

The Primary Stage of Grades (4-5)
School Year 2022- 2023

Name: Key _____

Subject: Science

Unit 1: The Respiratory and Circulatory System

Worksheet 2: Human Circulatory System

Class: Grade 5 CP (All sections)

Date: / /

-Objective:

- Identify different parts of the blood circulatory system and the function of each part.
- Describe the circulations of the blood in the human body.
- Relate the heart pulse rate to the body size and the level of exercise.

The three parts of the circulatory system are:

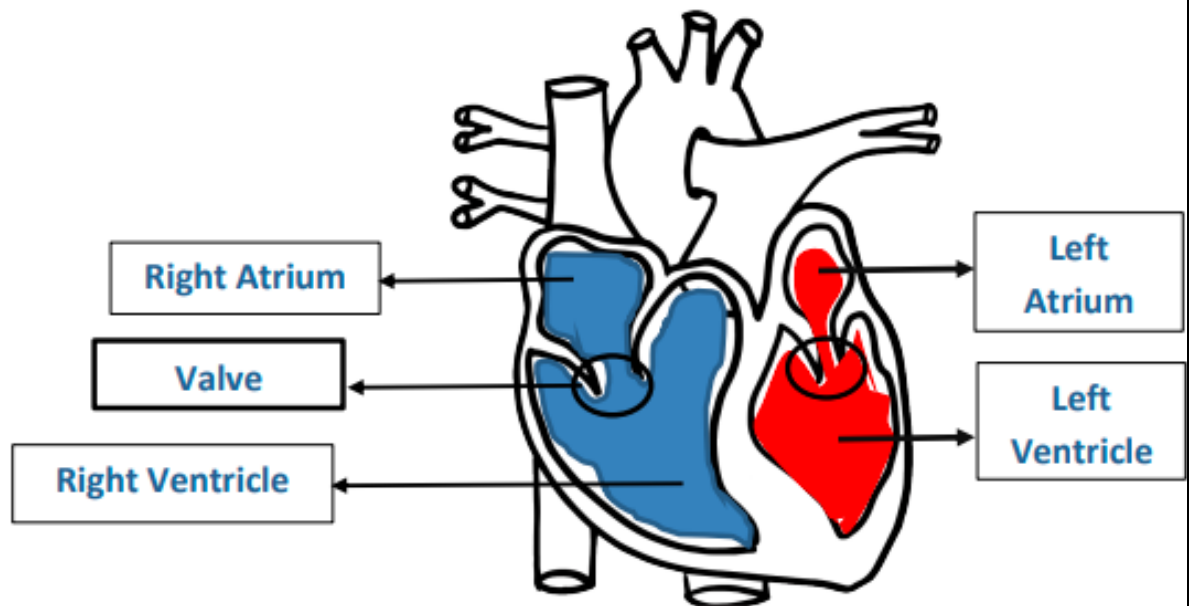
- 1) The Heart 2) Blood 3) Blood Vessels

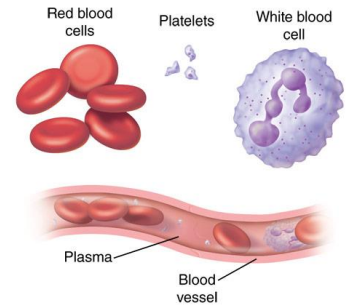
1. The Heart

a) The function of the heart is:

To pump blood around the body

b) Label the four chambers of the heart. Color the side containing **Oxygen rich blood with red**, and the side containing **Oxygen poor blood with blue**.





2. The Blood:

Blood has four main components and each has a specific function:

Blood component	Function
Red Blood Cells	Carry Oxygen.
White Blood Cells	Fight diseases.
Platelets	Stop Bleeding
Plasma	The liquid part of the blood.

Question:

Blood has many components; answer the following about these components:

1. What is the function of red blood cells in your body?

The carry oxygen.....

