

Exploring Marine Sediments at the OSU Marine and Geology Repository

PART 1: (from watching IODP video)

Question 1

List **two** things that you learned about the PROCESS of science:

Question 2

The video highlights the work of scientists studying past climate as recorded in ocean sediments. List **one** thing that you learned about past climate from this video.

PART 2: (from Tour of Four Oregon Cores)

Question 3

(Core 1: Y6705-13PC)

Think about where the iceberg transporting the debris found in this core came from. What processes brought the ice-rafted debris from Northern ice sheets down to the location it was found at? What time period do you think this sediment represents?

Question 4

(Core 2: EW9504-16PC)

How can turbidites be used to predict events, such as the next "big one" in the Cascadia Subduction Zone?

Question 5

(Core 3: NTOR1009-1PU)

What processes may have caused the layering of sand, silt, and organic material?

Question 6

(Core 4: FLOR1308-1UW)

Where is Mt Mazama located in relation to where this core was collected?

Question 7

(Core 4: FLOR1308-1UW)

How did volcanic ash from Mt Mazama appear in a core from a lake in Eastern Oregon?

PART 3: (from your observations of 3 sediment cores)**Question 8**

Complete the table below

	CORE A	CORE B	CORE C
Water Depth (m)	4337	544	4883
Sediment Description (color? texture? is it uniform over the whole core?)			
Do you think this sediment is mostly terrigenous (land-derived) or biogenous (biologically-derived?)			

Question 9

Look at the map showing 5 sample locations. Based on your observations of the three sediment cores A, B and C, which location best fits each core? Why did you choose that location?

Core A was collected at site # _____. Explanation:

Core B was collected at site # _____. Explanation:

Core C was collected at site # _____. Explanation: