

LEARNING OBJECTIVES:

1. Review the early embryonic events leading to the formation of the heart.

2. Identify the parts and the primitive heart and their relationships:

Sinus venosus, Primitive Atrium, Primitive ventricle, Bulbus cordis.
Conotruncus, Conus cordis, and Truncus arteriosus.
Mesocardium, Transverse sinus, Pericardial cavity.

3. Identify the major looping and folding movements of the heart.

4. Describe the aortic arches and their major derivatives.

Ascending aorta, Aortic arch, Brachiocephalic artery.
Carotid arteries, Subclavian arteries, Vertebral arteries.
Pulmonary arteries, Ductus arteriosus.
General idea of the derivation of the other arteries of the body.

5. Describe the cardinal, umbilical and vitelline venous systems.

Superior and Inferior Venae Cavae, Portal Vein, Ductus Venosus.
Pulmonary venous development.
General idea of the derivation of the other veins of the body.

6. Describe the formation of the definitive atria and the atrial septum.

7. Fetal circulation, Umbilical arteries and veins, and Changes that occur after birth.

8. Overview of lymphatic system development.

9. Learn about cardiovascular anomalies, specifically:

Atrial Septal Defects.

Patent ductus arteriosus.
Coarctation of the aorta.
Right aortic arch.
Double aortic arch.
Aberrant subclavian artery.

Persistent left superior vena cava.
Interrupted or duplicated inferior vena cava.
Anomalous pulmonary venous return.