

**BECAUSE
OF THEM
WE CAN**
BOX
JUST FOR KIDS

BECAUSE OF DR. CHARLES DREW

AGES 9 - 12

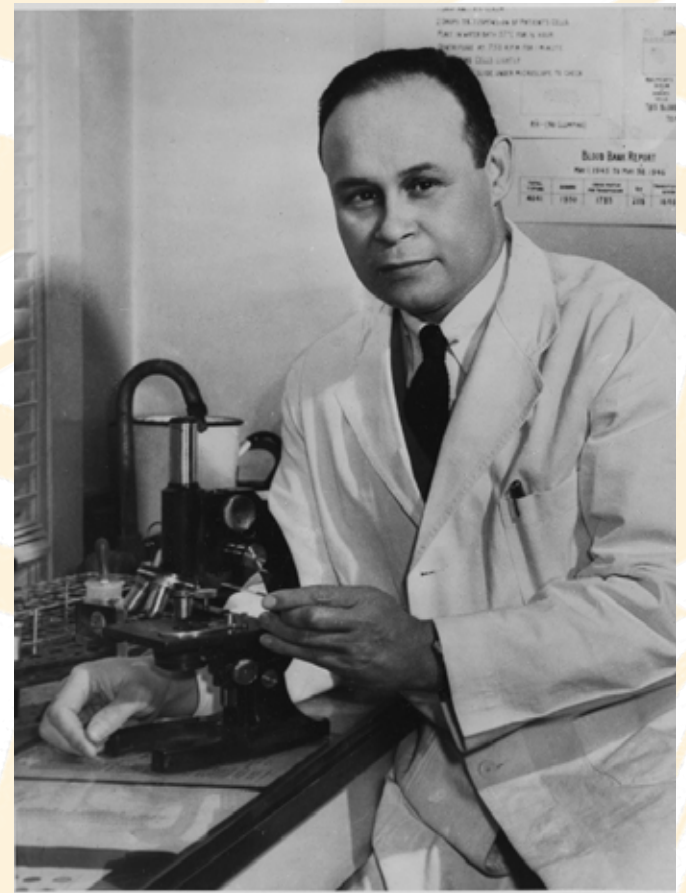


BOTWC MINI POSING AS
DR. CHARLES DREW

**EXCELLENCE OF PERFORMANCE
WILL TRANSCEND ARTIFICIAL BARRIERS
CREATED BY MAN.**
-CHARLES DREW

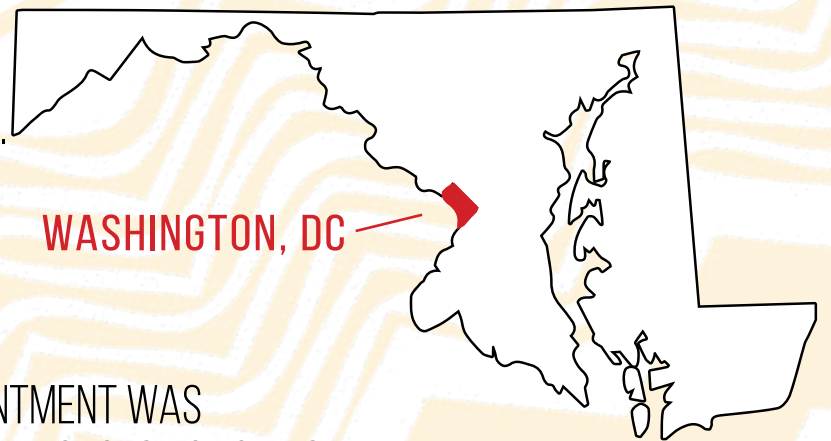
DR. CHARLES DREW'S LIFE

DR. CHARLES DREW WAS BORN IN WASHINGTON D.C., IN 1904. HIS FATHER WAS A CARPET LAYER AND HIS MOTHER WAS A TEACHER. GROWING UP HE HAD TWO MAJOR INTERESTS: SPORTS AND BIOLOGY. HE FOLLOWED THROUGH WITH HIS LOVE OF ATHLETICS AND SCIENCE WHEN HE PLAYED FOOTBALL AND STUDIED BIOLOGY AT AMHERST COLLEGE. HE ALSO TAUGHT BIOLOGY AND COACHED FOOTBALL, AFTER GRADUATING, AT **MORGAN STATE UNIVERSITY**. MORGAN STATE UNIVERSITY IS AN **HBCU**.



