**BLOOD**

1. **The six jobs of blood are**:










1. **Components of Blood**

* \_\_\_\_\_\_\_\_\_ of total blood content
* \_\_\_\_\_\_\_\_\_ water, \_\_\_\_\_\_\_ proteins, vitamins, glucose, etc …
* There are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2)

* Transport oxygen
* Contain \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* RBC are biconcave -

Why are sickle – shaped blood cells a problem?

* RBC have no nucleus because
* RBC’s produced in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Life span of 120 days
* Anemia –


* Gold ring test



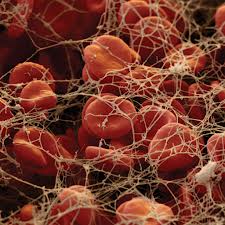
* RBC 700: WBC 1
* all have a nuclei
* main job is to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* two main groups of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - made in bone marrow
  2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - made in bone marrow, modified lymph nodes (tonsils, arm pits)



* no nucleus
* disc shaped, very small, made in the bone marrow
* less numerous than RBC
* important for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (filled with thromboplastin)

1. **Blood Clotting**

**cut or bruise**



1. **Blood Clot Dangers**
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: a blood clot that seals off a blood vessel



1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ : a blood clot that **dislodges** from one area, travels to another and **forms a blockage**

**BLOOD TYPES**

**Agglutination –**

**Transfusions –**

Why Blood Agglutinates

* All cells have protein markers on their membranes called \_\_\_\_\_\_\_\_\_\_\_\_\_\_
* **Each of our cells have unique antigens that identify you as you.**
* That is why when we receive donor organs we sometimes reject them as foreign material.
* This is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Red blood cells are no different:
  + Type A have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Type B have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Type AB have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Type O have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Our bodies make Y-shaped \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to attack foreign \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* On a first transfusion the blood freely mixes.
* In the meantime you develop \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ with the wrong blood type may be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Universal donor =**

**Universal Recipient =**

**Inheritance of Blood Type**

* Both A and B are dominant to type O
* Also type A and B share equal dominance that is why we have people that are type AB

State whether the blood mixes or clumps:

1. A person with A type blood receives from AB or B donors?
2. A person of type O blood receives from type A, B or AB donors?
3. A person of type AB receives from type A or O donor?

Determine the inheritance of blood type:

1. What is the blood type of a child who gets an A from mom and O from dad?
2. What is the blood type of a child who gets an A from dad and B from mom?
3. What is the blood type of a child who gets an O from both parents?