

Name \_\_\_\_\_

Date \_\_\_\_\_ Period \_\_\_\_\_

# Multiple Alleles

## Human Blood Groups

1. What are the blood types possible in offspring if one parent is type AB and the other is O?  
\_\_\_\_\_
2. What are the blood types possible in offspring if the mother is type O and the father is type A and the father's father was type O? \_\_\_\_\_
3. John's father has genotype BO and his mother has phenotype O. What are the chances of John being phenotype B? \_\_\_\_\_

The next 3 problems deal with the following couple: Father O+    Mother AB-    Is it possible for them to have

4. a child with type AB- ?        \_\_\_\_\_ Yes        \_\_\_\_\_ No
5. a child with type O- ?        \_\_\_\_\_ Yes        \_\_\_\_\_ No
6. a child with type B+ ?        \_\_\_\_\_ Yes        \_\_\_\_\_ No

7. Three couples dropped off their newborn babies at the local *Soggy Diaper Nursery*. At the end of the day they were unable to recognize their children. Could you help these frustrated (and stupid!) parents get the correct child?

	<u>Child</u>	<u>The Children</u>
<p><u>Couple 1</u> AB O</p>	<p>_____</p>	<p>Clippo AB</p> <p>Zippo A</p> <p>Dippo O</p>
<p><u>Couple 2</u> O O</p>	<p>_____</p>	
<p><u>Couple 3</u> A B</p>	<p>_____</p>	

8. Oh, no! A fire at the local hospital has destroyed the records in the maternity ward. The four babies were saved, but now hospital officials have to determine which child goes with which parents. Of course, you want to help out don't you? (Do it anyway!)

	<u>Child</u>	<u>The Children</u>
<p><u>Couple 1</u> B Rh+ O Rh+</p>	<p>_____</p>	<p>Binky O Rh-</p> <p>Dinky A Rh+</p> <p>Stinky O Rh+</p> <p>Inky AB Rh-</p>
<p><u>Couple 2</u> AB Rh- A Rh-</p>	<p>_____</p>	
<p><u>Couple 3</u> AB Rh+ O Rh-</p>	<p>_____</p>	
<p><u>Couple 4</u> O Rh- O Rh-</p>	<p>_____</p>	