AFTER SAVING FOR MEDICAL SCHOOL, ALTHOUGH CHARLES WAS ACCEPTED TO HARVARD, HE ATTENDED MEDICAL SCHOOL AT THE MCGILL UNIVERSITY FACULTY OF MEDICINE IN MONTREAL, CANADA. DREW THEN BECAME A PROFESSOR AT **HOWARD UNIVERSITY** COLLEGE OF MEDICINE. HE ALSO COMPLETED A **FELLOWSHIP** AT NEW YORK'S PRESBYTERIAN HOSPITAL WHILE BECOMING THE FIRST AFRICAN AMERICAN TO EARN A **DOCTORATE** OF MEDICAL SCIENCE FROM COLUMBIA UNIVERSITY.

CHARLES DREW BECAME A DOCTOR AND MEDICAL RESEARCHER. HE WAS A SURGEON THAT SPECIALIZED IN **BLOOD TRANSFUSIONS**. HIS RESEARCH IMPROVED THE WAY BLOOD IS STORED SO THAT IT COULD BE USED TO SAVE LIVES DURING BLOOD TRANSFUSIONS. IN 1941, DREW WAS APPOINTED THE DIRECTOR OF THE FIRST AMERICAN **RED CROSS** BLOOD BANK. HE CREATED MOBILE BLOOD DONATION STATIONS, LATER CALLED "BLOODMOBILES." HIS APPOINTMENT WAS AN HONOR, BUT DREW BECAME FRUSTRATED WITH THE U.S. ARMED FORCES POLICY TO REJECT BLOOD DONATIONS FROM AFRICAN AMERICANS. HE PROTESTED THIS RACIAL SEGREGATION AND THE RED CROSS DID NOT CHANGE THEIR **POLICY**.



#BOTWCCHALLENGE

LISTEN TO YOUR HEART!

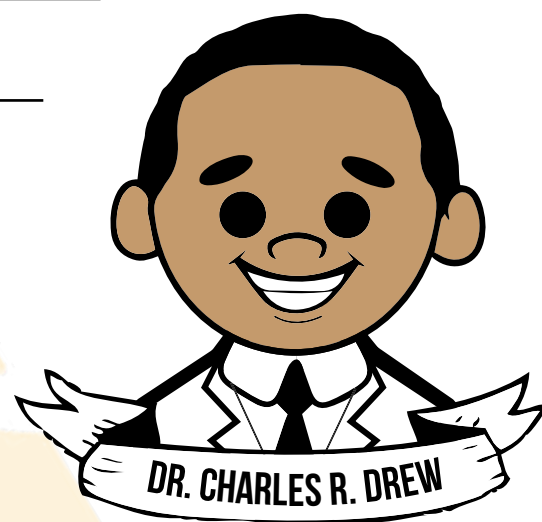
FIRST, USE YOUR STETHOSCOPE TO FIND YOUR HEART BEAT - THIS SLOW, STEADY BEAT IS CALLED YOUR **PULSE**. NOW PUT ON YOUR FAVORITE SONG AND DANCE AS HARD AS YOU CAN! WHEN THE SONG IS OVER, LISTEN TO YOUR PULSE AGAIN AND HEAR HOW FAST YOUR HEART IS BEATING!

DR. CHARLES DREW STOOD UP FOR HIS BELIEFS WHEN HE **RESIGNED** FROM THE **RED CROSS**, BECAUSE OF THEIR BELIEF THAT BLOOD QUALITY WAS DIFFERENT BASED ON RACE. HE STOOD UP FOR WHAT HE BELIEVED IN.

READ & WRITE

1. BASED ON THE INFORMATION IN THE TEXT, WHY DID DR. CHARLES DREW RESIGN FROM THE RED CROSS? WHAT DETAILS FROM THE TEXT SUPPORT YOUR ANSWER?

2. THINK ABOUT DR. CHARLES DREW'S INTERESTS AS A YOUNG ADULT. HOW IS THIS CONNECTED TO HIS ACCOMPLISHMENTS?



GLOSSARY

FELLOWSHIP: A GROUP OF PEOPLE MEETING TO PURSUE A SHARED INTEREST OR AIM, IN THIS CASE AT A UNIVERSITY OR AN INSTITUTION.

