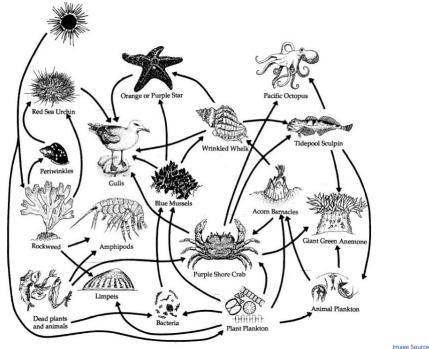


Sea Floor Graveyard - Student Worksheet #4 Hypoxia - Effects on the Ecosystem

Explain hypoxia and ecosystem impacts.

1. Examine the diagram below and answer the questions.



- a. Define the terms biotic and abiotic. _
- b. The diagram shows the sun an abiotic factor. Name one additional abiotic factor that would be present in the ecosystem depicted in the diagram.
- c. Predict what you think might happen to the ecosystem if the Purple Shore Crab experienced an unexpected die-off.
- d. Do you think the Gulls might be impacted if there was a hypoxia event that affected this ecosystem? Explain your reasoning.
- e. Explain how the data collected by OOI helps us understand this ecosystem better.

2. Watch this video about <u>hypoxia and dead zones</u> on the Oregon Coast. Describe how upwelling can contribute to dead zones forming.

- 3. Provide one piece of evidence from the above video that supports this claim: Dead zone events were not always happening on the Oregon coast.
- 4. Read about <u>Hypoxia off the Pacific Northwest Coast</u> and explain what scientists believe is causing the hypoxia events. Support your answer with evidence from the text.

5. Demonstrate your learning. Create a scene that depicts the cause and effects of a hypoxia event on the ecosystem. Use words and images to help show your understanding.