

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Practice: Blood Groups**

Use the following legend to represent the antigens present on the red blood cells:

A antigen



B antigen

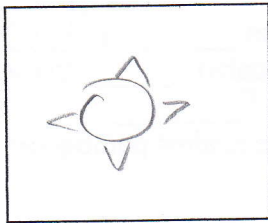


Rh antigen

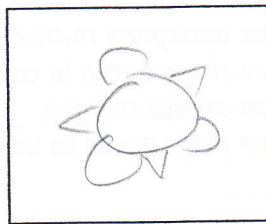


1. Using the above symbols, represent the following:

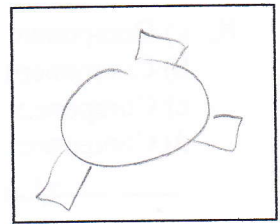
a) A red blood cell belonging to the group B-



b) A red blood cell belonging to group AB-

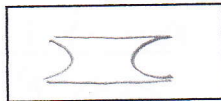


c) A red blood cell belonging to O+

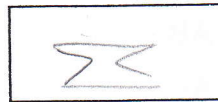


2. Draw symbols that could represent antibodies for the three symbols representing antigens above:

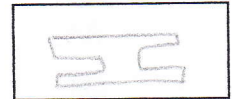
Anti-A:



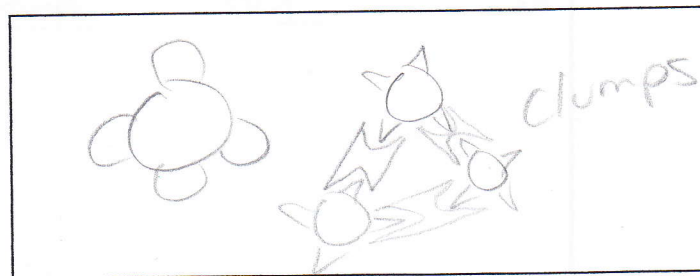
Anti-B:



Anti- Rh:



3. Models help us predict the behavior of matter. Draw what would happen if a person with A- blood type would receive blood from a person with B- blood:



4. What are the four blood types compatible with B+?

B+

B-

O+

O-

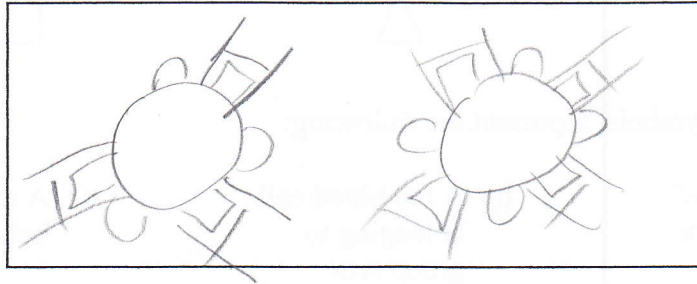
5. What blood type can we consider is the "Universal Donor"? Explain.

O- no antigens.

6. What blood type can we consider the "Universal Recipient"? Explain.

AB+ - all antigens - no antibodies

7. What would happen if someone with AB- blood type would receive blood from someone with A+ blood type?



8. a) Component of blood that transports nutrients and waste: Plasma  
 b) Component of blood that plays a role in coagulation (scabs) : Platelets  
 c) Component of blood that carries oxygen: RBC  
 d) Component of blood that plays a role in body's defense against pathogens:  
WBC

9. What antibodies are present in people who are O+? A + B.

10. Donor	Recipient	Yes or No?	Reason
A+	AB-	<u>NO</u>	<u>Anti-RH</u>
O+	A-	<u>NO</u>	<u>Anti RH</u>
B-	O+	<u>NO</u>	<u>Anti B</u>
A-	AB+	<u>YES</u>	<u>AB+ has no antigens</u>
AB-	B+	<u>NO</u>	<u>Anti A</u>