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The Circulatory Systems of Animals

*TEKS: 130.3 Livestock Production 4A, 130.6 Veterinary Medical, Applications 6A-B*

⬥ **What is the Circulatory System?**
An animal’s body system concerned with the transport of blood through the heart,

blood vessels and lungs; helps move nutrients, oxygen, waste, etc. around the body.

⬥ **Three Primary Types of Circulatory Systems:**

 **  ** *What animals have these types of circulatory systems?*

Double Loop

4 Chamber Heart

Double Loop

3 Chamber Heart

Single Loop

2 Chamber Heart

 Fish

 Amphibians

Birds, Mammals

⬥ **The Parts of the Circulatory System- Blood**

- The liquid that \_circulates \_\_\_\_ in the blood vessels,

 \_transporting \_\_\_\_\_ oxygen, carbon dioxide, waste, etc. around the body.

- What is blood made of?

Red Blood Cells (erythrocytes)- transport oxygen
White Blood Cells (leukocytes)- defense against infections
Platelets (thrombocytes)- assist with blood clotting
Plasma- liquid that suspends proteins and solid components of blood

⬥ **The Parts of the Circulatory System- Blood Vessels:
 Veins Arteries Capillaries**

The pathway of oxygenated blood from the heart to the body. Oxygen is transferred to the tissues; Waste from the tissue cells is then transferred into the blood

The pathway of oxygenated blood from the heart to the body

The pathway of oxygenated blood to the heart

⬥ **The Parts of the Circulatory System- The Heart:**

- This is the muscle that is involved in pumping the blood throughout the body.

- What are the parts of the heart?

 **VENTRICLE CHAMBER(s): ATRIUM CHAMBER(s): VALVES:**

The chamber(s) that pump the blood into the ventricle chamber(s)

The chamber(s) that pump the blood out of the heart,
to the lungs or body

Moving flaps between each chamber that keep the blood flowing in one direction; prevents backwards flow

*- Draw and describe the differences in the parts of 2, 3 and 4 chamber hearts.*

*-Label each part of the 4 chamber heart.*

*Determine how many chambers each of the following animals’ hearts have:*

**Horse: 4**

**Catfish: 2**

**Turkey: 4**

**Pig: 4**

**Trout: 2**

**Bull: 4**