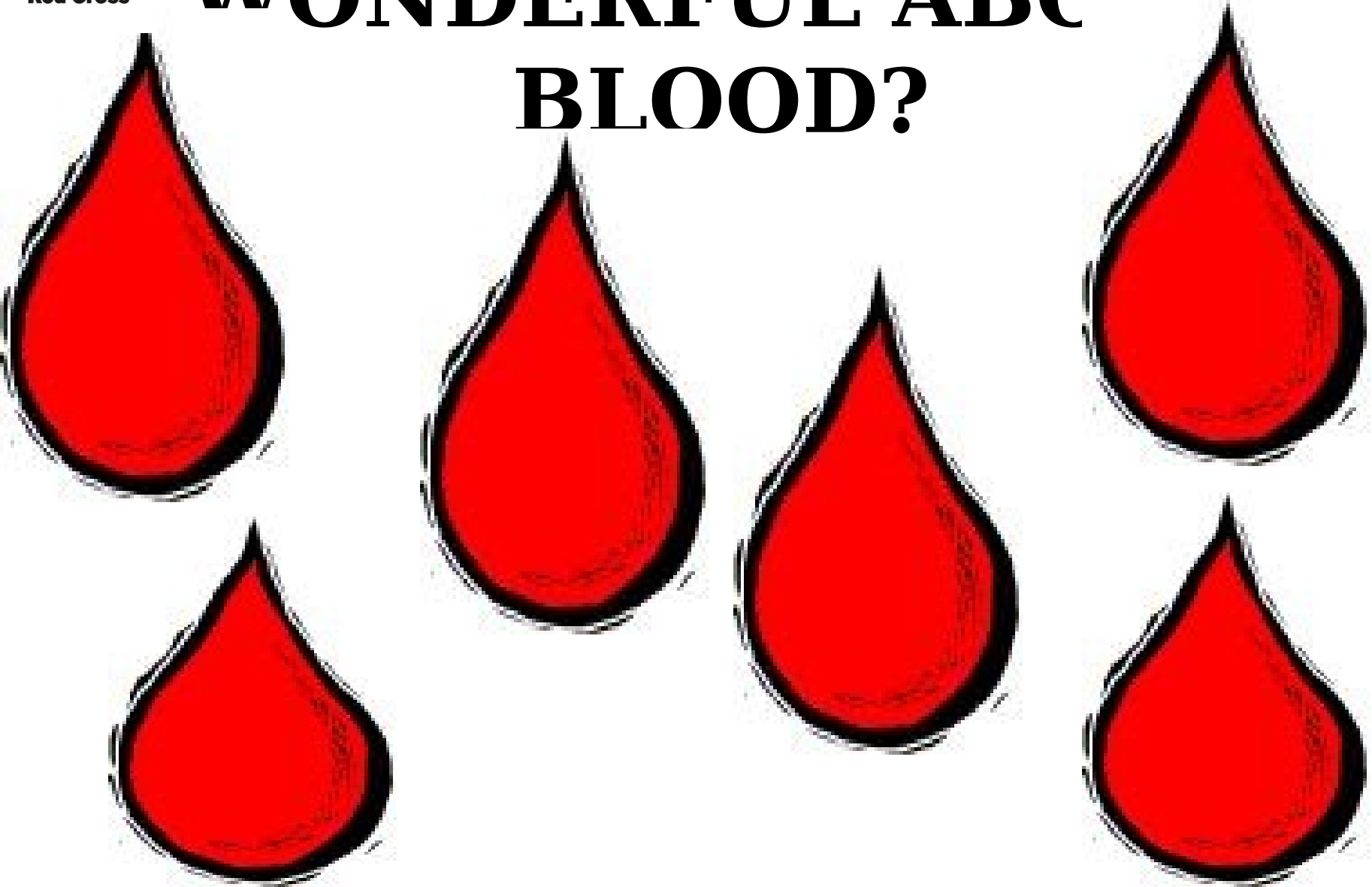
American Red Cross

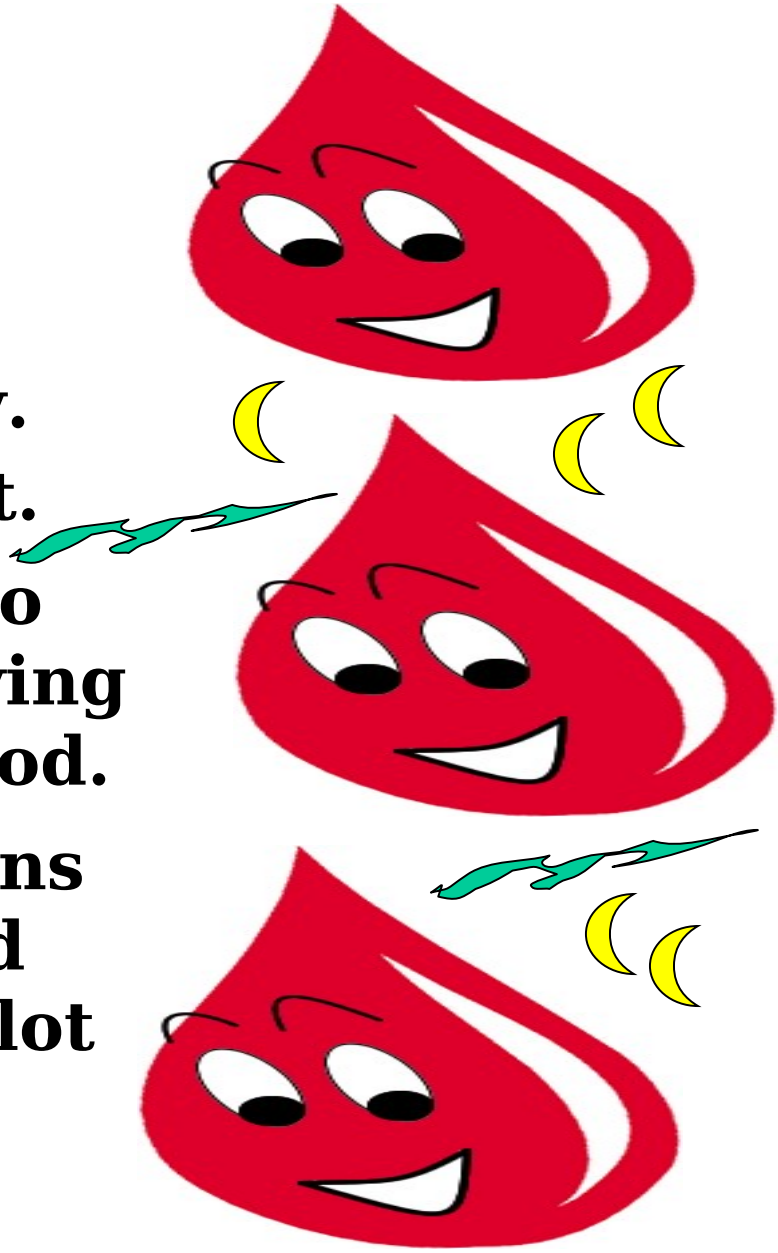
# WHAT IS SO WONDERFUL ABOUT BLOOD?



American Red Cross

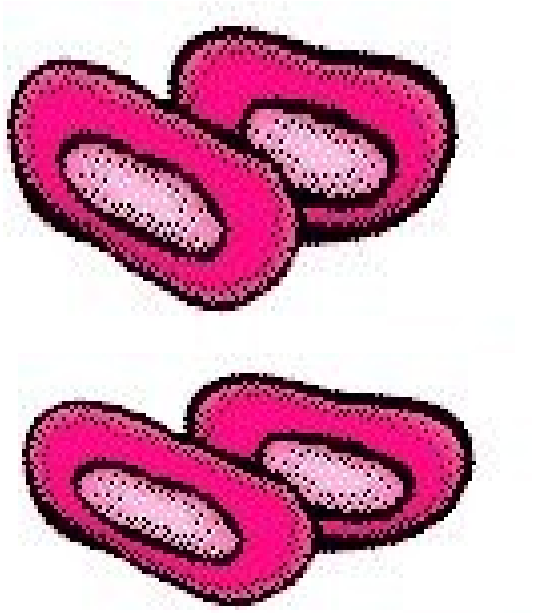
# BLOOD

- **Blood flows everywhere through the human body.**
- **We cannot live without it.**
- **The heart pumps blood to all our body cells, supplying them with oxygen and food.**
- **Blood also carries proteins and cell fragments called platelets that let blood clot where there has been an injury.**



American Red Cross

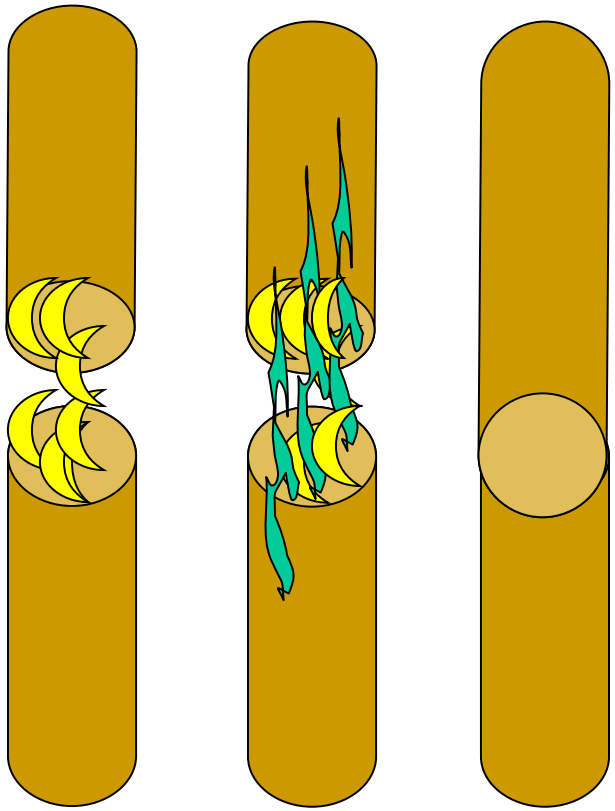
# RED BLOOD CELLS



- **Red blood cells carry oxygen to body tissues and remove carbon dioxide.**
- **They are red because they contain a protein called hemoglobin that is red in color.**
- **Red blood cells are round and thinner in the middle, like a balloon that is partly filled with water. This lets them squeeze through tiny blood vessels without breaking.**

American Red Cross

# PLATELETS



- **If a blood vessel is cut, platelets stick to the edges of the cut and to one another, forming a plug that stops bleeding.**
- **They then release chemicals that react with *fibrinogen* and other clotting proteins, leading to the formation of a blood clot.**
- **The blood vessel can then heal over the cut area.**

