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This journal belongs to:

My teacher's name is:

My school is:

My role is:
Show Us What You Know

1. Can you name 4 different uses for forest lands? 4 points
   a. __________________________
   b. __________________________
   c. __________________________
   d. __________________________

2. Why is it important to protect (conserve) forests? 3 points

3. Conservationists are people who protect forests. What problems or obstacles might they face? 3 points

4. Why is it important to develop forests? (For example: building houses, schools, roads, sports fields, etc.) 3 points

5. Developers are people who build houses, roads, schools, sports fields, etc. What problems or obstacles might they face? 3 points

6. What does mitigate mean? Can you name an example? 4 points

7. Which of the neighborhoods below is better for the forest? 5 points
   
   Spead-out Housing
   
   Dense Housing
Where Are We in the Greenway?

1) Find your school and Tiger Mountain on the map.
2) Find the Middle Fork (the place you saw in the video)

Tiger Mountain State Park is 13,745 acres
Map Questions

Use the map on pages 3-4 to answer the following questions.

1. How does the type of land change as you move from west to east (left to right)?

2. How does the land use change from west to east (left to right)? (Use the key)

3. Where are the cities? (Use the key)

4. What different types of water can you find?

Show Your Opinions!

Read the following statements and mark on the continuum with a X if you agree or disagree.

1. It is important for people to conserve forests as they are.

2. It is important for people to be able to use the forests for recreation: hiking, fishing, hunting, and camping.

3. It is important for people to be able to get wood products from forests.

4. It is important for people to harvest some forests to build more homes, shopping malls, schools, playfields, and farms.

5. It is important for people to be able to use forests in different ways such as for wood products, recreations, clean air and water, homes, and wildlife habitat.
Land Use Goals

**Wildlife Protection**
Conserving forests and other habitats as they are to protect the wildlife that live there.

**Development**
Cutting down trees and changing the landscape to build businesses, houses, schools, and roads.

**Low Impact Recreation**
Fun human activities that require the use of the environment, but have a small impact on it.

**Air Quality**
Conserving forests because trees and other plants are very good at filtering and cleaning the air.

**High Impact Recreation**
Fun human activities that require the use of the environment, but have a larger impact on it.

**Water Quality**
Conserving forests because trees and other plants are very good at filtering and cleaning the water.

**Timber Harvesting**
Cutting down trees and using the wood to make products for humans.

**Agriculture**
Cutting down trees and changing the landscape to grow food and/or livestock.
Welcome to the Tiger Mountain forest ecosystem!

This 14,000-acre forest is home to a wide variety of plants and animals. Please keep this in mind while visiting!

Practice 'Leave No Trace' principles by packing out your trash, leaving what you find where you find it, respecting wildlife, and being considerate of other visitors.

How would you describe the cloud cover?
- Cloudy
- Sunny
- Partly

What is the temperature?
- ___ °C / ___ °F
- Cold / Cool / Warm / Hot

Use these pages to record your abiotic and biotic observations.
(Find something not on the list? Record it on page 11-12!

Date: ___________ Time: ______ Season: ___________

---

**TREES:**
- Western Redcedar
- Douglas-Fir
- Western Hemlock
- Bigleaf Maple
- Vine Maple
- Red Alder
- Cottonwood

**FERNS:**
- Sword Fern
- Licorice Fern
- Bracken Fern

**MOSSES & LICHENS:**
- Moss
- Lichen

**SHRUBS:**
- Osoberry
- Horsetail
- Salal
- Oregon Grape
- Devil's Club
- Stinging Nettle
- Bleeding Heart
- Red Huckleberry
- Salmonberry

**INVASIVE PLANTS:**
- English Ivy
- English Holly
- Stinky Bob
- Scotch Broom
- Creeping Buttercup
- Himalayan Blackberry

**MAMMALS:**
- Douglas' Squirrel
- Chipmunk
- Black-Tailed Deer
- Mouse
- Black Bear

**BIRDS:**
- Crow
- Raven
- Woodpecker
- American Robin
- Hummingbird
- Mallard
- Pacific Wren
- Osprey
- Bald Eagle
- Red-Tailed Hawk

**Fungi:**
- Shelf-Type Fungi
- Mushroom-Type Fungi
- Jelly-Type Fungi

**INVERTEBRATES:**
- Banana Slug
- Black Slug (invasive!)
- Brown Slug (invasive!)
- Snail
- Earthworm
- Yellow-Spotted Millipede
- Fly
- Ant
- Beetle
- Spider
Your job today is to gather data about the forest and share your findings with the Conservationists or the Developers. You will use this data to support your argument.

Use the tools your Greenway Educator provides to complete the following survey!

