
    - how the picture and the climograph can both tell us during what time of the year the photograph was taken.

Culminating Project (1-2 Days) **Designing a Travel Guide**
- Keeping students in their triads, explain to them that they are going to create an illustrated handbook using blank sheets of paper.
- Explain to students that the handbook is to be a guide for travelers who are going to visit the countries that they researched during their last investigation.
- Explain to students that their books should include:
  - at least 5 of the countries from their research.
  - a description of the climate for each of the countries
  - illustrations
  - full description of what kind of clothing travelers will need when visiting.
Word Wall

Adaptation

Weather

Climate

Factors of Climate

Climograph
1. Allosaurus
   2. Apatosaurus
   3. Centrosaurus
   4. Panoplosaurus
   5. Dilophosaurus
   6. Stegosaurus
   7. Maiasaura
   8. Tyrannosaurus
### Dino-Sort-Us QCE

<table>
<thead>
<tr>
<th>Question:</th>
<th>Claim (What conclusion can you make based on the evidence?)</th>
</tr>
</thead>
<tbody>
<tr>
<td>How have herbivores and carnivores adapted to their environment?</td>
<td></td>
</tr>
</tbody>
</table>

| Evidence (What evidence are you using to answer the question?) | |

Reproduction rights granted only if copyright information remains intact.
What Would You Wear?

Examine the photograph above and be ready to discuss how you would dress in order to survive here.
What Would You Wear?

Examine the photograph above and be ready to discuss how you would dress in order to survive here.

Photograph by Todd Klassy, National Geographic Your Shot
What Would You Wear?

Examine the photograph above and be ready to discuss how you would dress in order to survive here.
What Would You Wear?

Examine the photograph above and be ready to discuss how you would dress in order to survive here.
What Would You Wear?

Examine the photograph above and be ready to discuss how you would dress in order to survive here.

Photograph by George Hodan, Your Shot
What Would You Wear?

Examine the photograph above and be ready to discuss how you would dress in order to survive here.

Photograph by National Geographic
What Would You Wear?

Examine the photograph above and be ready to discuss how you would dress in order to survive here.

Photograph by National Geographic
Adaptation

I understand that Adaptation means...

Example of an Adaptation of Dinosaurs includes...

I Think that People can Adapt to Their Environment by...
What is Weather? Think It-Draw It

In the space below, draw out what you think weather is all about!
What is Weather?

Surrounding the Earth is a layer of gases that is known as the Atmosphere. How the atmosphere is behaving in a certain region is known as Weather. Weather can have characteristics such as temperature, humidity, cloudiness, wind, and brightness (how sunny it is).

Weather can change quickly as in it was sunny in the morning and warm but by the night it was cold at night with rain. Weather can also be the conditions during certain times of the year known as Seasons.

The seasons of Summer, Fall, Winter, and Spring all have their characteristics including how the weather should be like. For an example, you will not likely wear a heavy coat in the middle of a San Antonio summer.
What is Climate?

While weather is the conditions of a place over a short period of time, climate is how weather behaves over a long period of time.

When you study **climate**, you are studying the average low and high temperatures and precipitation (rain) over a long period of time.

Scientists and Geographers study climate in different places and give different places with similar characteristics names.

For an example, a place that has low amounts of rain and high average temperatures during the year are often said to have an arid or desert climate.
Why Does Climate Matter?

When we study different places, we examine climate in order to better understand cultures and how they protect themselves from their environment.

Can you picture what people would wear in a climate that has year-round high temperatures and sunshine?

How about people who live in a climate with constant rain?

Climate will often determine what people wear when they are outdoors as well as what type of shelter they live in.
## My Climate Information

<table>
<thead>
<tr>
<th>I understand that Weather means...</th>
<th>I understand that Climate means...</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Understanding climate is important because...</th>
<th>I adapt to the Climate of San Antonio by...</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Topography

Landforms such as mountains affect climate. For an example, the mountains on the west coast of North America can act as a barrier for clouds carrying rain to the eastern side of the mountain chain.

### Oceans and Large Bodies of Water

Large bodies of water such as oceans, gulfs, seas, and very large lakes warm or cool slower than land masses do. Therefore, those who live near these places experience less of a temperature range between its lowest and highest temperatures.

### Wind (Air Masses)

Winds can carry moisture (water) and temperature (hot or cold) from place to place. If wind travels over water masses such as oceans or large rivers and lakes; it will carry water. If the wind is from the south, it will typically be a warm air mass. If the wind is from the north, it will typically be colder such as an arctic air mass.