DOCTORATE: THE HIGHEST DEGREE AWARDED BY A GRADUATE SCHOOL.

HBCU: HISTORICALLY BLACK COLLEGES AND UNIVERSITIES.

BIOLOGY: THE STUDY OF LIVING ORGANISMS.

POLICY: A COURSE, PRINCIPLE OF ACTION, OR RULE ADOPTED OR PROPOSED BY A GOVERNMENT, PARTY, BUSINESS, OR INDIVIDUAL.

RED CROSS: THE AMERICAN RED CROSS, ALSO KNOWN AS THE AMERICAN NATIONAL RED CROSS, IS A HUMANITARIAN ORGANIZATION THAT PROVIDES EMERGENCY ASSISTANCE, DISASTER RELIEF, AND DISASTER PREPAREDNESS.



MY BLOOD TYPE

DIRECTIONS: READ THIS SECTION AND UNDERLINE ANY IMPORTANT INFORMATION YOU COME ACROSS. WRITE YOUR THOUGHTS ANYWHERE YOU'D LIKE!

BLOOD TRANSFUSIONS ARE A LIFESAVING TREATMENT FOR MANY AMERICANS. BLOOD TRANSFUSIONS ARE NEEDED FOR MANY REASONS, INCLUDING SURGERY, AFTER ACCIDENTS, AND FOR PATIENTS THAT ARE SICK.

BLOOD CANNOT BE **ARTIFICIALLY** MADE, SO DOCTORS NEED **VOLUNTEER** DONATIONS. TO KEEP THE BLOOD SUPPLY SAFE, EVERY DONATION IS TESTED FOR BLOOD TYPE AND CHECKED FOR SICKNESSES.

WHAT ARE THE **COMPONENTS** OF BLOOD?

ALL BLOOD HAS:

- RED BLOOD CELLS
- WHITE BLOOD CELLS
- PLATELETS
- PLASMA

BUT NOT EVERYONE HAS THE SAME BLOOD TYPE. THERE ARE FOUR MAIN PARTS OF THE ABO BLOOD SYSTEM:

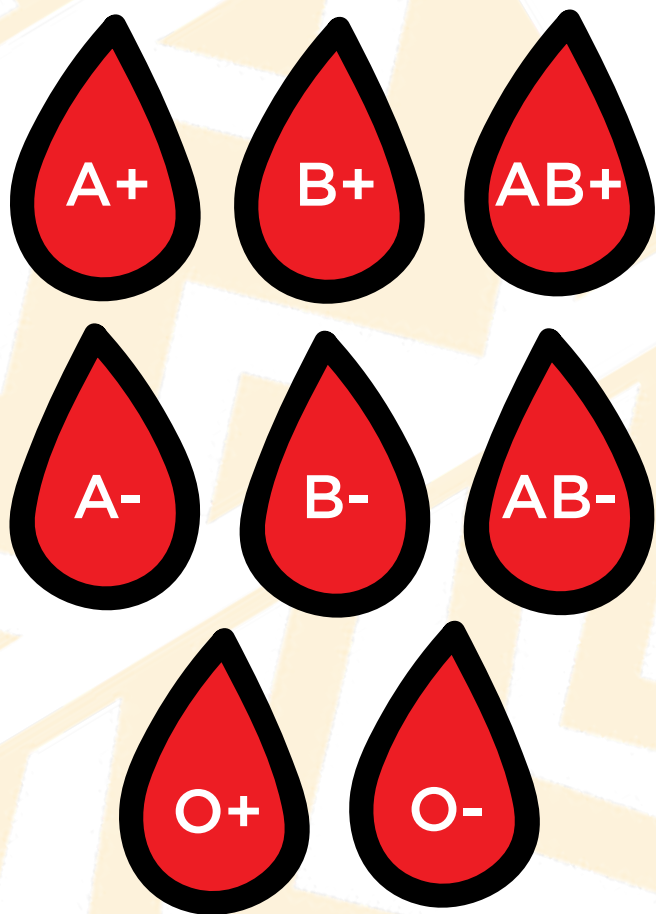
- **TYPE A:** THIS BLOOD TYPE HAS A MARKER KNOWN AS A.
- **TYPE B:** THIS BLOOD TYPE HAS A MARKER KNOWN AS B.
- **TYPE AB:** THIS BLOOD TYPE HAS BOTH A AND B MARKERS.
- **TYPE O:** THIS BLOOD TYPE HAS NEITHER A OR B MARKERS