American Red Cross

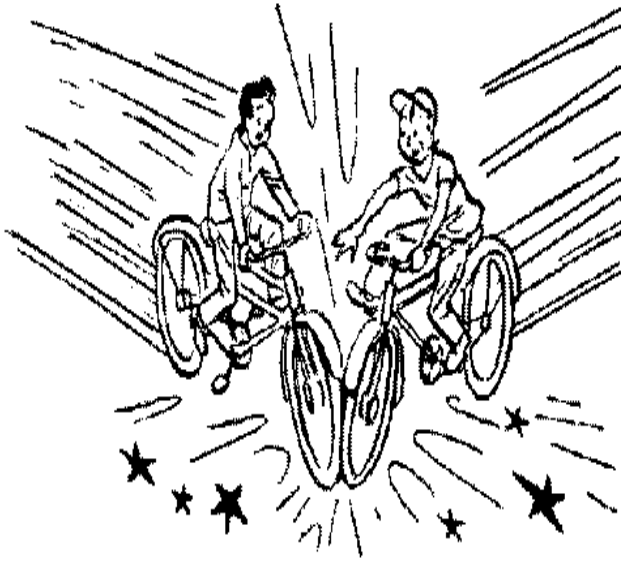
# PLASMA



- **Plasma is the liquid part of your blood in which red cells and platelets float.**
- **Plasma is mostly water, but the proteins it contains are necessary for life.**
- **Some of of these proteins are clotting proteins.**

American Red Cross

# BLOOD FACT



- If someone is in an accident, has surgery or gets cancer, they may need another person’s blood to help them survive.
- There is no substitute for blood transfusion.
- This blood comes from blood donors

American Red Cross

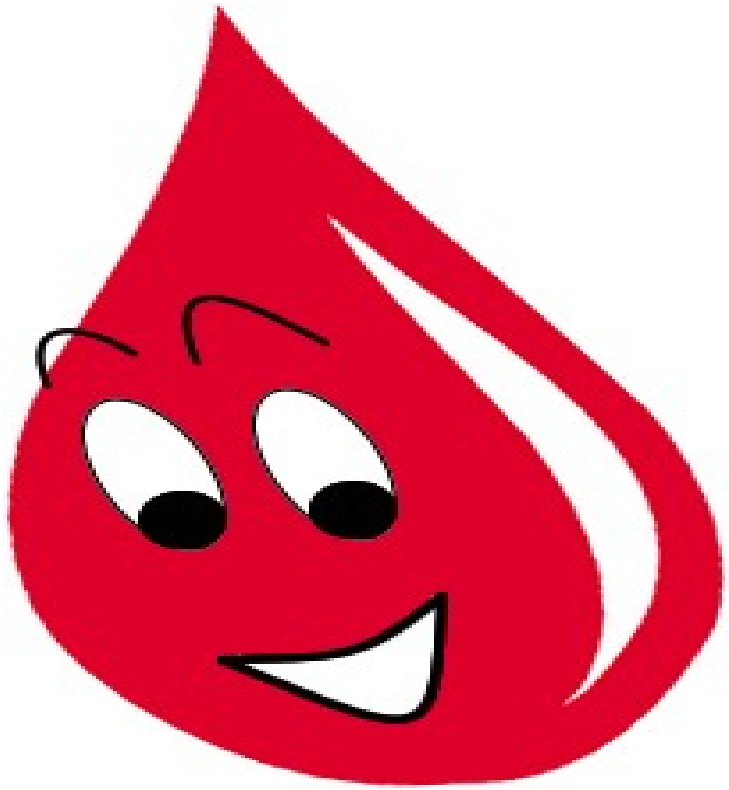
# BLOOD FACT



- **In the United States, a blood transfusion is needed about every two seconds.**

American Red Cross

- **What time is it?**



American Red Cross

# DID YOU KNOW?

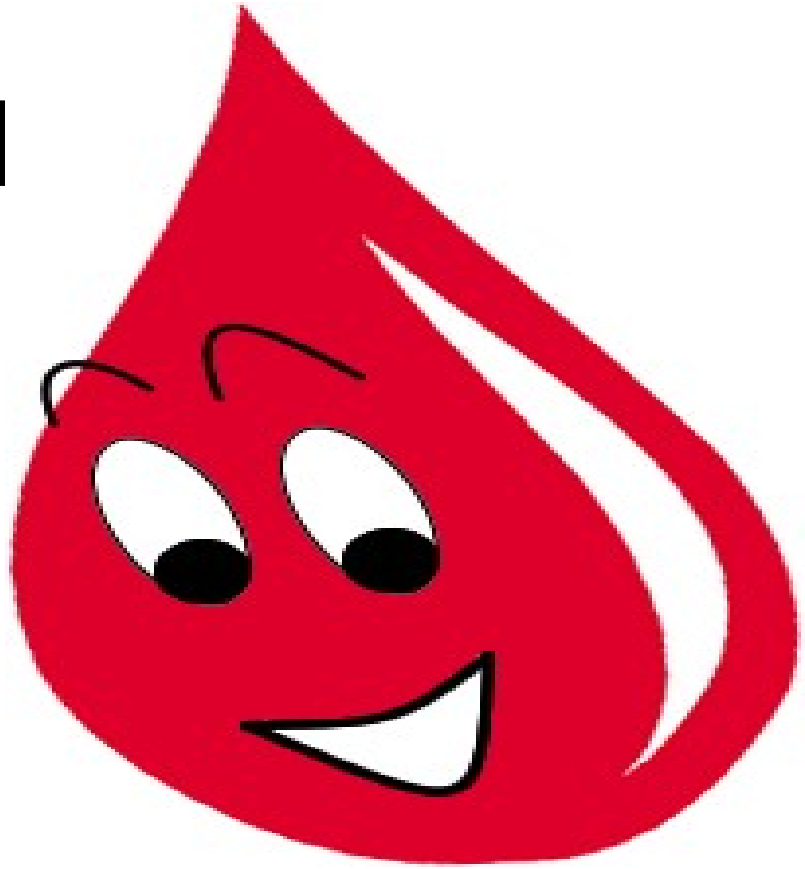


- **When someone donates a pint of blood, that blood is separated into red cells, plasma and platelets.**
- **Each one of these can be given to a different patient who needs only that part of the blood.**

