



Informative Writing Performance Task

Teacher Version

| | | | |
|--------------|----------|----------------------|-------------------------|
| Grade | 4 | Title/Subject | Ocean Ecosystems |
|--------------|----------|----------------------|-------------------------|

The following sections are included in this Teacher Version:

- **Overview**
- **Process: Day 1, 2 and 3**
- **Teacher Directions for Scoring Rubric**
- **Student Instructions and Articles**

Overview

On Day 1 students will engage in a video viewing and a shared reading and note-taking activity using informative texts to learn about Ocean Ecosystems. After the group activity, they will be directed to plan their writing. On Day 2 they will draft an informative writing piece about Ocean Ecosystems utilizing the information they read in the texts as well as notes they took during the shared lesson. On Day 3 students will finish their drafts, revise and edit their writing, and if they choose, produce a final copy.

Process

DAY 1: Video Viewing, Shared Reading, and Note-taking: Up to 60 minutes

Step 1: Connect to Background Knowledge ~ 5 minutes

Provide an introduction to the classroom activity by indicating that after this activity, students will be writing an essay focused on the topic of Ocean Ecosystems. Ask students to share orally what they might know about Ocean Ecosystems. Possible questions could include:

"What is an ocean? What do oceans look like? What animals live in oceans? What do these animals eat? What else do you know about oceans?"

For active engagement encourage pair or group sharing, before sharing out with whole group.

Step 2: Accessing the Information ~ 35 minutes

1. Explain: *"Now we will watch a video and read two sources about Ocean Ecosystems."* Watch the video and read both sources, pointing out important facts and features (pictures, captions, etc.) Use ONLY the sources provided in this prompt packet.
2. Lead a whole class discussion about the sources, during which students generate a key word list, list the "gist" next to each paragraph, highlight important words/phrases, or participate in pictorial narrative input (large teacher-created drawing with labels).
3. Think-Pair-Share: *"Tell your partner what you learned about Ocean Ecosystems."* Make sure both partners have time to share with each other.

Have the class watch this video clip:



<http://video.nationalgeographic.com/video/why-ocean-matters>

- about 5 minutes

https://www.youtube.com/watch?v=rTXzGuQ2MqE&list=PLIi4e7DUtEHmf359DE_RbKpMh2G7DlbFu

about 6 minutes



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Step 3: Clarify Expectations for the Writing Task:

Explain: *“Now you will have a chance to look at the sources, plan, and write a draft to explain to me what you learned about Ocean Ecosystems. Tomorrow you will have a chance to write a draft and the next day you will revise and edit your work to write a final revision.”*

Review the student directions and checklist for the writing assignment and give each student a sheet of blank paper for planning and lined paper for writing.

Step 4: Planning for Writing: ~ 20 minutes

Tell students to begin planning their writing on the blank sheet of paper. You can remind them of planning strategies you have taught in your classroom such as outlining, lists, webs, or drawing. Don't provide a plan yourself just remind them of the strategies for planning.

Collect all materials from Day 1 after the 60 minutes total is complete.

DAY 2: Writing Up to 45 minutes

1. Allow students to access the sources, their notes, the classroom activity charts/key word lists, and their draft.
2. Students read the prompt, review their writing plan and draft their essays.
3. Remind students when 10 minutes remain to re-read their writing and check for missing information, or confusing sentences.
4. Collect all student writing materials.

DAY 3: Revising and Editing Up to 45 minutes

1. Students edit and write final revision of essay. Provide additional lined paper for revisions and final copies as needed. Students may have time to create a final copy, or may revise and edit from their draft as time allows.
2. At teacher discretion, students may use word processing for draft or revision as long as spelling and grammar correction tools have been disabled.
3. Inform students when 10 minutes remain.
4. Collect all student writing materials.

Teacher Directions for Scoring Rubric:

Student responses to Part 2 will be scored using the Common Core based Informative/Explanatory Writing Rubric. A score will be given in each of the three rubric categories. For grades 3-6, student **revisions** will be scored.

Each student's final scores should indicate a 1, 2, 3, or 4 in each of the three categories (no partial scores such as 2.5, 3+, etc.). A score of 3 or 4 in each category is considered a passing score and a total of 8 points or higher out of 12 total is considered a passing overall score.

