



Task: Forest Benefits



PART 1: RESEARCH

Student Directions:

Your Task:

Many people new to Washington State may know little or nothing about the benefits of our state's forests. You have been asked to explain these benefits to a family from out of state that has just inherited 500 acres of forestland and are unsure about its value. Use information from the article, the poster, and the video to answer three research questions and to write your essay, explaining the many benefits of a forest.

Steps you will be following:

To plan and write your essay, you will do all the following:

1. Read an article and a poster.
2. Watch two videos.
3. Answer three questions about the sources.
4. Plan and write your essay.

Directions for beginning:

You will now watch two videos and read the article and the poster. Take notes because you may want to refer to your notes while writing your essay. You can look at the sources as often as you like.

Source Information:

Article: *We All Need Forests*

Poster: *Forest Benefits*

Videos: *Forest Fast Breaks: Animations for the Classroom Water* (1:40)

<https://www.youtube.com/watch?v=Fcz3SBf9FD0>

Forest Fast Breaks: Animations for the Classroom Wood Products (1:37)

<https://www.youtube.com/watch?v=t5rFTal3Q9M>

Use the notetaking graphic organizer to take your notes on both sources.



Task: Forest Benefits



MY NOTES

What are the benefits of a forest?

Article: <i>We All Need Forests</i>	
Benefit	Details
1.	
2.	
3.	
4.	

Poster: <i>Forest Benefits</i>	
Benefit	Details
1.	
2.	
3.	
4.	



Task: Forest Benefits



MY NOTES

What are the benefits of a forest?

Video: <i>Fast Break: Water</i>	
Benefit	Details

Video: <i>Fast Break: Wood Products</i>	
Benefit	Details

NOTE: Your notes will not be scored.

We All Need Forests



Forests make up just over half of our land in the state of Washington and provide jobs for many people. They are important places that benefit us in many ways. Trees in a forest give us wood for building. Forests have trails for hiking and protect clean water and air. They also provide homes for plants and animals. Let's explore these forest benefits!

Forest Products

Wow! Did you know over 5,000 products we use on a daily basis come from the trees in a forest?

Working forests are forests that provide products for us to use every day. Some trees are harvested for these products. Take a look around! Houses, furniture, doors, picture frames and so many other items are made from wood. Around the school, you will see more wood products: desks, boxes, pencils, brown bags for lunches, and napkins for cleaning up. But did you know trees also provide us with material for making carpets, fabric, cellophane, and lotions? Tree sap is used in paint thinners, syrup, chewing gum, and rubber. And there's more. Forests provide medicines and foods such as nuts, berries, and mushrooms. Yum! Forests are amazing places providing wood and other products that we use every day.



Recreation

Did you know people use the forests to have fun?

Forests provide hiking trails, campgrounds, rivers, streams and lakes for boating and fishing, and many other opportunities for relaxation. Some people visit the forest just to stand among the trees and feel nature all around them. They may even find inspiration in the beauty of the natural environment. Using our forests for hiking, fishing, and other sports provides us with a way to relax and feel inspired by nature!



We All Need Forests

Healthy Environment

Did you know that forests help to keep our air and water clean?

Well they do! Trees and all the green plants in a forest give off oxygen for us and other animals to breathe. Trees and plants also act like a giant air filter, cleaning pollutants such as dust, smoke, and certain chemicals from the air. In addition, forests help clean our water. Forest soils act as a filter, capturing particles and chemicals from rain or runoff as the water travels through the rich soil layers before getting into groundwater or streams. The canopy and root systems of the trees also capture the water from rain, slowly releasing the water into creeks and streams catching pollutants. So, forests provide clean air and water for people, fish and wildlife. We all need clean air and water to survive!



Fish and Wildlife Habitat

Did you know that forests are a home to thousands of different types of plants and animals?

Forests include many different habitats or places to live, and they provide plants and animals with food, shelter, water and space. This diversity is critical to maintain homes for many different types of plants and animals. A healthy forest is a place for many plants and animals to live.



Now you know!
Forests are valued places and
provide us with many benefits!
Yes, we all need forests!

Copyright 2015, American Forest Foundation. Permission to adapt and distribute this information from Project Learning Tree's "Exploring Environmental Issues: Focus on Forests" has been granted to the Pacific Education Institute. For more information about Project Learning Tree, visit www.plt.org.

