



# Sports & Physical Education

Blood Group

blood ✓



# Blood Group

- **ABO System (1900)**

A Group

B Group

O Group

AB Group

Who Discovered Blood  
Group-**Karl Landsteiner**

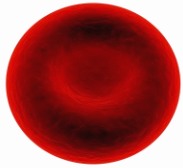
- **Rh Blood Group System**

Discovered - 1940 by Landsteiner and Wiener.

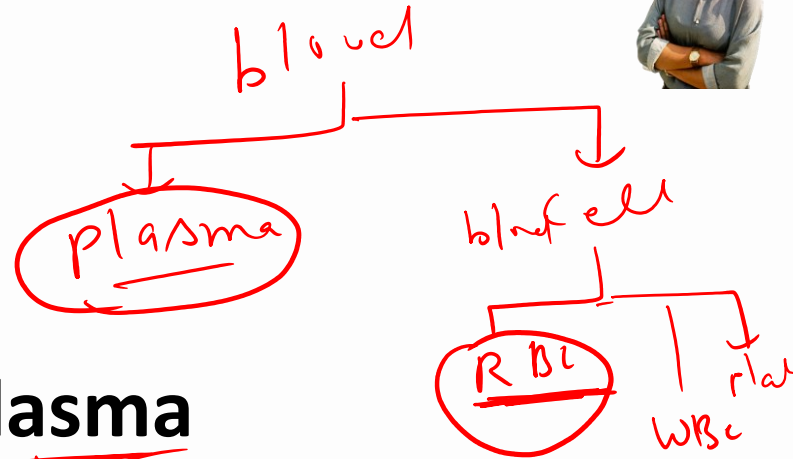


# Blood Group

RBC



Plasma



Antigen

Antibody



A

B



a

b



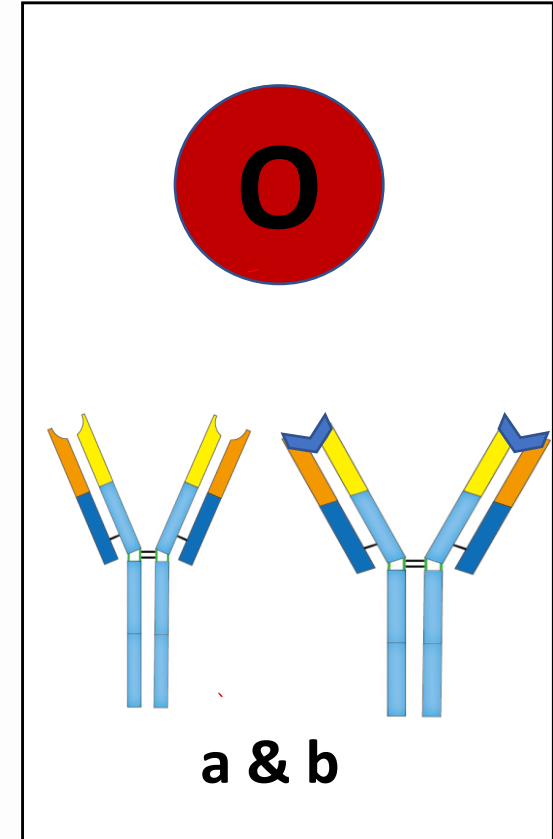
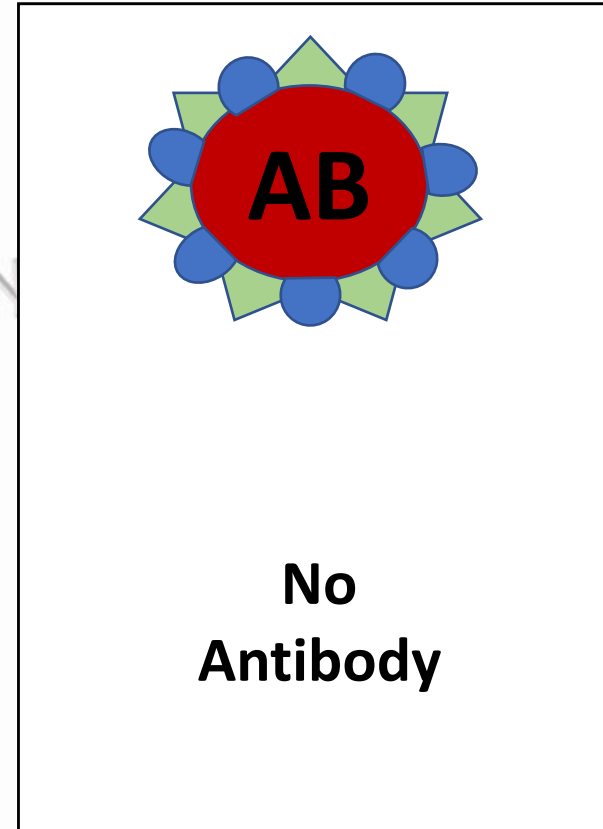
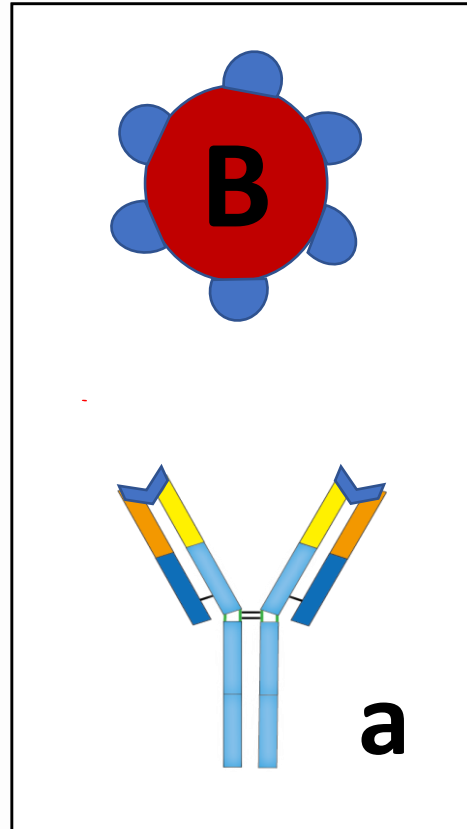
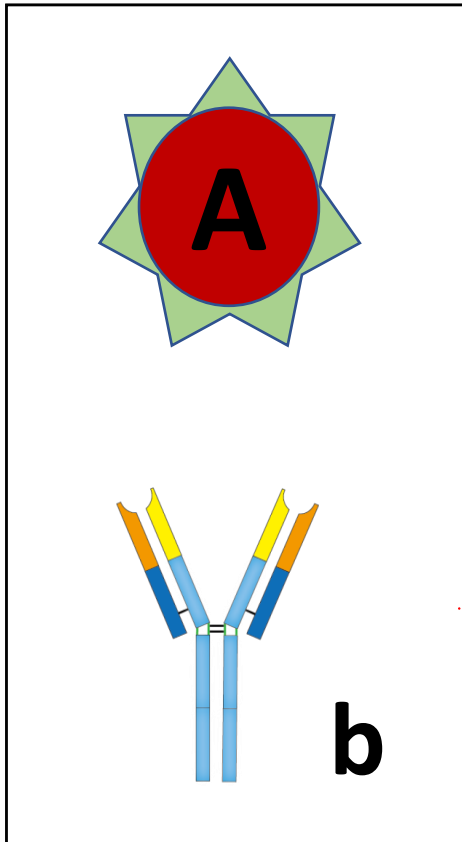
# Antigen & Antibody

Group A

Group B

AB

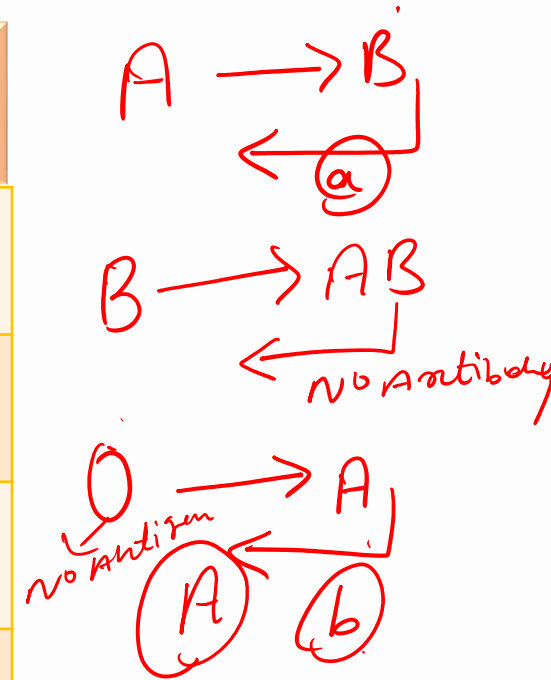
O





# Blood Group

		Antigen	Antibody
	A	A	b
	B	B	a
<b>Universal Recipient</b>	AB	A & B	<u>No antibody</u>
<b>Universal Donor</b>	O	<u>No Antigen</u>	a & b



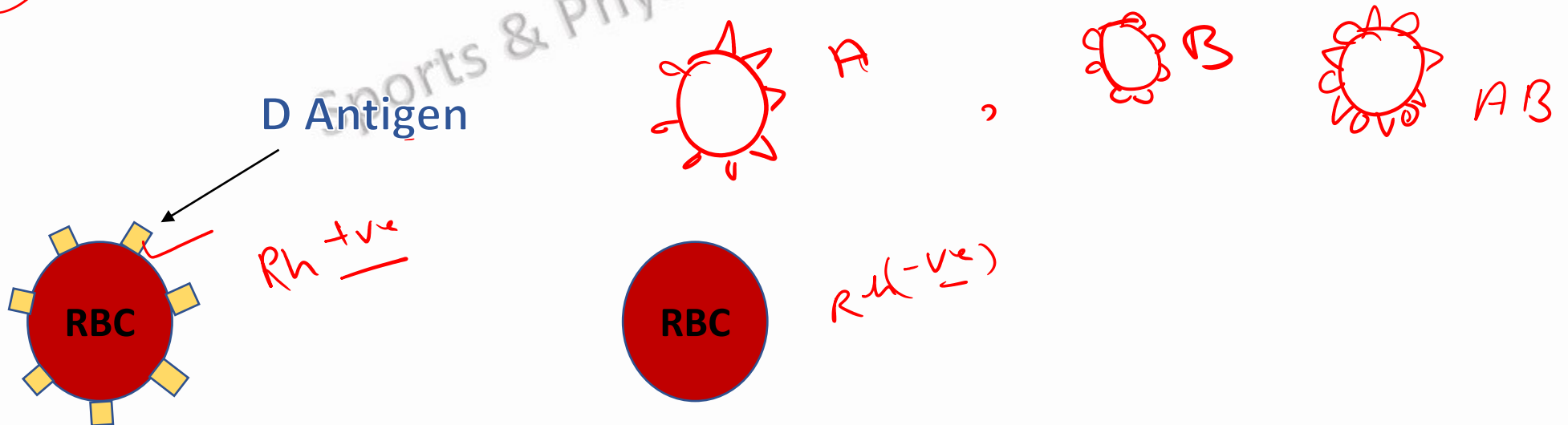


# Rhesus Rh Factor

Discovered - 1940 by Landsteiner and Wiener.

First discovered on Rhesus monkeys

The Rh blood group system consists of 49 defined blood group antigens, among which the five antigens D, C, c, E, and e are the most important.

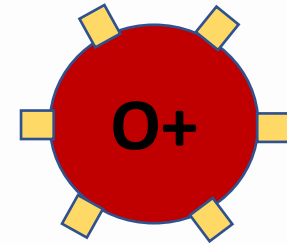
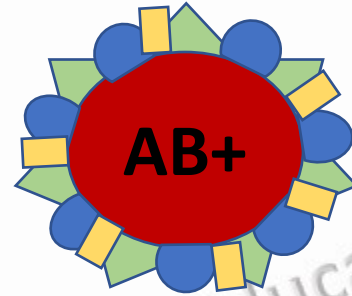
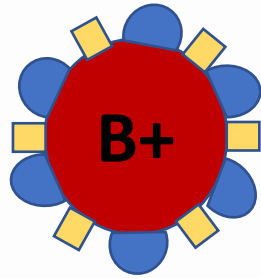
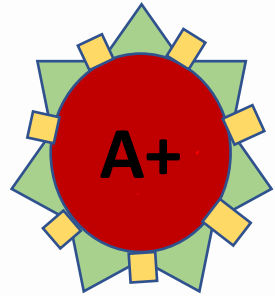


# Rh Factor



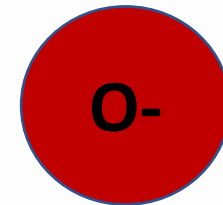
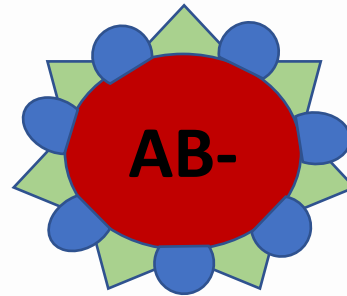
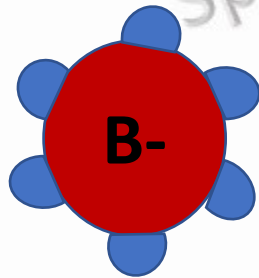
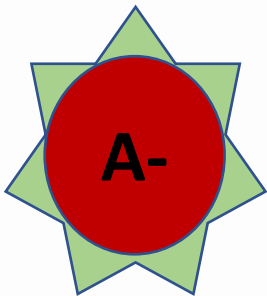
85% population are

Rh positive  
↓  
No Antibody



No Transfer

Rh +ve blood  
Rh -ve blood



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# Blood Group

Type	You can give blood to	You can receive blood from
A+	A+ , AB+	A+ , A- , O+ , O-
O+	O+ , A+ , B+ , AB+	O+ , O-
B+	B+ , AB+	B+ , B- , O+ , O-
AB+	AB+	<b>Everyone</b>
A-	A+ , A- , AB+ , AB-	A- O-
O-	<b>Everyone</b>	O-
B-	B+ , B- , AB+ , AB-	B- , O-
AB-	AB+ , AB-	AB- , A- , B- , O-





# Thank You for Watching



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thakuranjna99



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