The score for each of the three categories will be entered for each student into assessment log.



Informative Writing Performance Task

| Grade | | 4 | | Informative/Explanatory Writing Rubric | |
|-------------------|--|--|---|---|--|
| Level | INFORMATIVE/EXPLANATORY WRITING | | LANGUAGE CONVENTIONS | | WITH GUIDANCE and SUPPORT FROM ADULTS |
| 4 Exceeds | <ul style="list-style-type: none"> <input type="checkbox"/> Meets all expectations set forth in 3 <input type="checkbox"/> Document is well organized and connected with smooth transitions <input type="checkbox"/> Both introduction and conclusion are clear and well stated <input type="checkbox"/> Facts are well organized with appropriate details | | <p>Mostly correct use of language conventions, and some above grade level skills used, for example:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Meets all expectations set forth in 3 <input type="checkbox"/> Uses underlining, quotation marks, or italics for titles of works <input type="checkbox"/> Recognizes and corrects inappropriate shifts in verb tense. | | <p>Guidance & Support</p> <p>Level of guidance and support from adults before writing:</p> <p>Check off what was done before the student wrote the piece being scored.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Discussion <input type="checkbox"/> Read aloud or shared reading <input type="checkbox"/> Drawing <input type="checkbox"/> Vocabulary word bank <input type="checkbox"/> Shared or interactive writing <input type="checkbox"/> Graphic organizer <input type="checkbox"/> Language frames |
| | 3 Meets | <p>INFORMATIVE/EXPLANATORY WRITING (W2)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Introduces topic clearly (W1a) <input type="checkbox"/> Groups related information in paragraphs and sections (W2a) <input type="checkbox"/> Includes formatting (headings, etc.), illustrations, and multimedia when they aid comprehension (W2a) <input type="checkbox"/> Develops topic with facts, definitions, concrete details, quotations, or other information/examples related to the topic (W2b) <input type="checkbox"/> Links ideas within categories of information using words/phrases such <i>another, for example, also, because</i> (W2c) <input type="checkbox"/> Uses precise language and domain-specific vocabulary to inform/explain the topic (W2d) <input type="checkbox"/> Provides a concluding statement or section related to the information/explanation presented (W2e) <hr/> <p>WRITING PROCESS (W4-W8)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Uses clear and coherent writing in multi-paragraph texts that is appropriate to task, purpose, and audience (W4) <input type="checkbox"/> WGASFA* Develops/strengthens writing by planning, revising, editing (W5) <input type="checkbox"/> WGASFA* Uses a variety of digital tools to write and publish writing (W6) <input type="checkbox"/> WGASFA* Can keyboard/ type a minimum of one page in a single sitting (W6) <input type="checkbox"/> Takes notes, paraphrases, and categorizes information, and provides a list of sources (W8) <input type="checkbox"/> Draws evidence from text (W9) | | <p>Adequate use of correct sentence formation, punctuation, capitalization, grammar usage and spelling for grade level, for example:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Produces complete sentences, recognizing and correcting inappropriate fragments and run-ons (L1f) <input type="checkbox"/> Correctly uses frequently confused words (e.g., <i>to, too, two; there, their</i>) (L1g) <input type="checkbox"/> Writes fluidly and legibly in cursive or joined italics (L1h) <input type="checkbox"/> Uses correct capitalization (L2a) <input type="checkbox"/> Uses commas and quotation marks to mark direct speech and quotations from a text (L2b) <input type="checkbox"/> Uses a comma before a coordinating conjunction in a compound sentence. (L2c) <input type="checkbox"/> Spells grade-appropriate words correctly, consulting references as needed. (L2d) <input type="checkbox"/> Chooses words and phrases to convey ideas precisely (L3) <input type="checkbox"/> Chooses punctuation for effect (L3) | |
| 2 Almost Meets | | <ul style="list-style-type: none"> <input type="checkbox"/> Has clear topic but some facts are not well-developed <input type="checkbox"/> May not write multi-paragraphs <input type="checkbox"/> Has limited planning for writing <input type="checkbox"/> Uses some linking words/phrases <input type="checkbox"/> Has informal vocabulary or is not aligned with topic | | <p>Limited use of correct sentence formation, punctuation, capitalization, grammar usage and spelling for grade level, for example:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Uses some punctuation correctly <input type="checkbox"/> Uses some sentence variety correctly <input type="checkbox"/> Spells most words correctly | |
| | 1 Does Not Meet | <ul style="list-style-type: none"> <input type="checkbox"/> Provides few details or facts <input type="checkbox"/> Writes only single paragraph <input type="checkbox"/> Has no planning for writing <input type="checkbox"/> Copies sentences directly from text in articles in prompt | | <p>Infrequent use of correct sentence formation, punctuation, capitalization, grammar usage and spelling for grade level, for example:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Has many words spelled incorrectly <input type="checkbox"/> Has many errors in capitalization <input type="checkbox"/> Writes few complete sentences or only simple sentences <input type="checkbox"/> Has many errors or is missing punctuation | |

