

RED BLOOD CELLS
OR
ERYTHROCYTES

→ BICONCAVE DISCS

→ NO NUCLEUS - CREATES
MORE ROOM FOR HAEMOGLOBIN
TO TRANSPORT O_2

PLATELETS
OR
THROMBOCYTES

CELL FRAGMENTS
($\frac{1}{3}$ SIZE OF RBCs)

→ USED IN BLOOD CLOTTING

WHITE BLOOD CELLS OR LEUCOCYTES

→ LARGER THAN RBCs, BUT FEWER
IN NUMBER → IMMUNE RESPONSE e.g.

→ MONOCYTES - DESTROY BACTERIA BY
PHAGOCYTOSIS

PLASMA → LIQUID PART OF BLOOD

MADE OF WATER & DISSOLVED SUBSTANCES

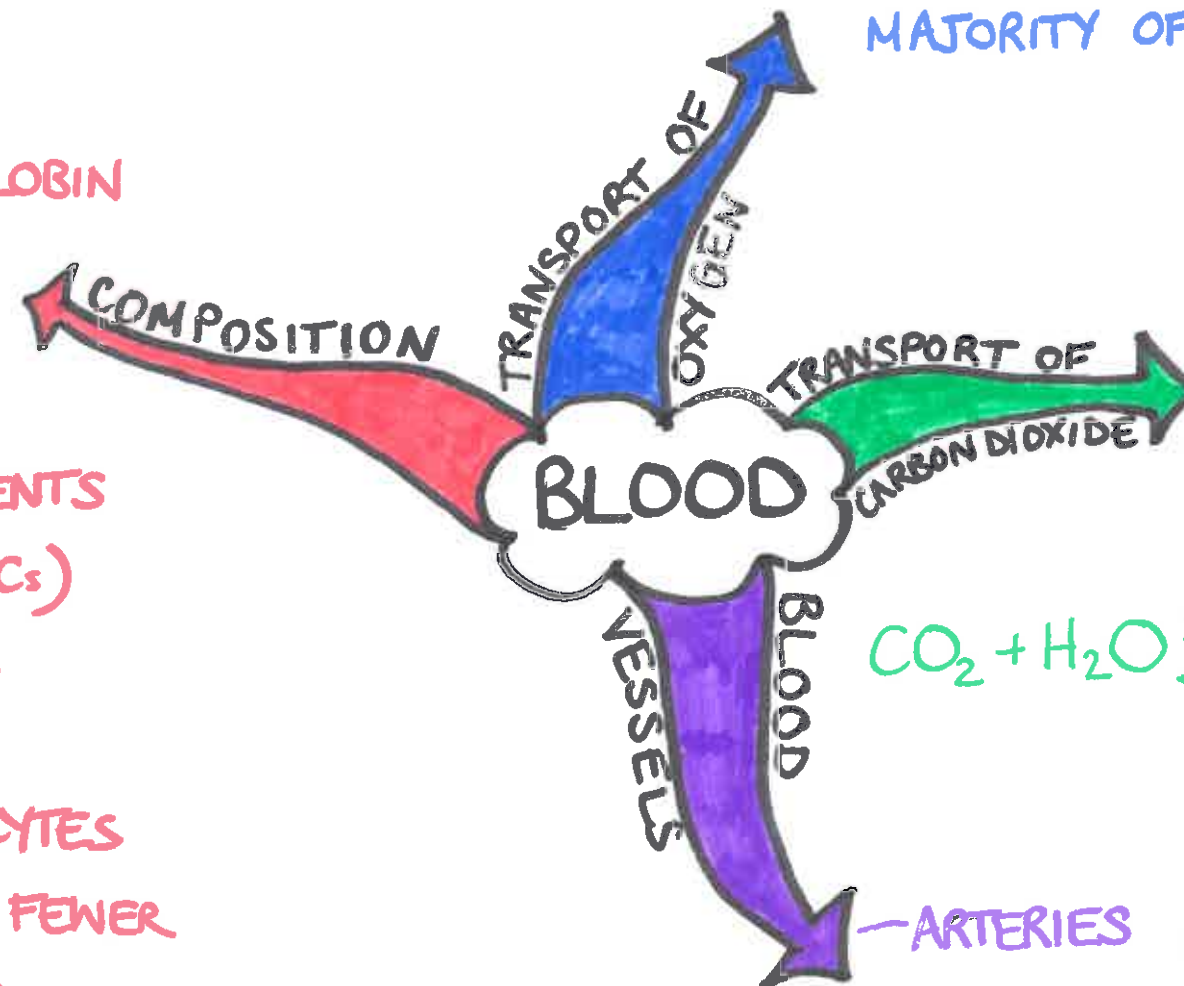
e.g. HORMONES, NUTRIENTS, IONS, PROTEINS,
WASTES & PROTEINS



OXYGEN DISSOCIATES FROM
HAEMOGLOBIN WHEN NEAR
RESPIRING CELLS

OXYGEN READILY COMBINES
WITH HAEMOGLOBIN IN THE
ALVEOLI

MAJORITY OF O_2 TRANSPORTED BY HAEMOGLOBIN



→ DISSOLVED IN PLASMA (8%)

→ CARBAMINOHAEMOGLOBIN (22%)

→ BICARBONATE IONS (70%)



VEINS

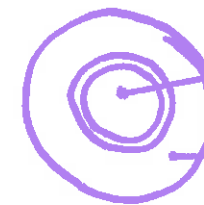
LARGE LUMEN

* NO MUSCLE WALLS

* CARRIES BLOOD AT
LOW PRESSURE

* CONTAIN VALVES TO
PREVENT BACKFLOW

ARTERIES



SMALL LUMEN

LARGE AMOUNTS OF SMOOTH MUSCLE
& ELASTIC FIBRES TO MAINTAIN
ELASTIC RECOIL (WITHSTAND HIGH
PRESSURE BLOOD FLOW)

* VASODILATION - RELAXATION OF
SMOOTH MUSCLE - REGULATE
BLOOD FLOW

* VASOCONSTRICTION - CONSTRICTION
OF SMOOTH MUSCLE
- DECREASES BLOOD FLOW TO
SKIN SURFACE

CAPILLARIES



TINY BLOOD VESSELS ONE CELL
THICK - CLOSE PROXIMITY TO
CELLS FOR NUTRIENT EXCHANGE