**WATER**
What types of water sources are in this forest? (Mark next to each option present)

- [ ] Lake
- [ ] Streams
- [ ] Swamp
- [ ] Wetlands
- [ ] Snow Pack

Why are these water sources important for Conservationists and Developers to know about?

__________________________
__________________________
__________________________

*Look back to pages 9-10 to help you answer the questions below.

**SOIL**
What type of soil did you find? *(Circle the answer)*

- [ ] Loamy
- [ ] Silt
- [ ] Sand
- [ ] Clay

Follow the directions of your Greenway Educator to find the pH of the soil.

Soil pH ________

**PLANTS**
Thinking about the forest understory and floor, are more of the plants native or invasive?

Native # ________  Invasive # ________

**AIR**
Lichen is an indicator of clean air. Is lichen present?

YES_____  NO_____

Go to pages 19-20 to form your argument
Developers

Your job today is to convince the Land Managers to sell you the land so you can build new places (schools, playgrounds, houses, businesses, and roads.)

Use the information the Scientists gave you to answer the following questions. Then use pages 19-20 to develop an argument as to why the forest should be developed.

**Priority Land Uses**
(look back at pages 7-8 for descriptions)

<table>
<thead>
<tr>
<th>Timber Harvesting</th>
<th>Agriculture</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Impact Recreation</td>
<td>Development</td>
</tr>
</tbody>
</table>

Why do we need development?

1. Is the forest near highways for easy access for construction materials?
   - YES
   - NO

2. Are the trees in the forest mostly Douglas-fir, Western Redcedar, and Western Hemlock? *These three trees are great for harvesting.
   - YES
   - NO

3. Is the land level?
   - YES
   - NO

4. Are there lakes, streams, swamps, or wetlands? *If so, trouble!
   - YES
   - NO

5. Are there any endangered or threatened species living in the forest? *If so, trouble!
   - YES
   - NO

6. Measure the circumference of 3 trees. How big are they? *Trees need to be at least 19 inches around to be harvested.
   - 
   - 
   -

Go to pages 19-20 to form your argument.
Conservationists

Your job today is to convince the Land Managers to conserve the land for the ecosystem services it provides as well as for the wildlife that live here.

Use the information the Scientists gave you to answer the following questions. Then use pages 19-20 to develop an argument as to why the forest should be conserved.

Priority Land Uses
(Look back at pages 7-8 for descriptions)

<table>
<thead>
<tr>
<th>Low Impact Recreation</th>
<th>Water Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Quality</td>
<td>Wildlife Protection</td>
</tr>
</tbody>
</table>

Why is it important to conserve forests?

1. Do the water sources support salmon migration? How?

2. Is the land large enough to sustain black bear migration routes? *Black bears have a territory of 7,000 acres
   YES_______  NO_______

3. Are there roads nearby? *If so, trouble for wildlife!
   YES_______  NO_______

5. How do people use this area for low impact recreation?

6. What animal evidence have you seen?

7. Are any of those animals endangered or threatened?
   YES_______  NO_______

Go to pages 19-20 to form your argument
Time to Form Your Argument

1. What will you do with the forest?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

2. What data supports your argument?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

3. How will you mitigate for the trouble spots?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

You can use this space to sketch your ideas.
Time to Discuss!

Conservationists and Developers will now get 5 minutes each to present their case on why the Land Managers should conserve or develop Tiger Mountain.

Remember to use your data to strengthen your argument.

Scientists, your job during this discussion is to be our experts. Conservationists, Developers, and Land Managers will ask you to provide facts during the discussion. If you hear someone report a fact falsely, please politely correct them!

What did the Land Managers decide to do with Tiger Mountain? (Please circle one of the following)

DEVELOP

CONSERVE

Reflect on the Decision

You can now step out of your roles to answer the following questions.

1. Before the hike and debate I wanted to conserve/develop (circle one) the forest. After the hike and debate I want to conserve/develop (circle one) the forest.

2. Did you change your mind?
   YES______
   NO______

3. Did you agree or disagree with the argument you had to make as a Conservationist or Developer? Why?

   ________________________________________________________________

4. Do you agree or disagree with the decision the Land Managers made? Why?

   ________________________________________________________________

   ________________________________________________________________
1. Can you name 4 different uses for forest lands?  4 points
   a.
   b.
   c.
   d.

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7. Which of the neighborhoods below is better for the forest?  5 points

   Spead-out Housing

   Dense Housing
Reflect on the Process

Think back to your time on Tiger Mountain and the activity we did there.

1. What went well? What didn’t? Please comment.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2. Did you feel like your voice was heard throughout the process? Why or why not?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

3. Did your team work well together? Why or why not?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

4. What about this activity is like the real world? What is not?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

5. Why are discussions like this valuable?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________