• **WGASFA:** “with guidance and support from adults”

This rubric was adapted from rubrics at sbusd.org and information from Smarter Balanced Assessments (www.smarterbalanced.org) using the California Common Core Standards at www.cde.ca.gov.





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| | | |
|-----------------|---|------------------|
| Student Version | | |
| Grade | 4 | Title/Subject |
| | | Ocean Ecosystems |

Student Prompt:

As you think about what you just read, write a multi-paragraph essay to explain to your teacher what you learned about Ocean Ecosystems.



Writing Tips:

- Be sure to introduce the topic and group related facts together.
- Use facts from the two sources to develop your ideas.
- You may want to include definitions and illustrations to help your teacher clearly understand what you learned.
- End with a conclusion.

Reminders:

- You can look at the sources and your key word list to help you with your writing.
- You might begin by making a plan or drawing a graphic organizer help you with your thinking.
- Do not copy sentences from the sources.

Step 1: Plan

Plan: review the texts and your notes

- Make a plan on the blank paper for your writing.

Step 2: Draft

- Write a topic sentence with your main idea.
- Write sentences with several facts, definitions, and concrete details to develop points.
- Group information together as you write.
- Use linking words such as *also, another, and, more, but, another, for example, because* to connect ideas.
- Use precise language and domain-specific vocabulary to inform or explain your topic.
- Write a concluding sentence or paragraph.
- Provide a list of sources.



Informative Writing Performance Task

| Student Version | | | |
|-----------------|---|---------------|------------------|
| Grade | 4 | Title/Subject | Ocean Ecosystems |

Step 3: Reread and Revise

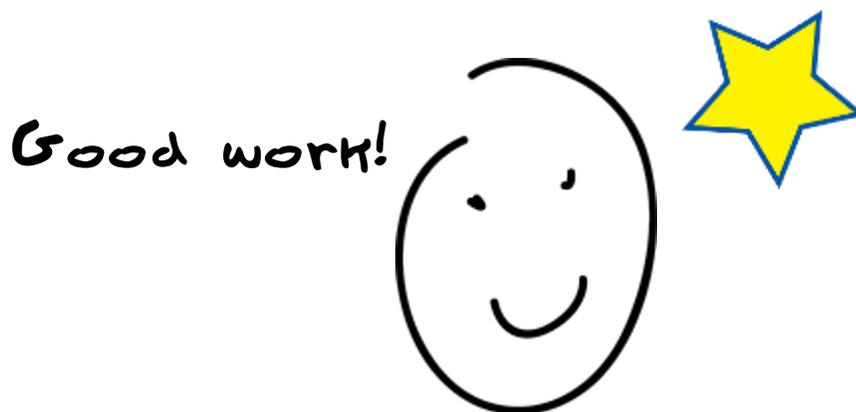
- Does it make sense?
- Have you used science words from the text?
- Is there missing information you want to add?

Step 4: Edit

- Capitals at the beginning of sentences
- Capitals for proper nouns
- Punctuation: (end points) **. ! ?**
- Commas **,** quotation marks **" "**
- Spelling
- Complete sentences (avoid run-ons and fragments)

Step 5: Final Draft

- Recopy and fix your mistakes.





