**Video: Oil’d**

List four common uses of oil:

1)

2)

3)

4)

**Where did the missing oil go? New study says some is sitting on the Gulf floor**

Science Daily

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After 200 million gallons of crude oil spilled into the Gulf of Mexico in April 2010, the government and BP cleanup crews mysteriously had trouble locating all of it.

Now, a new study led by Florida State University Professor of Oceanography Jeff Chanton finds that some 6 million to 10 million gallons are buried in the sediment on the Gulf floor, about 62 miles southeast of the Mississippi Delta.

"This is going to affect the Gulf for years to come," Chanton said. "Fish will likely ingest *(take into the body by swallowing or absorbing it)* contaminants because worms ingest the sediment, and fish eat the worms. It's a conduit *(a means of transmitting or distributing)* for contamination into the food web."

The article, published in the latest edition of the journal Environmental Science & Technology, details how oil caused particles in the Gulf to clump together and sink to the ocean floor.

1. How can oil in the Gulf floor affect the ocean ecosystem?

The researchers used carbon 14, a radioactive isotope as an inverse tracer to determine where oil might have settled on the floor. Oil does not have carbon 14, so sediment that contained oil would immediately stand out.

Chanton then collaborated with Tingting Zhao, associate professor of geography at Florida State, to use geographic information system mapping to create a map of the oiled sediment distribution on the sea floor.

Chanton said in the short term, the oil sinking to the sea floor might have seemed like a good thing because the water was clarified, and the oil was removed from the water. But, in the long term, it's a problem, he said.

Less oxygen exists on the sea floor relative to the water column, so the oiled particles are more likely to become hypoxic, meaning they experience less oxygen. Once that happens, it becomes much more difficult for bacteria to attack the oil and cause it to decompose, Chanton said.

2) Why might the oil at the bottom of the sea floor stay there for an extended period of time?

1. What do you think is the greatest advantage of oil? Why?

4) What do you think is the greatest disadvantage of oil? Why?

**\*\*\*Homework\*\*\*: Answer the following questions in your own words.**

1. What is peak oil?
2. Why should we be concerned with peak oil?

Source: