

RED BLOOD CELLS

Hematocrit = % of whole blood that is RBCs.

1000 RBC : 1 WBC

Shape:



"squished jelly donut"
= BICONCAVE
2 ↓ ↙ dented

Reasons for this shape:

1. Increased surface area for GAS EXCHANGE. (trade of O_2 + CO_2 in body cells + lungs).
2. Gives flexibility - allows the cells to move through tiny capillaries (tiniest blood vessels).
3. Allows the cells to stack (like pennies) - move faster.

RBC's contain HEMOGLOBIN:

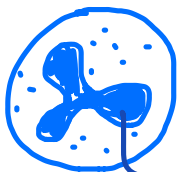
- a protein gives blood its red color.
- contains iron (Fe)
- binds to O_2
- 1/4 million hemoglobins in EACH cell!

WHITE BLOOD CELLS

- Remove toxins, wastes, damaged cells
- Most WBCs are not in blood, most found in organ tissues.

Two Types: Granular $\hat{=}$ Agranular
with \downarrow grains \downarrow without = "A"

1. GRANULAR



NEUTROPHIL

50-70% of all WBC's.

lobed nucleus

* know this one!



EOSINOPHIL

2-4% of all WBC's

bilobed nucleus

→ involved in allergies



BASOPHIL

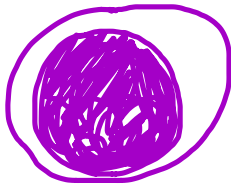
<1% of all WBCs

On slides, WBCs look PURPLE because they are STAINED.

2. AGRANULAR



MONOCYTE (also called a Macrophage)
2-8% of WBCs



LYMPHOCYTE *
20-30% of WBCs

Know
this one
too!!