Informative Writing Performance Task

| Student Reading Text | | | |
|----------------------|---|---------------|----------------------------|
| Grade | 4 | Title/Subject | Ocean Ecosystems Article 1 |

http://www.earthskids.com/ek_science-marine.htm

(This article has been reduced)

EARTH'S KIDS

Educational & support resources for parents, teachers, and kids!



Oceans and Marine Life Science

Scientists believe that life on Earth began in the ocean, approximately 4 billion years ago. And in fact, it was only about 500 million years ago that life emerged from the ocean onto the land. That means that ocean life has existed 8 times longer. So no matter how unimaginably long it was since the first creatures crawled out on land... to the age of the dinosaurs... to our time, all of that is but a small slice of the pie compared to the vast span of time in which the oceans have nurtured life. And even today, although living things now exist on nearly every part of the Earth's surface, in so many different forms, the ocean continues to be critically important to life on Earth.

To begin with the ocean covers 70% of the Earth's surface and is still the home of the majority of Earth's living creatures. Secondly, the oceans are a vital part of the water cycle that brings rain to our crops and forests -- and drinking water to our cities. And the ocean also produces much of the oxygen upon which all human beings, and animals, depend. Finally, the oceans provide fish and shellfish and other vital resources upon which humans depend, including jobs for millions of people.

But the ocean's role doesn't end there. Because it's so vast and deep the ocean absorbs much of the heat and light that comes from the sun. In fact it is so deep (average depth about 13,000 feet, with a maximum depth of 36,198 feet), that sunlight can't even reach the ocean floor in most places. The sunlight, and its warmth, seems to simply fade away as you go deeper into the ocean. But what really happens is a bit more complicated. In actual fact, there are currents at work within the ocean, causing the warm and cold water to move in complex patterns that control how the heat from the sun gets redistributed around the planet. And these warm and cold ocean currents actually help drive our weather patterns.

Here's another fascinating ocean fact: the vast majority of ocean creatures live in the waters of the continental shelves, in the band of shallower water that surrounds each continent (before the drop off into the vastly deeper waters of the open ocean). And yet a single study of a single small section of the deep ocean yielded 898 species -- half of them previously undiscovered.

And yet as we said, much of the life in the seas exists relatively close to land. Which means it is also close to human beings and their pollution -- including run-off from dirty city drains and from farmlands that use pesticides and artificial fertilizers. All of this disrupts breeding cycles and food webs and brings the delicate balance upon which our fisheries depend into jeopardy.



Informative Writing Performance Task

Student Reading Text

| | | | |
|--------------|----------|----------------------|-----------------------------------|
| Grade | 4 | Title/Subject | Ocean Ecosystems Article 2 |
|--------------|----------|----------------------|-----------------------------------|

<http://www.ck12.org/earth-science/Ocean-Ecosystems/lesson/Ocean-Ecosystems/>

This article has been modified slightly for this writing performance task.

Ocean Ecosystems

The Intertidal Zone

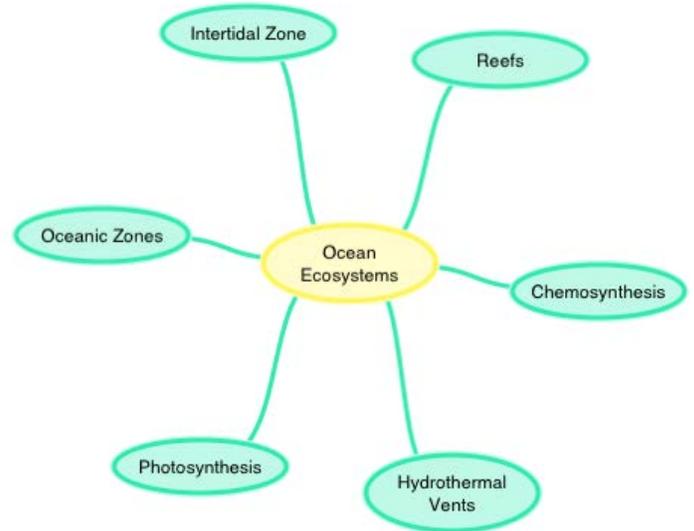
Conditions in the intertidal zone change rapidly as water covers and uncovers the region and waves pound on the [rocks](#). A great abundance of life is found in the intertidal zone ([Figure below](#)). High [energy](#) waves hit the organisms that live in this zone, so they must be adapted to pounding waves and exposure to air during low [tides](#). Hard shells protect from waves and also protect against drying out when the animal is above water. Strong attachments keep the animals anchored to the rock.