American Red Cross

# BLOOD FACT

- **A kidney transplant patient, on average, will need one to two units of red blood cells to get through surgery.**
- **A heart transplant patient, on average, will need four to six units of red blood cells.**



# PLASMA

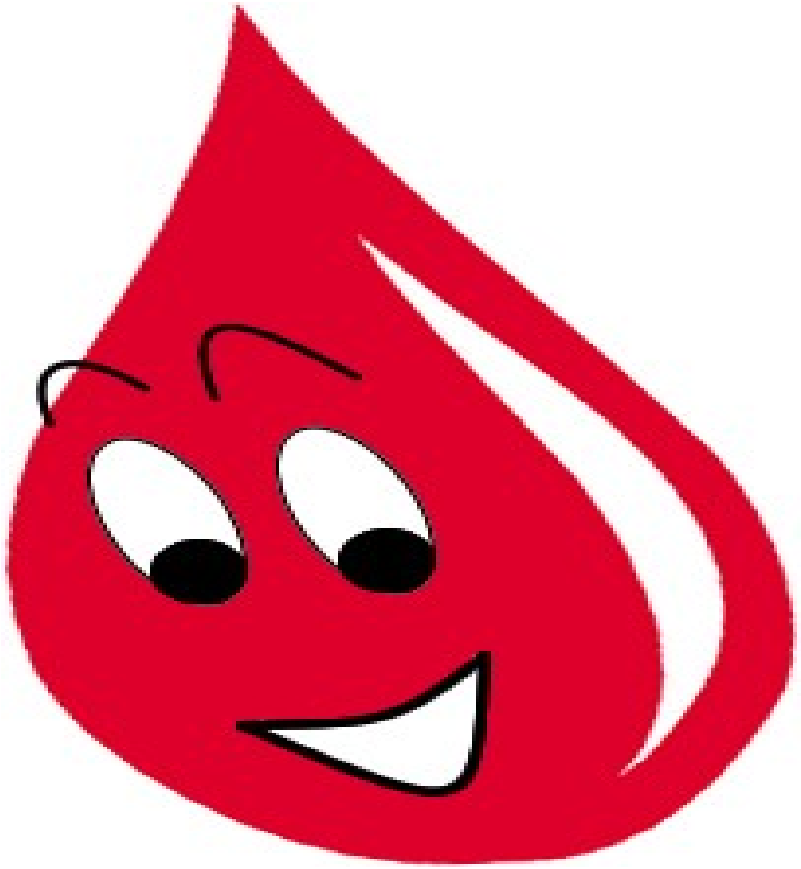


- **Plasma transfusion helps hundreds of patients with liver disease, severe burns, hemophilia, and leukemia. Transplant and cardiac patients are also helped by plasma transfusions. Plasma provides essential clotting factors to these patients.**

American Red Cross

# BLOOD FACT

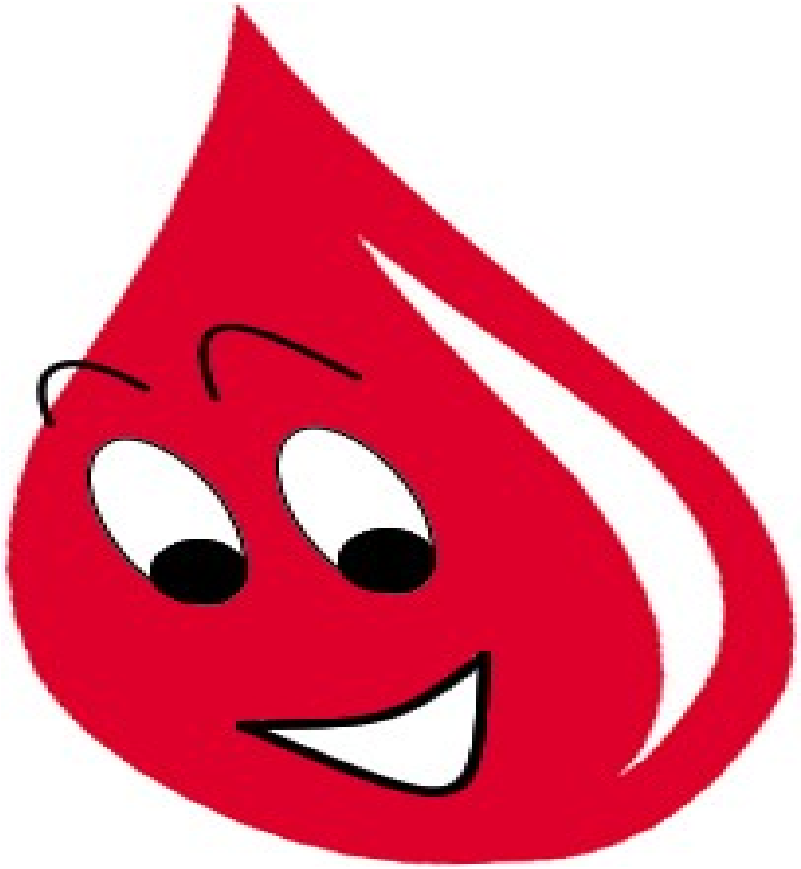
- **A liver transplant patient, on average, will need six to 10 units of red blood cells, 20 units of plasma and 10 units of platelets.**