### Zones of Latitude

The further away from the equator you get (whether you travel north or south) the colder the climate. The earth is divided into three temperate zones based on latitude: polar, temperate, and tropical.

### Elevation / Altitude

The higher in elevation you are from being at sea level, the colder the temperature! The reason is the higher in elevation you go, the less dense the air becomes. Less dense air cannot hold the heat as well as air in warmer areas. For every 1000 feet in elevation you go, the temperature average drops around 3.5° F.
# How To Make Folder Games

<table>
<thead>
<tr>
<th>What?</th>
<th>A Folder Game may be compared to an interactive foldable where students are handed a game board (the folder) and are tasked with different challenges ranging from matching terms with definitions to comparing and contrasting different concepts/ideas.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Why?</td>
<td>When dealing with complex ideas/events, students need to have multiple opportunities not only use the language of the discipline, but how to connect concepts and ideas together through their similarities and their differences.</td>
</tr>
</tbody>
</table>
| How? | - Acquire sufficient amount of folders to create a class set.  
  - Determine the purpose of the folder game:  
    - Matching?  
    - Characteristics of…?  
    - Compare and Contrast?  
  - Create a template using the information for the game pieces. Ensure that all of the pieces are the same height and width in order to avoid giving clues to the players.  
  - Clue the headers/topics to the inside of each folder.  
  - Place the game pieces in a sandwich baggie and paper clip the pieces to the inside of each folder.  
  - Divide students into pairs.  
  - Distribute one folder per team.  
  - Have students work together to perform the assigned task(s).  
  - When time has expired, have students write a reflection / essay using the information from the folder game. |
| When? | Folder Games can be utilized anytime during the lesson cycle where appropriate, especially during the vocabulary building and guided practice portions of a lesson cycle. |
### TOWZE - Factors of Climate Folder Game

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mountains</td>
<td>Plains</td>
<td>Strong Winds</td>
<td>Equator</td>
</tr>
<tr>
<td>Tropical Zone</td>
<td>Polar Zone</td>
<td>Pacific Ocean</td>
<td>Indian Ocean</td>
</tr>
<tr>
<td>Arctic Ocean</td>
<td>Mississippi River</td>
<td>Low Winds</td>
<td>Hills</td>
</tr>
<tr>
<td>Antarctic Circle</td>
<td>Desert</td>
<td>Tropic of Capricorn</td>
<td>Mediterranean Sea</td>
</tr>
</tbody>
</table>
TOWZE - Factors of Climate Folder Game
<table>
<thead>
<tr>
<th>Factor</th>
<th>What Is It?</th>
<th>What Are Examples?</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td></td>
<td></td>
</tr>
<tr>
<td>w</td>
<td></td>
<td></td>
</tr>
<tr>
<td>z</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
For the following sentence stems, complete the sentence and then create an illustration that explains your completed sentence.

<table>
<thead>
<tr>
<th>Part 1 - The summer weather in San Antonio is like...</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Part 2 - The winter weather in San Antonio is like...</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Part 3 - My favorite time of the year in San Antonio is...</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
What Are Climographs?

When geographers examine where people live, they will often investigate a climate of that place in order to better understand the culture of the people. Climographs are just one of the tools geographers use to examine climate.

Part 1 - Average Temperature - The first piece of a climograph is the average temperature of a place in a typical year. Geographers average the high and low temperatures the place experiences per month. For an example, if in January the average high temperature is around 70º F and the average low temperature of January is 50º F, geographers will report the average temperature in January to be 60º F because \( \frac{70+50}{2} = 60 \). When the average temperature for all 12 months is reported out, it can be graphed as in the example below:

![Average Temperature Graph]

Part 2 - Average Precipitation - The second part of a climograph is the average precipitation (or rainfall) a place receives on a monthly basis. Much like average temperature, geographers use data over a span of time, and not just use information from one single year. When the average precipitation is reported out, you can graph it out like the example below:

![Average Precipitation Graph]

Part 3 - Combining the Information - Once geographers have all of their data on average temperature and average precipitation, they combine the two graphs together to make a climograph. See the climograph below for San Antonio and examine how the geographer combined the information from steps one and two together.

Based on the information presented in the Climograph, what conclusions can you make about San Antonio’s climate?
Climographs - Charting the Data

<table>
<thead>
<tr>
<th>Los Angeles, California</th>
<th>J</th>
<th>F</th>
<th>M</th>
<th>A</th>
<th>M</th>
<th>J</th>
<th>J</th>
<th>A</th>
<th>S</th>
<th>O</th>
<th>N</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature ( ºF)</td>
<td>59</td>
<td>59</td>
<td>59</td>
<td>61</td>
<td>63</td>
<td>64</td>
<td>65</td>
<td>68</td>
<td>70</td>
<td>62</td>
<td>62</td>
<td>54</td>
</tr>
<tr>
<td>Precipitation (inches)</td>
<td>3.9</td>
<td>5.1</td>
<td>2.8</td>
<td>0.9</td>
<td>0.3</td>
<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.2</td>
<td>1.0</td>
<td>1.4</td>
<td>2.8</td>
</tr>
</tbody>
</table>
Clothing Materials (Textile)

Introduction

When you go to buy clothes, you are actually purchasing something that was either part of an animal or vegetable or was manufactured in a chemical plant. We call the material that we make into clothes textiles. Before mass-production and the introduction of certain chemicals and plastics, people depended on what was in the environment for their clothing. Many cultures still depend on natural materials since they do not have either the resources or industries to mass produce man-made materials.

Natural Materials

Animal (Cellulose)  
- Silk
- Wool
- Camelid / Camel Hair
- Leather
- Cashmere
- Fur

Vegetable (Protein)  
- Cotton
- Linen
- Jute
- Piña
- Bamboo
- Soy Protein

Mineral  
- Asbestos

Man-Made Materials

- Rayon
- Polyester
- Nylon
- Acrylic
- Spandex
<table>
<thead>
<tr>
<th>Fiber</th>
<th>Classification</th>
<th>Source</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silk</td>
<td>Animal-Based</td>
<td>Chinese Mulberry Silkworm</td>
<td>Smooth, Lightweight, and Cool</td>
</tr>
<tr>
<td>Wool</td>
<td>Animal-Based</td>
<td>Sheep</td>
<td>Heavy and Keeps Heat In</td>
</tr>
<tr>
<td>Camel Hair</td>
<td>Animal-Based</td>
<td>Cameliid</td>
<td>Lightweight and Keeps Heat In</td>
</tr>
<tr>
<td>Leather</td>
<td>Animal-Based</td>
<td>Various Animals (Hide and Skin)</td>
<td>Lightweight, Rugged, and Can Keep Some Heat In</td>
</tr>
<tr>
<td>Cashmere</td>
<td>Animal-Based</td>
<td>Indian Cashmere Goat</td>
<td>Soft and Keeps Heat In</td>
</tr>
<tr>
<td>Fur</td>
<td>Animal-Based</td>
<td>Various Animals</td>
<td>Depending on the Animal can be Light or Heavy but used to Keep Heat In</td>
</tr>
<tr>
<td>Cotton</td>
<td>Plant-Based</td>
<td>Cotton Shrub</td>
<td>Lightweight and Absorbs Water</td>
</tr>
<tr>
<td>Linen</td>
<td>Plant-Based</td>
<td>Different Types of Plants (Flax)</td>
<td>Lightweight and Absorbs Water</td>
</tr>
<tr>
<td>Jute</td>
<td>Plant-Based</td>
<td>Fibers from Jute Plants</td>
<td>Strong Fibers, Common Plants, Soft and Retains Some Heat</td>
</tr>
<tr>
<td>Piña</td>
<td>Plant-Based</td>
<td>Pineapple Tree Leaves</td>
<td>Lightweight, Cool and Sheer</td>
</tr>
<tr>
<td>Bamboo</td>
<td>Plant-Based</td>
<td>Bamboo Plants</td>
<td>Lightweight and Absorbs Water</td>
</tr>
<tr>
<td>Soy Protein</td>
<td>Plant-Based</td>
<td>Leftovers From Making Tofu</td>
<td>Much like Wool but Lightweight</td>
</tr>
<tr>
<td>Asbestos</td>
<td>Mineral-Based</td>
<td>Natural Minerals</td>
<td>Fire Resistant and Lightweight (No longer used due to links to lung disease in humans)</td>
</tr>
<tr>
<td>Rayon</td>
<td>Man-Made</td>
<td>Wood Pulp</td>
<td>The pulp is chemically changed into fibers. Lightweight, shiny, and Absorbs Water</td>
</tr>
<tr>
<td>Polyester</td>
<td>Man-Made</td>
<td>Plants and Plastic</td>
<td>Resists Water, Durable, and Lightweight</td>
</tr>
<tr>
<td>Nylon</td>
<td>Man-Made</td>
<td>Plastic</td>
<td>Has a Shine (luster), Stretches, and is Lightweight - Feels Like Silk</td>
</tr>
<tr>
<td>Acrylic</td>
<td>Man-Made</td>
<td>Plastic</td>
<td>Imitates Wool and Cashmere</td>
</tr>
<tr>
<td>Spandex</td>
<td>Man-Made</td>
<td>Plastic</td>
<td>Strong, Stretches Easily, and Lightweight</td>
</tr>
<tr>
<td>(Lycra)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Characteristics of Textiles