THESE PARTS MAKE UP EIGHT BLOOD TYPES. BELOW, YOU'LL FIND A TABLE WITH ALL OF THE EIGHT POSSIBLE BLOOD TYPES. **READ THE PARAGRAPH ON THE NEXT PAGE AND WRITE ONE FACT YOU LEARNED ABOUT EACH BLOOD TYPE, ON THE RIGHT SIDE OF THE TABLE.**

BLOOD TYPE	FACTS
O NEGATIVE	
O POSITIVE	
A NEGATIVE	
A POSITIVE	
B NEGATIVE	
B POSITIVE	
AB NEGATIVE	
AB POSITIVE	

BLOOD TYPES



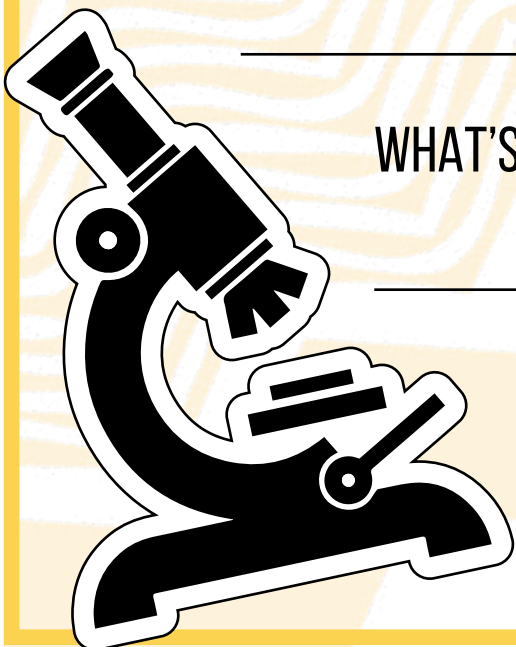
THERE ARE SPECIAL TRAITS ON YOUR RED BLOOD CELLS THAT MAKE UP YOUR BLOOD TYPE. THESE TRAITS ARE CALLED **ANTIGENS**. THERE ARE TWO TYPES OF ANTIGENS THAT BLOOD CAN HAVE: A ANTIGENS AND B ANTIGENS. HAVE YOU EVER GROUPED YOUR CRAYONS BY COLOR? JUST LIKE YOU GROUP YOUR CRAYON BOX, THESE ANTIGENS ORGANIZE BLOOD INTO FOUR GROUPS: **A, B, O, OR AB**. YOUR BLOOD IS IDENTIFIED AS **TYPE A** IF IT ONLY HAS A ANTIGENS. YOU WOULD HAVE **TYPE B** BLOOD IF IT ONLY HAS B ANTIGENS. **TYPE AB BLOOD** HAS BOTH A AND B ANTIGENS AND **TYPE O** BLOOD HAS NEITHER A NOR B ANTIGENS. CERTAIN BLOOD TYPES CANNOT DONATE BLOOD TO OTHERS. FOR EXAMPLE, IF YOU HAVE **B POSITIVE** BLOOD YOU CAN GIVE BLOOD TO **B POSITIVE** AND **AB POSITIVE**. IF YOU HAVE **O NEGATIVE** BLOOD YOU CAN GIVE TO ALL BLOOD TYPES!

MEDICAL RESEARCH CHALLENGE!

