

APES Pesticides Assignment

Name _____

Fill in the table:

Definition	Examples – Details – etc.				
1. What are Pesticides?	<u>Insecticide</u>	<u>herbicide</u>	<u>fungicide</u>	<u>nematocide</u>	<u>rodenticide</u>
2. Benefits of pesticides					
3. Negative Effects of Pesticides					
4. Human Health Effects of Pesticides					
5. First generation pesticides			6. Second Generation Pesticides		
7. Broad-spectrum pesticide					
8. Narrow-spectrum pesticides					
9. Chlorinated Hydrocarbons					
10. Bioaccumulation			11. Biomagnification		
12. Organophosphates					
13. Carbamates					
14. Biopesticides					
15. Selective Herbicides			16. Broad Spectrum Herbicides		
17. Contact Herbicides	18. Systemic Herbicides				

19. Pesticide Treadmill	
20. Explain Genetic Resistance To Pesticides.	
21. Benefits of polyculture vs monoculture in reducing pesticide use	
22. Biological Control	
23. Genetic Engineering	How does Genetic Engineering create alternatives to Pesticides?
24. Irradiation	
25. FIFRA	
26. Food Quality Protection Act	
27. What is Integrated Pest Management?	

FRQ: The active ingredients in many pesticides are chemical compounds that kill organisms such as insects, molds, and weeds. Proponents claim that the use of pesticides improves crop yields and thus protects land and soil by reducing the conversion of forests and wetlands to cropland. Opponents of pesticide use claim that pesticides degrade water and soil quality and that other modern agricultural techniques and practices are responsible for the improved crop yields in recent years.

- (a) Design a laboratory experiment to determine whether or not a new pesticide (product X) is toxic to minnows, a type of small fish. For the experiment you design, be sure to do all of the following.
 - (i) State the hypothesis.
 - (ii) Describe the method you would use to test your hypothesis.
 - (iii) Identify the control.
 - (iv) Identify the dependent variable.
- (b) Describe experimental results that would lead you to reject your hypothesis in part (a)(i). (Be specific.)
- (c) One strategy for dealing with agricultural pests is integrated pest management (IPM).
 - (i) Describe IPM. As part of your description, include TWO specific pest-control approaches that are part of IPM.
 - (ii) Identify one environmental benefit of using IPM.
- (d) Describe TWO agricultural practices, other than those involving pest control, that increase crop yields.