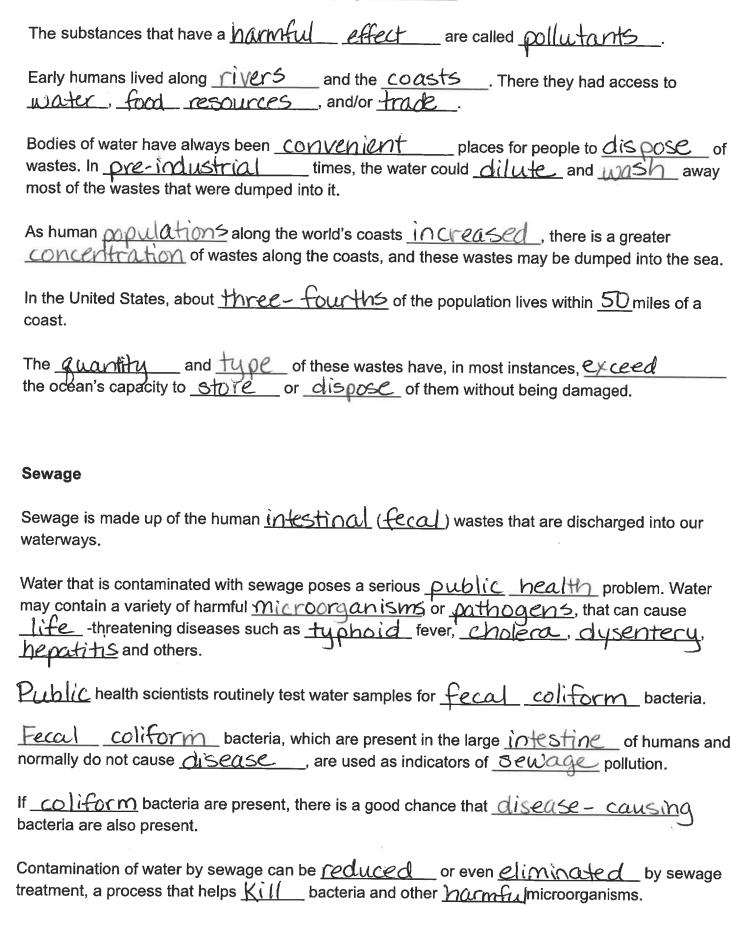
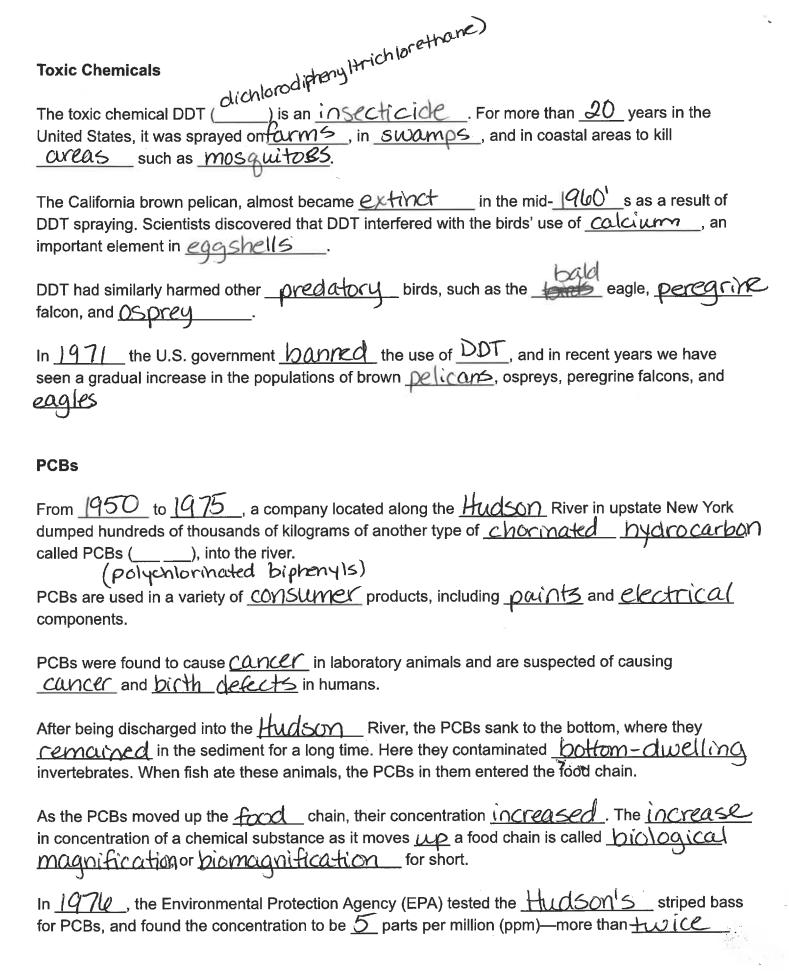
Chapter 22 Notes