2. Adam fell in the playground and his knee started to bleed. Which component of the blood helps to stop the bleeding?

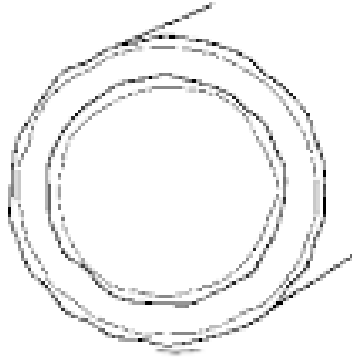
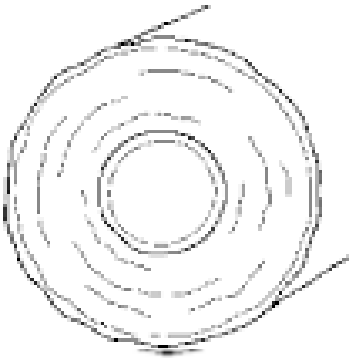
Platelets.....

3. Maya had an infection in her throat. Which blood component helps Maya to fight this infection?

White Blood Cells.....

3. The blood vessels:

The picture below shows the three kinds of blood vessels. Write the name of the blood vessel and the directing of flow under its picture.



- Name:

Artery

Vein

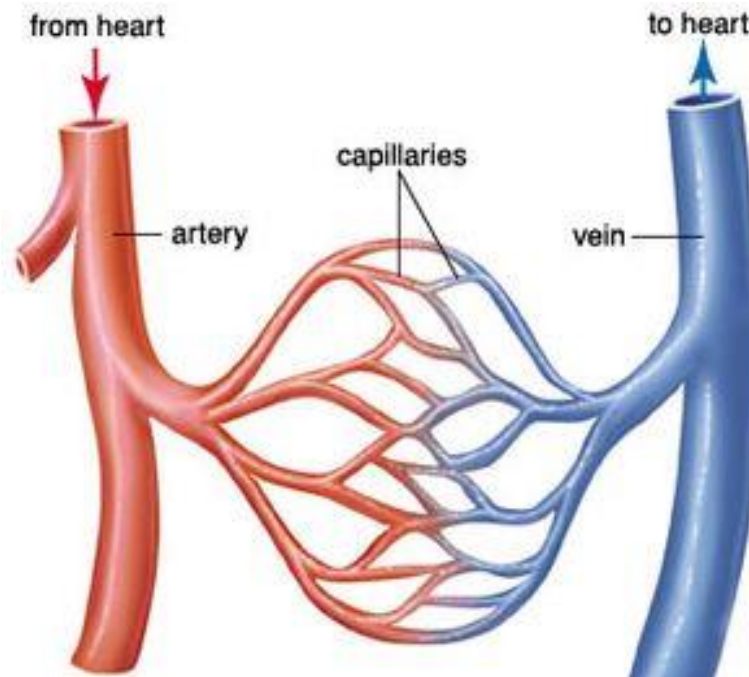
Capillary

-Direction
of flow:

Away from the
heart.