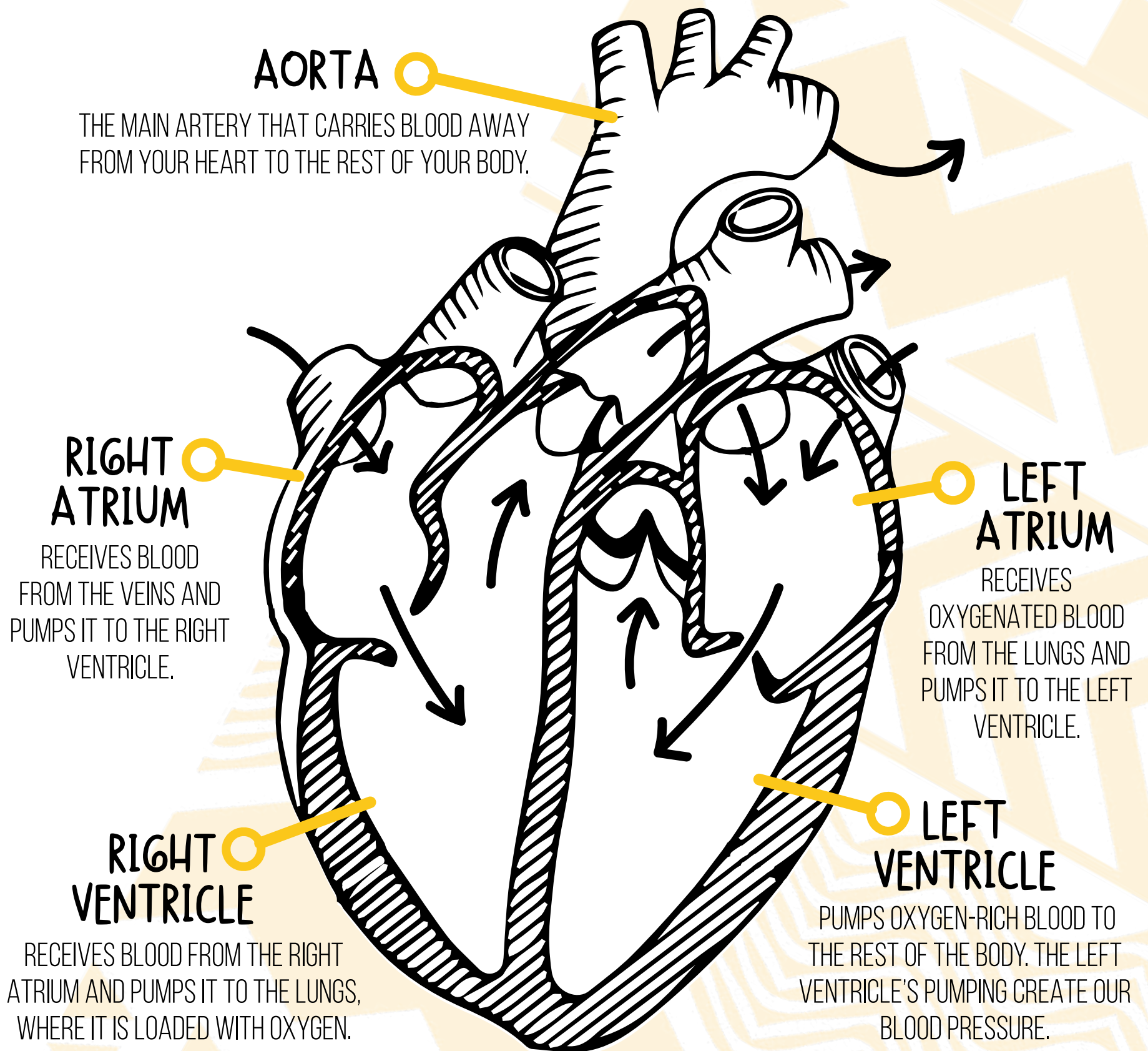
YOU MAY HAVE NOTICED THAT THERE MIGHT NOT BE ENOUGH INFORMATION IN THIS PARAGRAPH TO FINISH THE CHART ABOVE! AH HA! WE WANT YOU TO BE A MEDICAL RESEARCHER, LIKE DR. CHARLES DREW AND DO SOME DIGGING USING AN INTERNET SEARCH ENGINE (GOOGLE, YAHOO) USING YOUR COMPUTER OR PHONE! (ASK YOUR PARENT/GUARDIAN, FIRST!) THERE ARE SOME BONUS QUESTIONS, BELOW.

WHAT'S MY BLOOD TYPE? (YOU MIGHT NEED TO ASK YOUR PARENT/GUARDIAN.)

WHAT'S SOMETHING I LEARNED ABOUT MY BLOOD TYPE?



COLORING ACTIVITY



TAKE THE PLEDGE

I WILL HONOR
THE SACRIFICES OF
MY ANCESTORS.

I WILL BELIEVE
IN ME.

I WILL PURSUE
MY DREAMS.

I WILL HELP
OTHERS ALONG
THE WAY.