<table>
<thead>
<tr>
<th>Natural</th>
<th>Man-Made</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How are natural and man-made materials similar?
San Antonio's historic River Walk extends some 2½ miles, attracting several million visitors every year.
<table>
<thead>
<tr>
<th>Placard</th>
<th>Location</th>
<th>Climate is like...</th>
<th>People would wear...</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### What Do You Think?

<table>
<thead>
<tr>
<th>Placard</th>
<th>Location</th>
<th>Climate is like...</th>
<th>People would wear...</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Placard</td>
<td>Location</td>
<td>Climate is like...</td>
<td>People would wear...</td>
</tr>
<tr>
<td>---------</td>
<td>----------</td>
<td>--------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What Do You Think?

Vendors *hawk* (sell) goods at one of many markets on Lagos Island, demonstrating the *entrepreneurial* (people who own their own business) *fervor* (excitement) that has made Nigeria’s economy Africa’s most *vibrant* (full of life).
What Do You Think?

Workers from drought-stricken Sawarda village in India say the Golden Quadrilateral (GQ) has brought prosperity closer to home: "Today the jobs are in Jaipur, which used to be three hours away," says one. "With the highway, we can get there in 45 minutes."

Photograph by Ed Kashi

Sawarda Village, India

Temperature (°F)

Precipitation (in)

January February March April May June July August September October November December

20 18 16 14 12 10 8 6 4 2 0

100 90 80 70 60 50 40 30 20 10 0

©SAISD Social Studies Department
Reproduction rights granted only if copyright information remains intact.
What Do You Think?

A crowd of pilgrims arrives at the mosque in Tanta for Ragabiya, a three-day festival honoring the most venerated saint in Egypt, Sidi Ahmad Al-Badawi.
What Do You Think?

When rally day comes to Good Hope Baptist church in Rosier Creek, Virginia, it's like a homecoming. Kinfolk and old friends gather from afar for preaching, music, and dinner.
What Do You Think?

Kathmandu has become such a chaotic place. The streets are crowded and everyone is doing their own thing. This image depicts the activities on the street, which juxtaposes with the stillness of the mother and child on the street.

Photograph by Larry Louie

Kathmandu, Nepal

Temperature (°F)

Precipitation (in)
What Do You Think?

The arrival of meat in camp may spur a line dance, but the Hadza also dance deep into the night as a ritual or at any hour for sheer pleasure.

Photograph by Martin Schoeller

Dodma, Tanzania

Temperature (°F)

Precipitation (in)

January February March April May June July August September October November December
What Do You Think?

While waiting for freshly slaughtered sheep to cook, a group in Darkhan, Mongolia, makes merry.

Photograph by Christopher De Bruyn
Johan Kuhmunen, with his dog Cammu, lives in Sweden, but the summertime range for his family's herd crosses into Norway. The Sami tradition of learning from the elders is an important part of reindeer herding, and knowledge is passed down from generation to generation and not learned in books.
Their hands stained by the indigo dye in their new clothes, Tuareg women celebrate a birth. Tuareg females rarely cover their faces, while men traditionally wear turbans that conceal all but their eyes.
The Bajau of Malaysia fish and dive for almost everything they eat. Some live in houses on the beach or on stilts; others have no homes but their boats. Her face is dusted with bedak sejuk, a cooling powder made of rice and pandan leaves.
Bolivia is a nation full of contrasts. The terrain varies from the high, harsh mountain ranges and plateaus of the west to the lush, humid tropical lowlands in the east to the scrubby, flat Chaco region bordering Paraguay to the south.
What Do You Think?

The Uros are a self-identified ethnic group, about 2,000 of whom live in Peru, many of them on artificial floating islands on Lake Titicaca. Another 2,600 individuals live beside lakes and rivers of Bolivia.
Materials Organized and Provided By:

The Social Studies Department
“At Your Service”

406 Barrera St.
San Antonio, TX 78210
Phone: 210•554•2630
Fax: 210•224•6448

Content ©SAISD Social Studies Department Except Where Noted