FOREST PRODUCTS

*Wood for
Homes
Furniture
Paper*



RECREATION

*Hiking
Camping
Skiing
Fishing
Snow-
Shoeing*



Forest Benefits



Clean Air

Clean Water

**HEALTHY ENVIRONMENT
HEALTHY ENVIRONMENT**

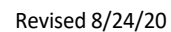


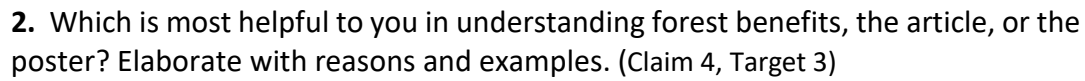
*Homes for
Plants and
Animals*

**WILDLIFE HABITAT
WILDLIFE HABITAT**

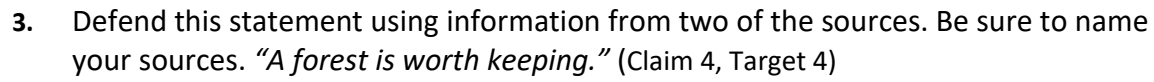


- [illegible]





PEI PACIFIC
EDUCATION
INSTITUTE





Task: Forest Benefits



Part 2: FIELD INVESTIGATIONS

Teachers are encouraged to take the students on a guided walk through a local forest or school yard with trees. Students should observe for the four benefits of a forest and record their evidence in an observational journal. Discussion questions might include the following:

- Which benefit was the easiest to identify?
- How might students verify forest products?
- What background knowledge do students have relating to the recreational benefits of a forest?
- What evidence do students find that show the habitats present in a forest?
- What positive impacts on the environment does a forest have?

In addition, teachers may want to consider one or both field investigations:

- PLT Trees as Habitats #22:
https://www.pltwa.com/uploads/2/7/8/2/27828107/trees_as_habitat_and_tree_benefits.pdf
- Tree Benefits: www.treebenefits.com

Other ideas for field investigations:





PART 3: ESSAY

Student Directions:

Please review your notes and sources, plan, draft, and revise your essay. While you may use your notes and refer to the sources, you must work on your own. Now read your assignment and the information about how your essay will be scored, and then begin your work.

Your Assignment

Help! A family from out of state has just inherited 500 forested acres and wants to learn more about forests. Write an essay explaining a forest's many benefits and encouraging the family to learn more about forests before deciding what to do with their new inheritance. Be sure to cite your sources.

How your essay will be scored:

The people scoring your essay will be assigning scores for:

1. **Statement of Purpose/Focus** – how well you clearly state and maintain your controlling idea or main idea.
2. **Organization** – how well the ideas progress from the introduction to the conclusion using effective transitions and how well you stay on topic throughout the essay.
3. **Elaboration of Evidence** – how well you provide evidence from sources about your topic and elaborate with specific information.
4. **Language and Vocabulary** – how well you effectively express ideas using precise language that is appropriate for your audience and purpose.
5. **Conventions** – how well you follow the rules of usage, punctuation, capitalization, and spelling.

Now begin work on your essay.

- Plan your essay
- Write your essay
- Revise and edit for a final draft



Task: Forest Benefits



Organizing My Essay: The many benefits of a forest

Introduction	
First Benefit	
Second Benefit	
Third Benefit	
Fourth Benefit	
Conclusion	



Scoring Notes: Forest Benefits



1. Describe how a forest keeps our water clean. Use information from both the article and a video in your answer. Be sure to name your sources. (*Claim 4, Target 2*)

Analyze/Integrate Information Rubric (Claim 4, Target 2)

2	The response gives sufficient evidence of the ability to gather, analyze, and integrate information within and among multiple sources of information.
1	The response gives limited evidence of the ability to gather, analyze, and integrate information within and among multiple sources of information.
0	A response gets no credit if it provides no evidence of the ability to gather, analyze, and integrate information within and among multiple sources of information.

Scoring Notes:

Article: Forest soils act as a filter capturing particles and chemicals from rain or runoff as water travels through the soil. The canopy and root systems also capture water from rain slowly releasing water into creeks and streams, catching pollutants

Video: Water evaporates, forms clouds and becomes rain. The forest acts as a giant filter to the rainwater and runoff. Water is cleaned as it moves through the soil of the forest and becomes ground water.

2-point response:

- Accurately describes how the forest helps to keep our water clean by acting as a filter, capturing the pollutants.
- Uses information from both the article and the video
- Cites the sources

1-point response:

- Accurately describes how the forest helps to keep our water clean by acting as a filter, capturing the pollutants.
- References only one of the two sources
- May or may not cite the sources

0-point response:

- Inaccurate description of how the forest helps to keep our water clean.
- Off Topic



Scoring Notes: Forest Benefits



Sample 2 Point Responses:

Example #1:

The forests keep our water clean by filtering the water. (Video) How do they do that? The water evaporates from the ocean and it makes clouds. The clouds drop the rain in the forests. The soil filters the water and helps to make it safe to drink. In the article, we also learn that the forest soils act as a filter capturing the chemicals, helping to make the water safe to drink.