American Red Cross

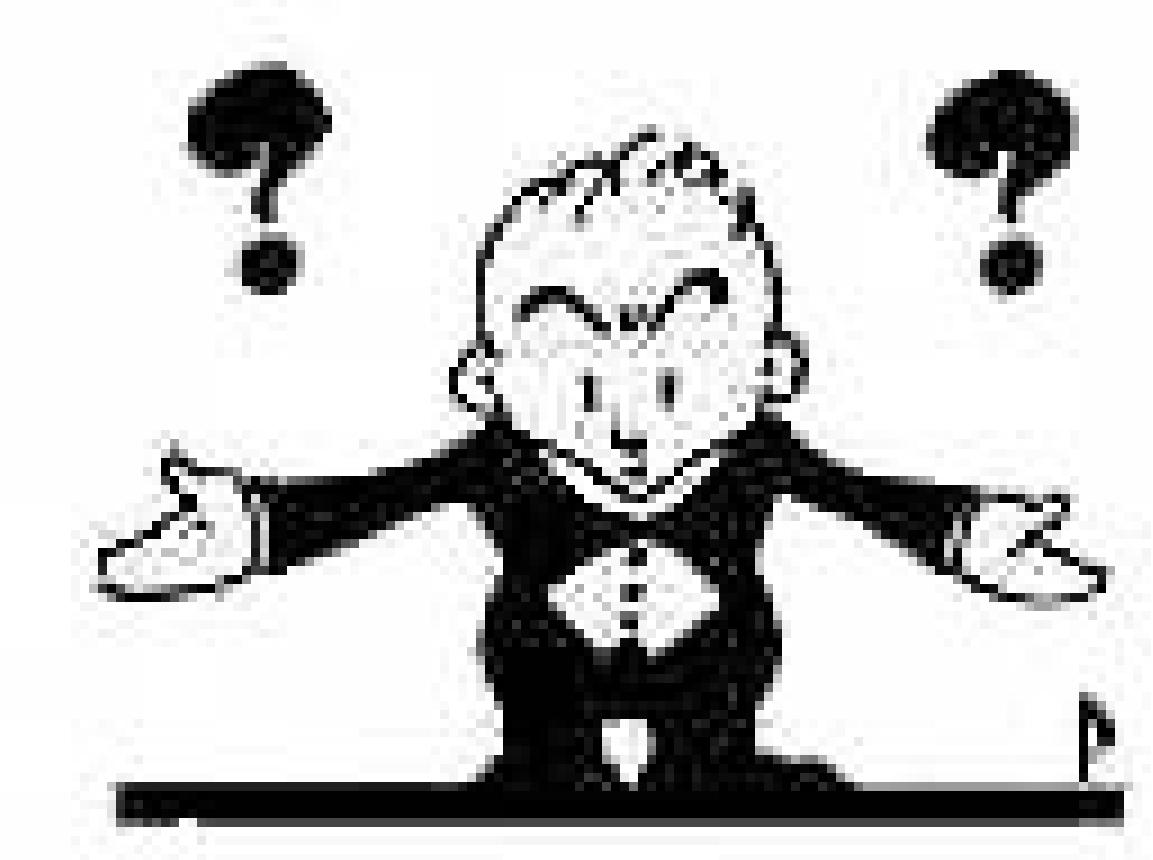
# 3LOOD FACT

- **A newborn open-heart surgery, on average, will need one to four units of red blood cells, one to two units of plasma, and one to four units of platelets.**



American Red Cross

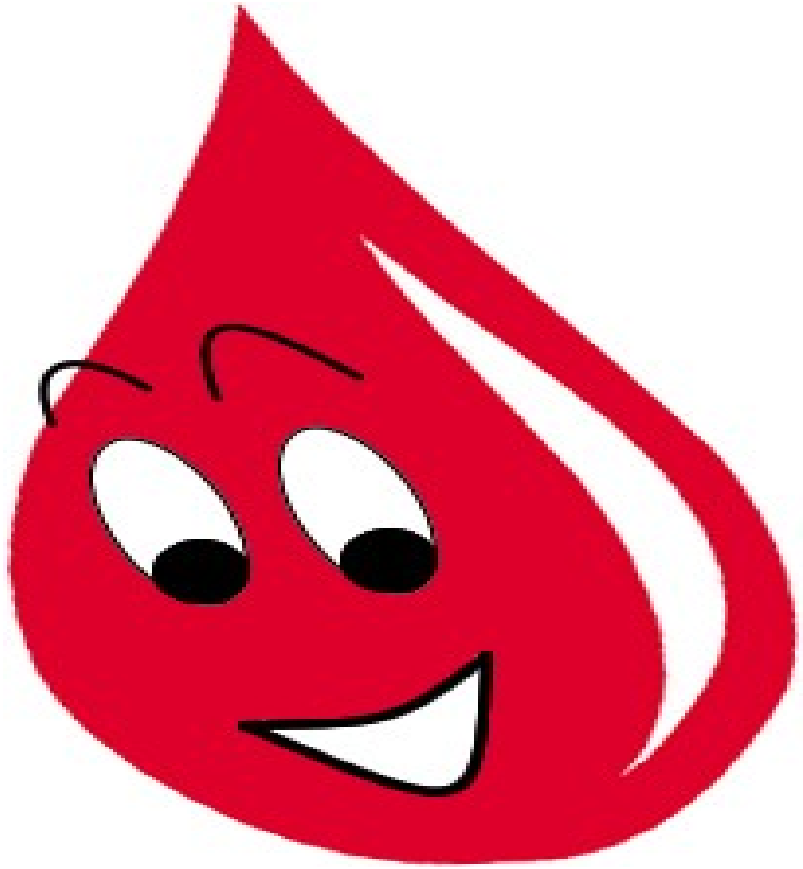
# DO YOU KNOW ?



