



4: WHAT HAPPENS TO THE ENVIRONMENT?

Presenter: Jacky Lu

Which Parts?

Land



Water

Plants and Animals



Illustration by Jeff Grader / property of Delta Education

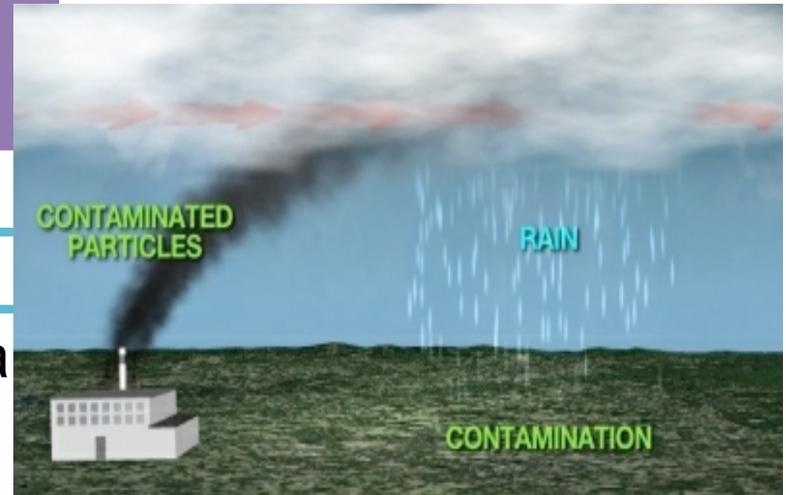
Land

Effects

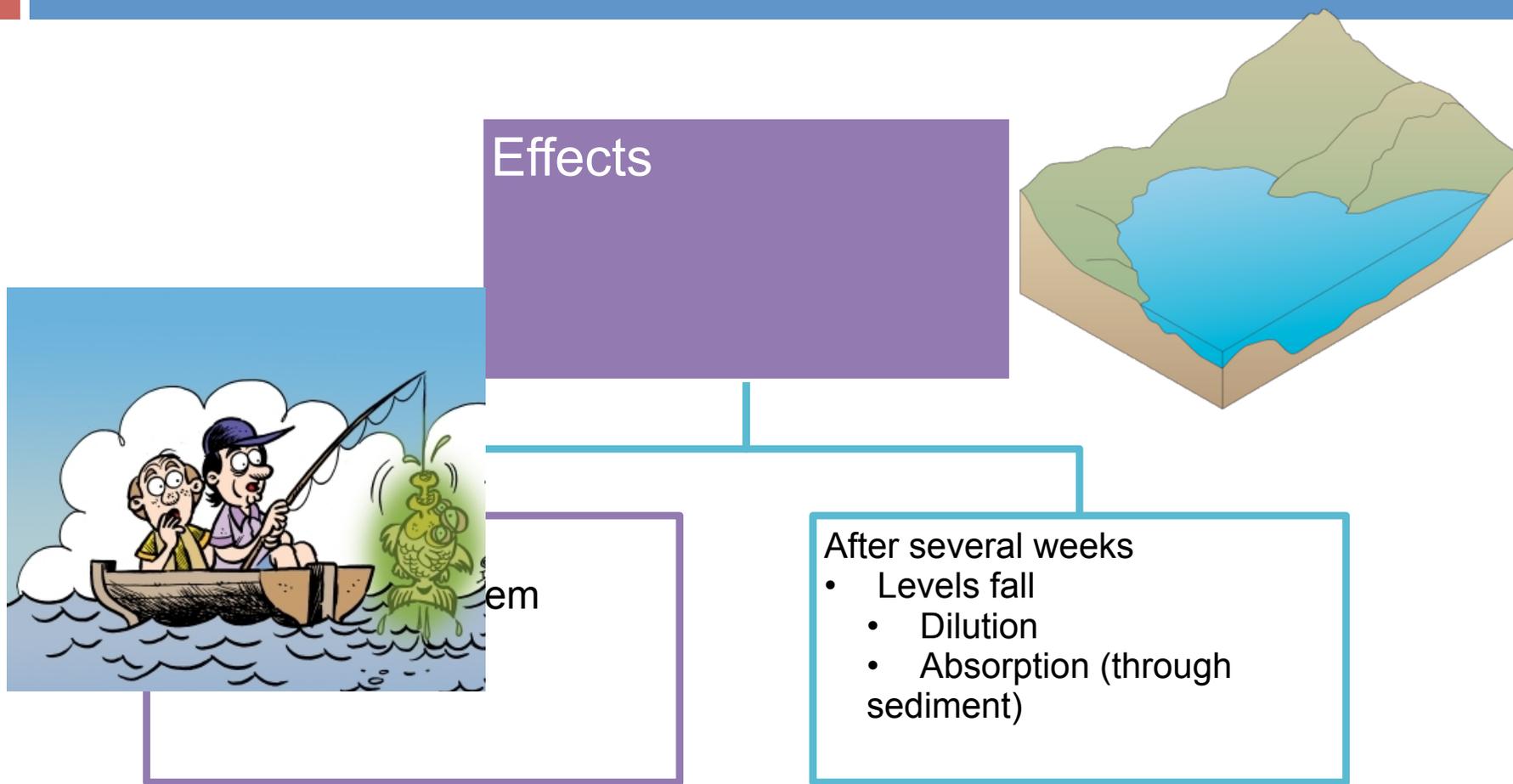


F

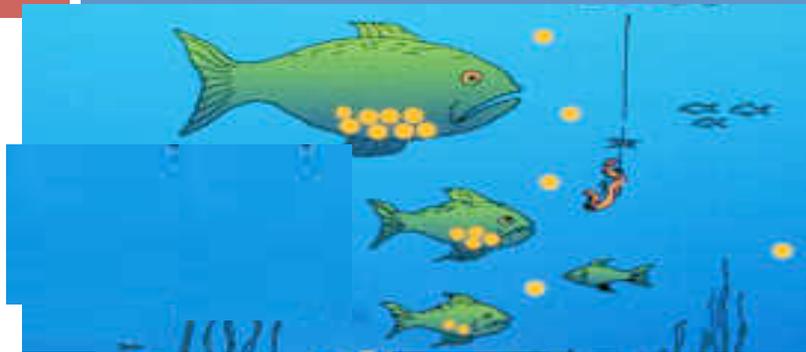
Conta



Water



Bioaccumulation



Plant
1
radioactive
particle



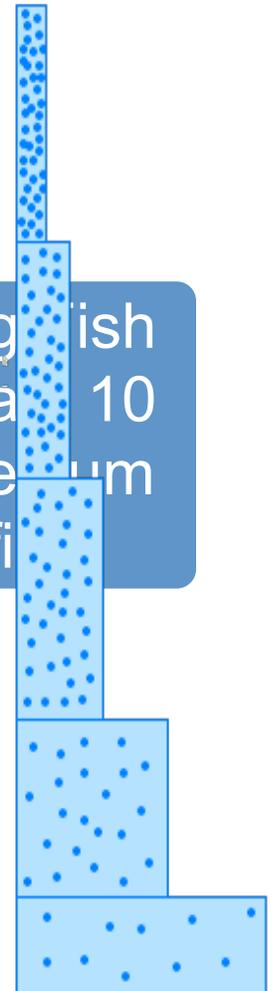
Small
Fish (eats
10 plant)
10



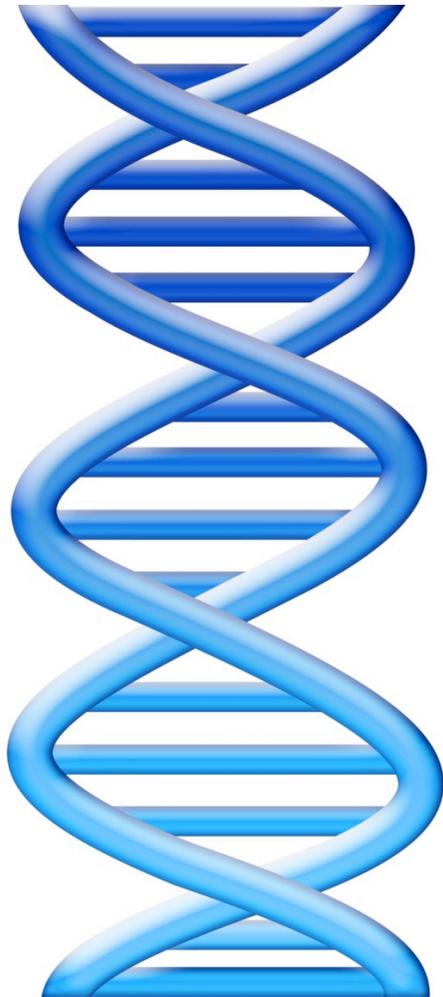
Medium
Fish (eats
10 small
fish) 100



Big fish
(eats 10
medium
fish)



Plants and Animals (In General)



Effects

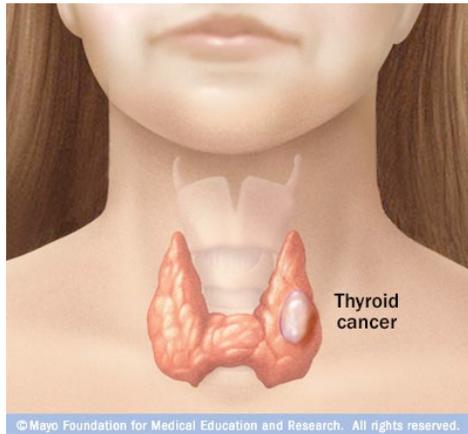
Genetic Effects

- Mutations



Mutated Sunflower
(Chernobyl)

Plants and Animals (In General)



Effects on Food