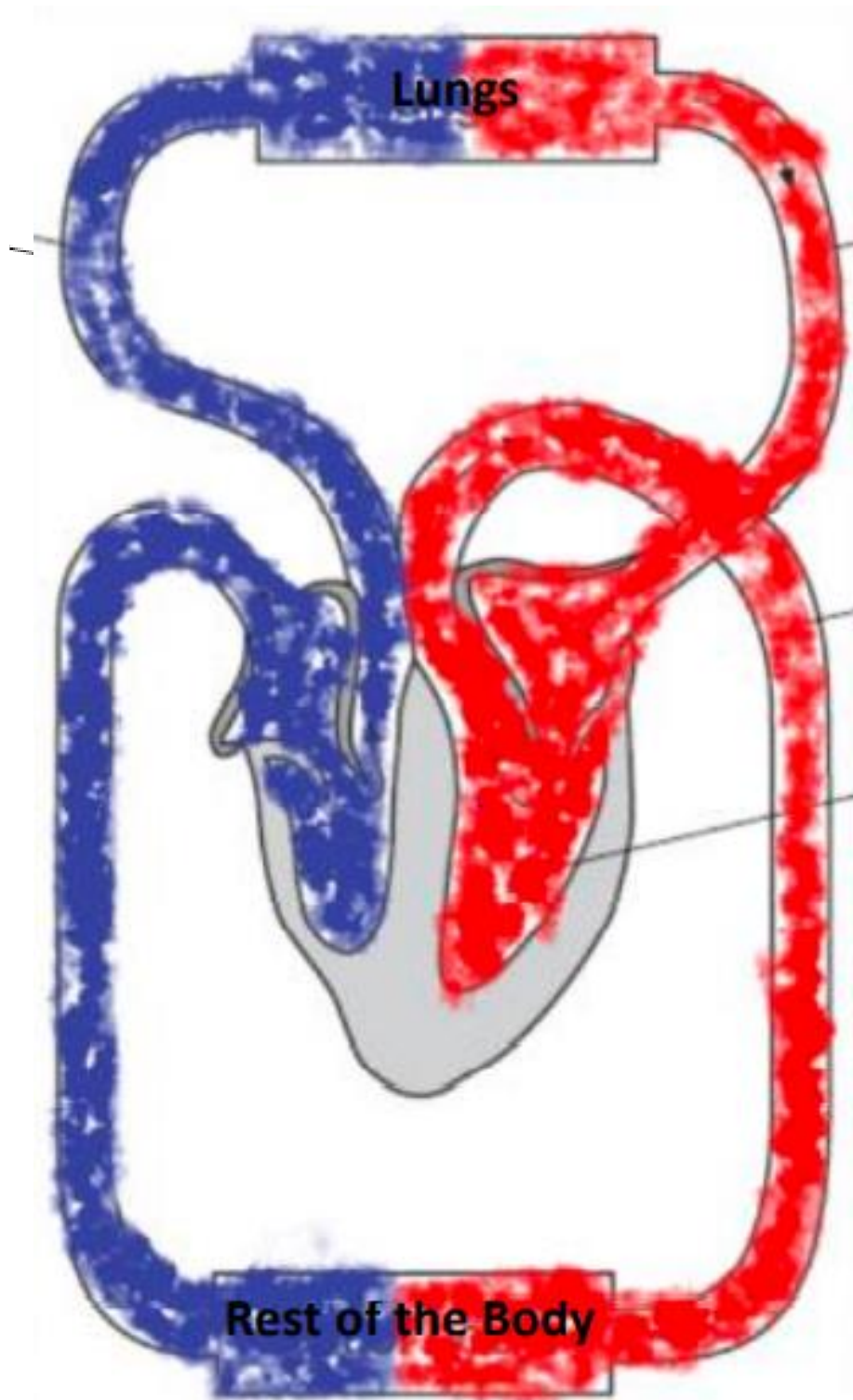
Towards the
heart.

Joins arteries
and veins.



- Blood circulations:

Color the parts carrying **Oxygen poor blood with blue**, and those carrying **Oxygen rich blood with red**.



Heart Pulse Rate:

Question 1:

The table below represents the Heart pulse rate of different animals.

Animal	Heart Pulse Rate (BPM)
A	50
B	270
C	550

- a. What is the **unit** used to measure the heart pulse rate?

Beats Per Minute (BPM)

- b. Which animal is the **smallest**? Explain your answer.

Animal C, It has the highest heart pulse rate. The smaller the body size, the higher the heart pulse rate is.

Question 2 :

Theresa was exercising. She took her **heart pulse rate** before exercising, and immediately after exercising.

Reading 1: 130

Reading 2: 90

Which reading was taken immediately after exercising? **Reading 1.**

Explain why.

When we exercise, our body needs to produce more energy, so our heart pumps blood faster to deliver more oxygen to all body muscles.