the permissible limit. As a result, the commercial fishing of striped bass in the <u>Hudson</u> River was <u>5 topped</u> .
PCBs are no longer being dumped into the $\underline{\text{HudSM}}$ River. As a result, PCB levels in striped bass have dropped to less than $\underline{\mathcal{Q}}$ ppm. Second, now that the level of contamination has dropped, the striped bass fishing industry can start again in New York.
Mercury
In Minimata Bay, Japan, from the early 1950's to 1960, more than 100 people developed tremors, fell into comas, and died. Many more were stricken with a variety of nervous system ailments that included blindness, loss of hearing, insanity, and partysis. Doctors discovered that all victims had consumed large amounts of local fish and shellfish, they suspected that the seafood was contaminated.
When the seafood was examined, high levels of <u>Mercury</u> were found. The <u>Mercury</u> was traced to a nearby <u>industrical</u> plant that manufactured <u>plastics</u> and <u>chemicals</u> . The factory's <u>liquid</u> wastes, which contained mercury, were being <u>discharged</u> into the bay.
In the 1970's, the chemical plant in Minamata finally stopped discharging mercury. Unlike, the Hudson River PCB's, the sediments in Minamata Bay were still contaminated with mercury.
This spawned a global investigation into mercury in the food chan.
In 1972, Congress passed the Clean Water Act, which required industrial plants to install equipment that prevents mercury from being released directly into the water.
The U.S. government's Food and Drug Administration (FDA) set a limit of no more than <u>0.5</u> ppm of mercury in fish.
Oil Pollution
On occasion large oil agroundand spill crude or fuel oil into the ocean. Marine animals are covered in crude oil.
Birds will <u>freeze</u> to death, <u>drown</u> , or are <u>poisoned</u> by the oil as they try to <u>clean</u> themselves. <u>Fish</u> , too, are covered with oil, which coats their <u>gills</u> and causes the fish to suffocate. Countless microscopic <u>plankton</u> , on which all other marine life <u>depends</u> are <u>Killed</u> by the oil.

oceanic oil pollution.
Nonpoint Source pollution is caused by rainfull or Snowmelt moving over and through the ground. As the runoff moves, it <u>Dicks</u> up and <u>Carries</u> away natural and <u>human-made</u> pollutants, finally depositing them into <u>lakes</u> , rivers, <u>wetlands</u> coastal waters and <u>Ground</u> waters.
For example, the discharge of <u>Consumer</u> products that contain oil into <u>Sewer</u> systems from homes, <u>businesses</u> , and motor vehicles is a major form of nonpoint source oil pollution.
Litter in the Ocean
Litter is <u>solid</u> waste or <u>quibage</u> . Most litter consists of <u>plastic</u> , <u>glass</u> , and <u>metal</u> —materials that do not undergo natural decay.
A nonbiogegradable waste such as plastic may remain in the environment for hundreds of years.
Some animals, particularly sea <u>furtles</u> that eat <u>jellyfish</u> , mistake <u>flastic</u> bags for food. The <u>furtles</u> then die—either of <u>starvation</u> (with plastic bags filling their <u>starvation</u> on the plastic bags)
Plastic <u>rings</u> from beverage <u>Sty-Docks</u> trap and choke <u>Fish</u> , <u>birds</u> , and other marine life when the animals swim, or put their heads in, through the rings and are unable to get them off their bodies.
And each year, thousands of fish, seabirds, turtles, and marine mammals die when they become entangled in plastic gill nets, fishing line, and huge drift nets that are discarded or lost at sea by fishing vessels
The <u>United States</u> throws away more trash than any other nation in the world. More than <u>150</u> million tons of solid wastes, or refuse, are thrown out each year—nearly <u>10</u> million tons of it into offshore waters.
Among this are millions of pieces of glass, metal, paper, plastic, and plastic form items are thrown into the ocean each year.

As devastating as these oil spills are to the environment, they account for only about $\underline{20}$ % of all

One method is incineration the disposal of solid wastes by combustion. There are some 200 large incinerators now operating in the United States. Although the burning of wastes can be used to generate energy, it is not a perfect to waste disposal. Many towns cannot afford to build an incinerator. Also, incineration of garbage can produce air pollutants The most ecologically sound method of handling solid wastes is recycling, reusing, and reducing our waste. What you can do: 1. Use a reusable wastr bottle and coffee mug!!! 2. Try to recycle everything you can and do so properly (containers washed, boxes broken down). 3. Compost all vegetable scraps. Making a compost is easier than you think. 4. Buy reusable was for groceries. Buy durable reusable containers for left was food

6. Support private industry, nonprofit research groups, environmen

groups, and government or wost that are all working to find ways to prevent,

or packing lunch to go.

5. Find biodegradable/compostable Snack bags

reduce, and cleanup debris in the marine environment.

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