Example #2:

Source #1: "We All Need Forests, Healthy Environments". The article states: "Forest soils act as a filter, capturing particles and chemicals from rain or runoff as the water travels through the rich soil layers before getting into groundwater or streams. The canopy and root system of the trees also capture the water from rain, slowly releasing the water into the creeks and streams catching pollutants." According to the article, this is how a forest keeps water clean.

Source "2: Video "Forest fast Break Water" When water reaches the ground most of it is absorbed into the ground water system like a giant filter. Forest soils help clean our water every day and never need replacement. Most of our water comes from forests.

Example #3:

Both the article and the video explain how the forest asks as a giant filter to help to keep our water clean. The article also talks about how the canopy and root systems in a forest help to capture water and filter it. The video shows how the water works its way through the soil to become ground water and how the pollutants are captured.

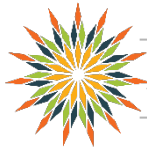
Sample 1 Point Responses:

Example #1:

Water from the ocean, rivers, and lakes evaporates and becomes a cloud. Clouds bring that moisture in land and drops it on our forest. As the water reaches the forest, the ground absorbs the water like a giant filter helping to clean water when it reaches ground. (Accurate reason but no reference to either source.)

Example #2:

Forests give us wood for building, trails for hiking, clean water and air, and homes for plants and animals. How do you get clean water? When it rains, the water goes into the soil in the forest and the soil acts as if it were a real filter. (Accurate reason but no reference to either source. Some information is off topic.)



Scoring Notes: Forest Benefits



Example #3:

The forest soil helps the water to be clean. The forest soil acts as a filter, capturing particles and chemicals from the rain. (Accurate reason with detail but no reference to either of the sources.)

Sample 0 Point Responses:

Example #1:

The forest makes clean water. The forest has the most water. Almost all the water is fresh water. (Off Topic; No description of how the forest makes clean water.)

Example #2:

Our forest provides a lot and grows a lot, but we will need water to make things grow. Without water we cannot eat or drink so we cannot live. Everything and everybody will no longer live. The forest will make water when it rains. There the water goes to us and the water fountain. We only have 3% of clean water. (Off Topic: No description of how the forest keeps our water clean.)

Example #3:

It gives us water and wood to make furniture plus ice cream! And food. These come from trees. (Off Topic)

2. Which is most helpful to you in understanding forest benefits, the article, or the poster? Elaborate with reasons and examples. *Claim 4, Target 3)*

Use Evidence Rubric (Claim 4, Target 3)	
2	The response gives sufficient evidence of the ability to distinguish relevant from irrelevant information such as fact from opinion.
1	The response gives limited evidence of the ability to distinguish relevant from irrelevant information such as fact from opinion.
0	A response gets no credit if it provides no evidence of the ability to distinguish relevant from irrelevant information such as fact from opinion.

Scoring Notes:

Article: More details; more examples; Provides main ideas about forest benefits and supporting details

Poster: Very easy to read because of pictures and labels; provides main ideas about forest benefits so is very easy to understand



Scoring Notes: Forest Benefits



2 Point response:

- Names either the article or the poster as being the most beneficial in understanding forest benefits
- Provides two reasons with examples

1 Point response:

- Names either the article or the poster as being the most beneficial in understanding forest benefits
- Provides only one reason with or without examples

0 Point response:

- No stand is taken
- Takes a stand but provides no reasons

Sample 2-point responses:

Example #1:

The most helpful to me was the article because it told examples of how we use wood. Like tree sap is used for syrup, chewing gum, and rubber. It also told examples about furniture, foods, recreation, products, healthy environment, and wildlife habitats that are made of wood.

Example #2

In my opinion, the poster is the most helpful way to understand the benefits of a forest. You do not have to find them in the article, and it makes the work much easier. For example, if you wanted to find the recreations of the forest, you would look quickly in the poster and you would find a lot of things and find them quick!

Example #3:

I think that the article is more better at letting me understand forest benefits because the article gives me more information about what can be made out of wood like toothpaste and fabric, what helps us with our daily lives like medicine and foods, and what we can do to relax and have fun like camping.