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# BLOOD TYPE

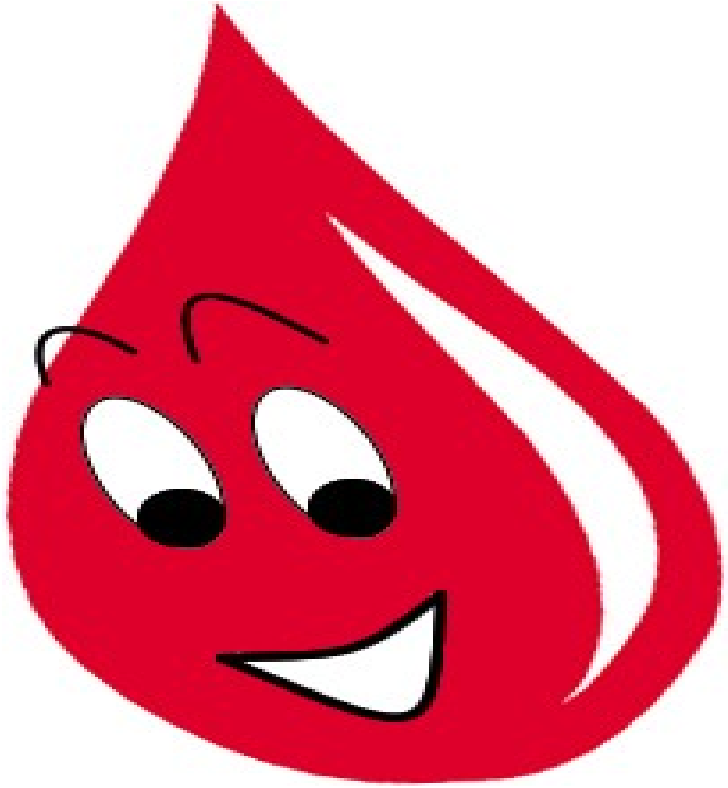
- **Not everyone has the same blood type!**
- **Blood type refers to features of the person’s red blood cells.**
- **There are hundreds of these different features.**



American Red Cross

# BLOOD TYPE

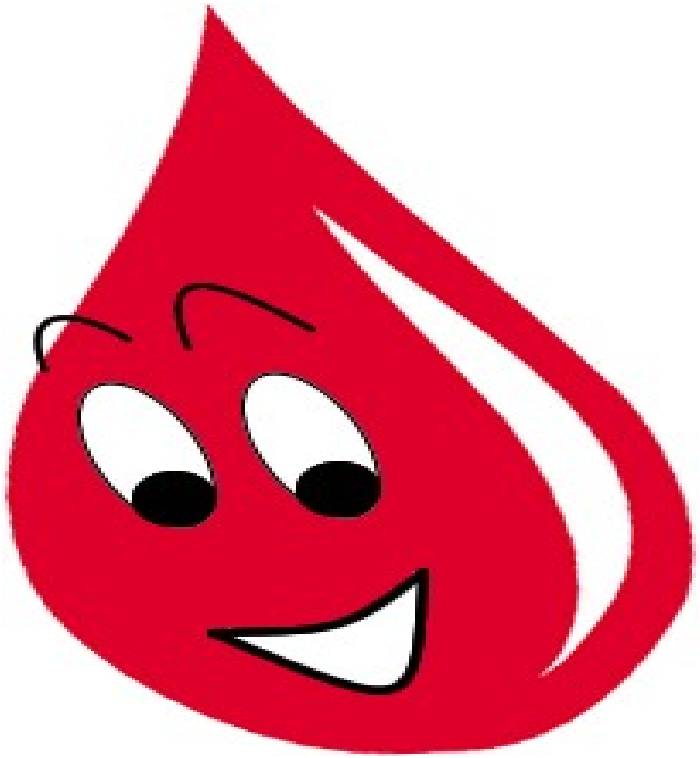
- **The ABO blood groups are the features most people know about.**
- **In this group, there are 4 different types of red blood cells -- A, B, AB, and O.**



