



Amoeba Sisters | Video Recap

NAME: _____

Amoeba Sisters Video Recap: *Biomagnification*

1. **Diagram it!** Illustrate the organisms listed above the labels below. Draw in arrows to show the direction of energy flow and fill in the consumer labels. You will use this diagram to answer several questions that follow.

5 Insects

2 Lizards

1 Predatory Bird

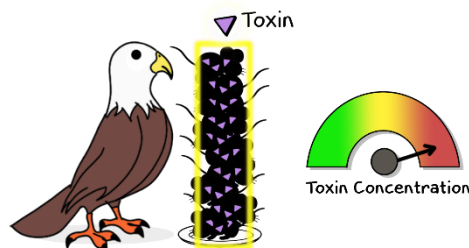
(Primary Consumer)

(_____ Consumer)

(_____ Consumer)

2. Consider a toxin (with the ability to **bioaccumulate**) used on the insects. If the insects are exposed to this toxin, explain how this toxin can also reach lizards and predatory birds based on the diagram you made from #1.

3. Which consumer level from question #1 would you predict to have the highest concentration of toxin? Why?



4. The video mentions that many toxins, such as many pesticides, do not necessarily stay isolated to the area where they are intended to be placed. Explain.





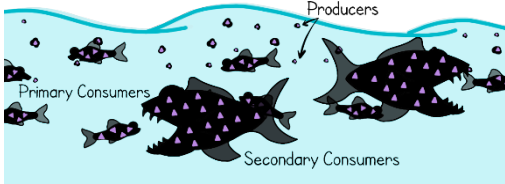
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Amoeba Sisters Video Recap: *Biomagnification* Apply It!

Mercury is a toxin that is of significant concern due to biomagnification. It can be found in varying concentrations in fish. Many health organizations provide guidelines for fish consumption and list average mercury concentrations in different fish species. Explain how mercury found in an aquatic environment can accumulate in biomagnification, and explain how limiting consumption of large predatory fish, such as swordfish, may be necessary for individuals trying to avoid high mercury concentrations.

5.



6. Your Ideas: Based on your understanding of **biomagnification**, what are some questions that one may want to consider if preparing to release a new pesticide?