Example #4:

The one that mostly helped me is the article because I can give more information about our forest benefits. For an example, it talks about trees sap. The sap is a material that helps us to paint houses. The article also gives me other different facts. Some tell me that forest clean our air so if there was not any clean air, we would not be able to breath and survive.



Scoring Notes: Forest Benefits



Sample 1-point responses:

Example #1:

The article because it gives you more information than the poster. (no specific examples are provided. What information specifically?)

Example #2:

The poster because the poster shows pictures of the information. (Lacks specific examples to support the reason provided.)

Sample 0-point responses:

Example #1:

I think both are important because trees give us oxygen and give us pure and clean water. (Does not take a stand)

Example #2:

The forest is a world of things that help us. For example, we need wood to make toothpaste. (Off Topic)

3. Defend this statement using information from two of the sources. Be sure to name your sources. *A forest is worth keeping.* (Claim 4, Target 4)

Use Evidence Rubric (Claim 4, Target 4)

2	The response gives sufficient evidence of the ability to cite evidence to support arguments and/or ideas.
1	The response gives limited evidence of the ability to cite evidence to support arguments and/or ideas.
0	A response gets no credit if it provides no evidence of the ability to cite evidence to support arguments and/or ideas.

Scoring Notes:

Article: Forest Products; recreation; healthy environment; fish and wildlife habitats (Tells the story with mostly words)

Poster: Forest Products; recreation; healthy environment; fish and wildlife habitats (Tells the story with mostly pictures)

Wood Products Video: Shows the wide variety of products we get from a forest including lumber, boxes, furniture, and paper. We also get product we eat like ice cream and toothpaste. Trees are very strong, and we use almost the entire tree to get forest products.



Scoring Notes: Forest Benefits



Clean Water Video: The forest acts like a giant filter to help to keep our fresh water clean from pollutants. We only have a very small amount of water that we can drink (3%) so we need to find ways to keep this water supply healthy.

2 Point response:

- Defends the statement.
- Uses specific examples from at least two of the four sources.
 - Names the sources.

1 Point Response:

- Defends the statement.
- Uses specific examples from only one source.
 - May or may not name the sources.

0 Point Response:

- Agrees with the statement but provides no supporting evidence from any of the sources
- Off Topic

Sample 2-point responses:

Example #1:

A forest is worth keeping because it has a lot of benefits like it keeps our water clean. (Water Video) Wood is a benefit of forests. Wood helps us make houses, skateboards, etc. Wood is also in toothpaste and ice cream. (Wood Video) Forests include many different habitats or places to live and they provide **PLANTS** and animals with food, shelter, water, and space. (Article) Now you know forests are special places and provide us with many benefits. We all need forests!

Example #2:

A forest is worth keeping. In the article “We all Need Forests”, plants give off oxygen for us and other animals to breathe! Forests include many different habitats or places to live. Also, houses, furniture, doors, picture frames, and so many other items are made from wood. In the video about water, it said that the forests capture water and act like a giant filter to help to keep the water we drink clean.



Scoring Notes: Forest Benefits



Example #3:

From the source “Fast Break Water,” the forest is worth keeping because the soil under the trees is like a filter and since there is only 3% of water available for use out of 300 million trillion gallons of water, we need trees and the forests. From the source “Fast Break Forest Products, the forest is worth keeping because the wood from trees can be made into shelter, cardboard boxes, toothpaste, and much, much more. Trees are great for us. We cannot do without them!

Sample 1-point responses:

Example #1:

The article says the forest provides medicines and foods such as nuts, berries, and mushrooms. It also says the forest provides products for us to use every day. We need houses, furniture, doors, and picture frames and so many other items that are made from wood. (Only references one of the four sources. Does a great job with one source but needs to cite at least two of the four sources.)

Example #2:

From the sources Forest Fact Break Water, the forest is worth keeping because the soil under the trees is like a filter. It is like a water filter in your refrigerator, but this filter is not handmade. It is made by nature. (Great response for one source but needs to cite information from two of the sources for full credit.)

Example #3

I support this statement by looking at the video saying trees work pretty hard for us giving pure water, clean air, giving oxygen and when there is a lot of trees around they help us to get a lot of rain. (Mixes information from a variety of the sources without naming all the sources. Some inaccurate information.)

Sample 0-point responses:

Example #1:

Forests are great! (No specific evidence from any source to support why forests are worth keeping.)

Example #2:

We need water and wood and we should keep the forest safe. (No specific evidence from any source.)

Example #3:

Forest products is houses, paper. Recreation is hiking, camping, skiing, snow shoeing. (Random facts with no reference to sources or to defending the statement “A forest is worth keeping.”)

**Informative / Explanatory
Performance Task Writing Rubric (Grades 3-5)**

Score	4	3	2	1
Statement of Purpose/Focus	The response is fully sustained and consistently and purposefully focused: <ul style="list-style-type: none"> controlling or main idea of a topic clearly communicated, and the focus is strongly maintained for the purpose, audience, and task 	The response is adequately sustained and generally focused: <ul style="list-style-type: none"> controlling or main idea of a topic is clear, and the focus is mostly maintained for the purpose, audience, and task 	The response is somewhat sustained and have a minor drift in focus: <ul style="list-style-type: none"> controlling or main idea may be somewhat unclear, or the focus may be insufficiently sustained for the purpose, audience, and task 	The response has little or no discernable organizational structure: <ul style="list-style-type: none"> controlling or main idea may be confusing or ambiguous; response may be too brief or the focus may drift from the purpose, audience, and task
Organization	The response has a clear and effective organizational structure creating unity and completeness: <ul style="list-style-type: none"> consistent use of a variety of transitional strategies to clarify the relationship between and among ideas effective introduction and conclusion logical progression of ideas from beginning to end; strong connections among ideas with some syntactic variety 	The response has an evident organizational structure and a sense of completeness, though there may be minor flaws and some ideas may be loosely connected: <ul style="list-style-type: none"> adequate use of transitional strategies with some variety to clarify the relationship between and among ideas adequate introduction and conclusion progression of ideas from beginning to end; strong connections among ideas 	The response has an inconsistent organizational structure, and flaws are evident: <ul style="list-style-type: none"> inconsistent use of transitional strategies and/or little variety introduction and conclusion, if present, may be weak uneven progression of ideas from beginning to end; and/or formulaic; inconsistent or unclear connections between and among ideas 	The response may be related to the topic but may provide little or no focus: <ul style="list-style-type: none"> few or no transitional strategies are evident introduction and/or conclusion may be missing frequent extraneous ideas may be evident; ideas may be randomly ordered or have an unclear progression
Elaboration of Evidence	The response provides thorough and convincing support/evidence for the controlling idea and supporting idea(s) that includes the effective use of sources, facts, and details: <ul style="list-style-type: none"> comprehensive evidence from sources is integrated; references are relevant and specific effective use of a variety of elaborative techniques* 	The response provides adequate support/evidence for the controlling idea and supporting idea(s) that includes the use of sources, facts, and details: <ul style="list-style-type: none"> adequate evidence from sources is integrated, some references may be general adequate use of some elaborative techniques* 	The response provides uneven, cursory support/evidence for the controlling idea and supporting idea(s) that includes partial or uneven use of sources, facts, and details: <ul style="list-style-type: none"> some evidence from sources may be weakly integrated, imprecise, or repetitive; references may be vague weak or uneven use of elaborative techniques*; development may consist primarily of source summary 	The response provides minimal support/evidence for the controlling idea and supporting idea(s) that includes little or no use of sources, facts, and details: <ul style="list-style-type: none"> evidence from the source material is minimal or irrelevant; references may be absent or incorrectly used minimal, if any, use of elaborative techniques*
Language	The response clearly and effectively expresses ideas, using precise language: <ul style="list-style-type: none"> vocabulary is clearly appropriate for the audience and purpose effective, appropriate style enhances content 	The response adequately elaborates ideas, employing a mix of precise and more general language: <ul style="list-style-type: none"> vocabulary is generally appropriate for the audience and purpose generally appropriate style is evident 	The response expresses ideas unevenly, using simplistic language: <ul style="list-style-type: none"> vocabulary use is uneven or somewhat ineffective for the audience and purpose inconsistent or weak attempt to create appropriate style 	The response is vague, lacks clarity, or is confusing: <ul style="list-style-type: none"> vocabulary is limited or ineffective for the audience and purpose little or no evidence of appropriate style

Score	2	1	0
Conventions	The response demonstrates an adequate command of conventions: <ul style="list-style-type: none"> adequate use of correct sentence formation, punctuation, capitalization, grammar usage, and spelling 	The response demonstrates a partial command of conventions: <ul style="list-style-type: none"> limited use of correct sentence formation, punctuation, capitalization, grammar usage, and spelling 	The response demonstrates little or no command of conventions: <ul style="list-style-type: none"> infrequent use of correct sentence formation, punctuation, capitalization, grammar usage, and spelling

NS Unintelligible, in a language other than English, off-topic, copied text. (Off-purpose writing will still receive a score in Conventions.)

*Elaborative techniques may include the use of personal experiences that support the controlling idea.