American Red Cross

# BLOOD TYPE

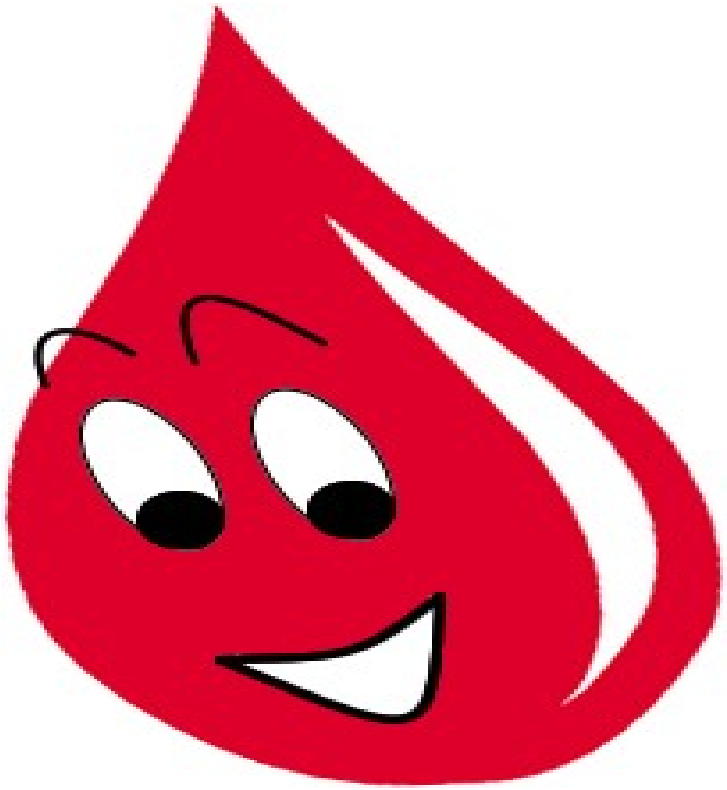
- About half of us are blood group O
- The next most common is blood group A.
- Few people have type B, and even fewer have type AB.



American Red Cross

# BLOOD TYPE

- **Th Rh blood groups are the next most familiar types.**
- **People whose red cells have a particular feature called the “ D antigen” are *Rh positive.* People who lack the factor are *Rh negative.***
- **Most people are Rh positive.**



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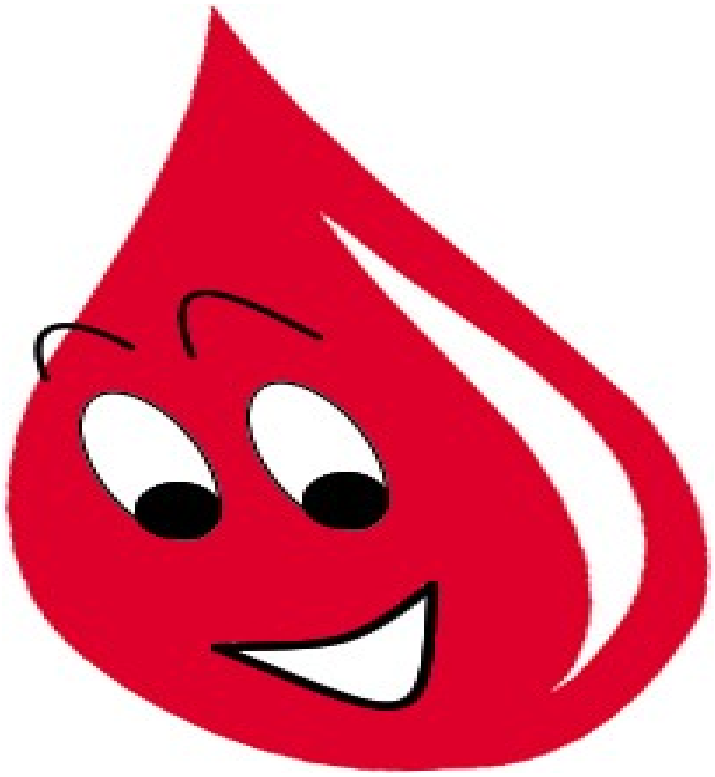
# DO YOU KNOW ?



American Red Cross

# BLOOD TYPE

- **Type O blood may be transfused into patients of any blood type.**
- **Rh negative blood may be transfused into patients of either Rh type.**
- **So O negative is a very special blood type in a blood donor.**