Contamination

- Radio Iodine causes Thyroid Cancer



Notable Examples

- ❑ Chernobyl
- ❑ Fukushima



Chernobyl

- “Red Forest”
 - ▣ Forest in the vicinity of Chernobyl
 - ▣ Pine Trees died and turned a brick red color
 - ▣ Still Recovering
 - ▣ Growth Distortions (from genetic damage)



Fukushima

- Radioactivity
 - ▣ Ocean
 - Lesser Effect
 - ▣ Air
 - Depends on Location
- Food
 - ▣ Restrictions



Works Cited

- Cuttler, Jerry M., and Myron Pollycove. "Nuclear Energy and Health: And the Benefits of Low-Dose Radiation Hormesis." *Dose-Response An International Journal*. U.S. National Library of Medicine, 10 Nov. 2008. Web. 26 May 2011.
- Fernandez, Marisa. "Scientific Facts on the Chernobyl Nuclear Accident." *GreenFacts*. GreenFacts, 12 Apr. 2006. Web. 26 May 2011.
- Izrael, Yuri A., and Tikhomirov F.A. Schleglov. "The Red Forest." *NuclearFlower*. N.p., 1990. Web. 26 May 2011.
- Narayan, Adi, Simeon Bennett, and Phoebe Sedgman. "Radiation's Effects on Food, Agriculture: Questions and Answers." *Bloomberg*. Bloomberg L.P., 18 Mar. 2011. Web. 26 May 2011.
- O'Grady, Kevin. "Fukushima Affect on Ocean Bigger than That of Chernobyl." *Environmental Protection*. 1105 Media Inc., 20 May 2011. Web. 26 May 2011.
- Sublette, Cary. "Section 5.0 Effects of Nuclear Explosions." *Nuclear Weapons Archive*. N.p., May 1997. Web. 26 May 2011.
- United States. Environmental Protection Agency. "Protecting People and the Environment." *Radiation Topics*. *U.S. Environmental Protection Agency Site*. EPA, 24 Mar. 2011. Web. 26 May 2011.

Questions?