Organisms in a tide pool include sea stars and sea urchins.

In a tide pool, as in the photo, what organisms are found where and what specific adaptations do they have to that zone? The mussels on the top left have hard shells for protection and to prevent drying because they are often not covered by water. The sea anemones in the lower right are more often submerged and have strong attachments but

can close during low [tides](#). Many young organisms get their start in estuaries and so they must be adapted to rapid shifts in salinity.



Reefs

Corals and other animals deposit calcium carbonate to create rock **reefs** near the shore. Coral reefs are the “rainforests of the oceans,” with a tremendous amount of species diversity ([Figure →](#)).

Coral reefs are among the most densely inhabited and diverse areas on the globe.

Reefs can form interesting shapes in the oceans. Remember that hot spots create volcanoes on the [seafloor](#). If these volcanoes rise above sea level to become islands, and if they occur in tropical waters, coral reefs will form on them. Since the volcanoes are cones, the reef forms in a circle around the volcano. As the volcano comes off the hot spot, the crust cools. The volcano subsides and then begins to erode away ([Figure →](#)). In this image of Maupiti Island in the South Pacific, the remnants of the volcano are surrounded by the circular reef. Eventually, all that is left is a reef island called an atoll. A lagoon is found inside the reef.



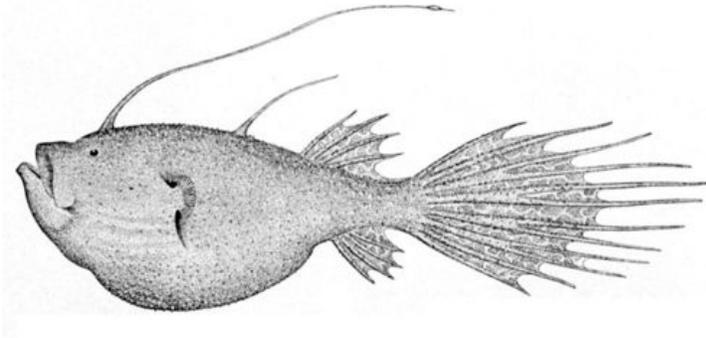


Informative Writing Performance Task

Oceanic Zone

The open ocean is a vast area. Food either washes down from the land or is created by photosynthesizing plankton. Zooplankton and larger animals feed on the phytoplankton and on each other. Larger animals such as whales and giant groupers may live their entire lives in the open water.

How do [fish](#) survive in the deepest ocean? The few species that live in the greatest depths are very specialized ([Figure below](#)). Since it's rare to find a meal, the [fish](#) use very little [energy](#); they move very little, breathe slowly, have minimal bone structure and a slow metabolism. These fish are very small. To maximize the chance of getting a meal, some species may have jaws that unhinge to accept a larger fish or backward-folding teeth to keep prey from escaping.



An 1896 drawing of a deep sea angler fish with a bioluminescent "lure" to attract prey.

Hydrothermal Vents

Hydrothermal vents are among the most unusual [ecosystems](#) on Earth since they are dependent on chemosynthetic organisms at the base of the food web. At mid-ocean ridges at **hydrothermal vents** , bacteria that use **chemosynthesis** for food [energy](#) are the base of a unique ecosystem ([Figure below](#)). This ecosystem is entirely separate from the [photosynthesis](#) at the surface. Shrimp, clams, [fish](#), and giant tube worms have been found in these extreme places.



Tube worms

Giant tube worms found at hydrothermal vents get food from the chemosynthetic bacteria that live within them. The bacteria provide food; the worms provide shelter.

Summary

- In the ocean, phytoplankton photosynthesize as the main food source. They are eaten by zooplankton and other larger animals.
- Organisms that live in the deepest ocean have amazing adaptations to the exceptionally harsh conditions, such as unhinging jaws, backward-folding teeth, or a bioluminescent lure.
- A hydrothermal vent ecosystem has [chemosynthesis](#) as its food source. The ecosystem is independent of photosynthesis at the surface.