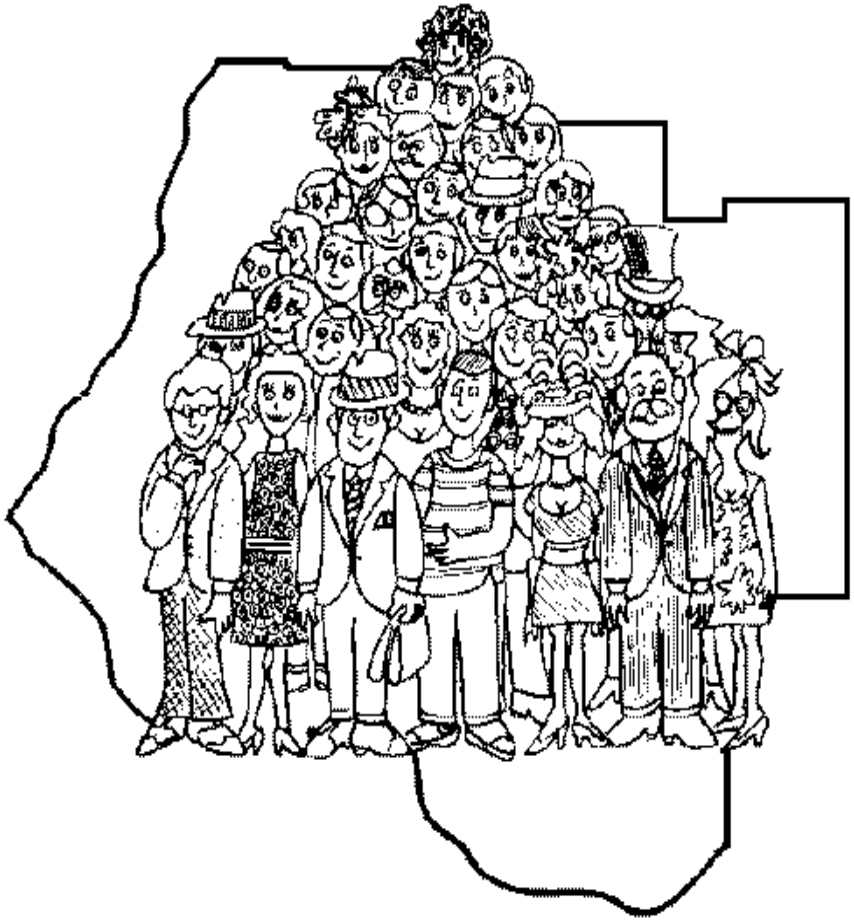
American Red Cross

# DO YOU KNOW ?



American Red Cross

# BLOOD FACT



- **About half of Americans can safely be blood donors.**
- **But only about 5 percent actually donate blood.**
- **The other 95% are relying on these donors if they ever need a transfusion.**

American Red Cross

# DO YOU KNOW ?

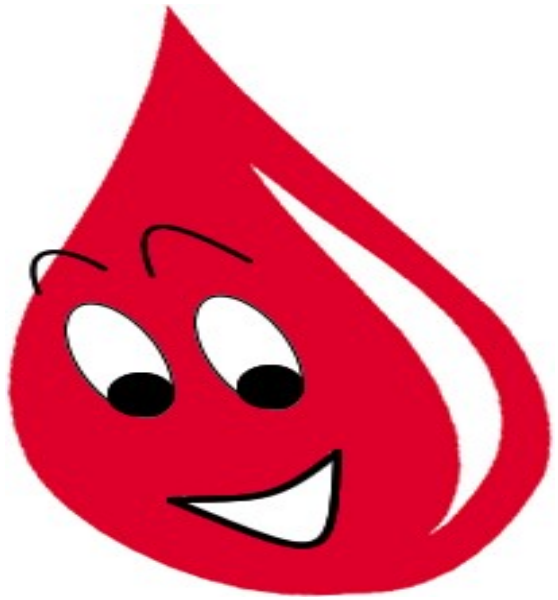


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# DONATING BLOOD IS EASY

http://www.redcross.org/flash/giftoflife/giftoflife.html

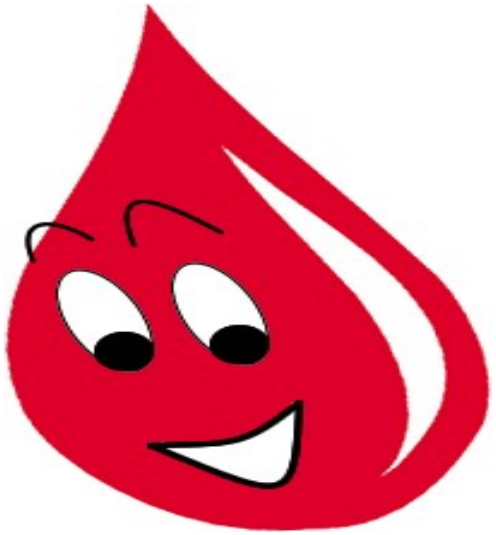
- It is quick and it is safe.
- It doesn’t hurt badly at all.
- And it saves lives.



American Red Cross

# WOULD YOU LIKE TO TAKE A QUIZ?

https://corpweb.redcross.org/biomed/refcent/flash/start.ht



American Red Cross

# TODAY WE WOULD LIKE TO ASK YOU TO:



- **Seriously consider becoming a blood donor when you become 17 years old.**
- **If you know somebody who has been helped by a blood transfusion, think about the good person that made a blood donation to help your friend.**

American Red Cross



- **Think about organizing a blood drive at your school or help at a blood drive in your community.**
- **Talk with an adult about the importance of donating blood.**

Together, we can save a life.

It is one of the most important things you can

American Red Cross

# WHAT TIME IS IT?



- So how much time has passed since we started?
- Many, many people have needed blood.
- Remember, the only way for someone to receive blood is for another person to donate it.

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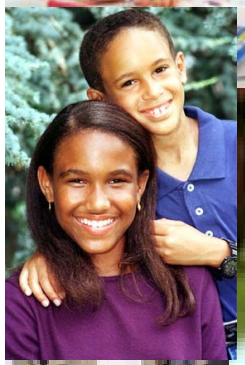


- **FIRST AID**
- **CPR**
- **WATERSAFETY**
- **DISASTER RELIEF**
- **INTERNATIONAL SERVICES**
- **ARMED FORCES EMERGENCES SERVICES**
- **YOUTH**







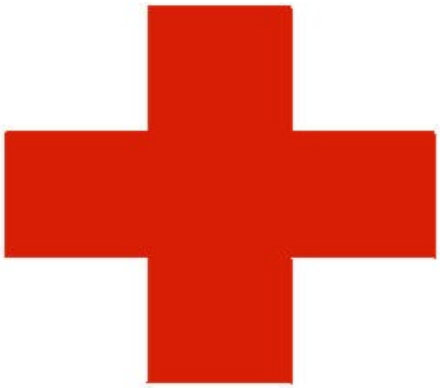












**American Red Cross**

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