

# Adam interactive lab



**ASSIGN  
BUSTER**

6. 9 1. Label the following diagram. A) Parietal branch of superficial temporal artery B) Frontal branch of temporal artery C) Superficial temporal artery D) External carotid artery E) Internal carotid F) Vertebral artery G) Inferior thyroid artery H) Subclavian artery 2. What regions of the face are supplied by the external carotid artery? The face. 3. What is the significance of the transverse foramina in cervical vertebrae? They carry blood vessels and nerves from the body and the brain and vice versa. 4. Through what cranial structure does the carotid artery pass as it enters the brain?

The carotid canal. 6. 10 1. Label the following diagram: A) Anterior cerebral artery B) anterior communicating artery C) Middle cerebral artery D) Interior carotid artery E) Posterior communicating artery F) Posterior cerebral artery G) Basilar artery H) Vertebral artery 2. The two vertebral arteries merge to form what artery? Basilar artery. 3. The circle of Willis encircles cranial nerve II (optic nerve) and what brain structure? Pituitary gland. 4. What is an anastomosis? A network of streams that both branch out and reconnect. 5. What is the physiological importance of an anastomosis?

It acts as a safety net as it ensures the continuing flow of blood in cases where there may be blockage or damage to the primary vessels. 6. 11 1. Use the structure list for brain at the top of your screen, scroll down the list and identify the following structures on the diagram below. A) Internal carotid artery B) Posterior communicating artery C) Basilar artery D) Vertebral artery (right) E) Anterior cerebral artery F) Anterior communicating artery G) Internal carotid artery (left) 6. 12 1. Magnify and adjust the image on your screen to match the following figure.

Label the following figure. A) Right common carotid artery B) Right subclavian artery C) Brachiocephalic artery D) Vertebral artery E) Left common carotid artery F) Left subclavian artery G) Arch of aorta H) Descending aorta

2. The right common carotid artery is formed at the bifurcation (splitting or fork) of the first branch of the aortic arch. What is the first branch? Brachiocephalic artery 3. What is the second branch of the aortic arch? Left common carotid artery 6. 13 1. Label the following diagram.

A) Proper palmar digital artery B) Common palmar digital artery C) Superficial palmar arterial arch D) Superficial branch of radial artery E) Radius F) Radial artery G) Axillary artery H) Vertebral artery I) Subclavian artery J) Brachial artery K) Ulna L) Ulnar artery M) Deep palmar arterial arch N) Palmar metacarpal artery 2. From what blood vessel does the axillary artery receive its blood? The subclavian artery. 3. What is the name of the large artery (a continuation of the axillary artery) running on the medial side of the arm, which represents the principal arterial supply to the arm? The brachial artery. 4.

What is the name of the large artery, representing one of the two terminal branches of the brachial artery, running along the lateral portion of the forearm? The ulnar and radial artery. 5. What is the name of the larger of the two terminal branches of the brachial artery, which runs along the medial portion of the forearm? The anterior interosseous artery. 6. What is the derivation of radial artery? The brachial artery. 6. 14 1. Adjust the image to match the diagram that follows, and label the diagram. A) Left inferior phrenic artery B) Celiac trunk

C) Supplementary mesenteric artery D) Left renal artery E) Left testicular artery F) Inferior mesenteric artery G) Inferior vena cava H) Left common iliac artery

2. What is the function of the phrenic artery? It supplies blood to the diaphragm.

3. What artery in a female would correspond to the testicular artery? The ovarian artery.

4. The celiac artery is a short, wide vessel, extending about 1 cm anteriorly and immediately dividing into three branches.

a. What branch supplies blood to the spleen? The splenic artery.

b. What branch supplies blood to the stomach?

The gastric artery.

c. What branch supplies blood to the liver? The common hepatic artery.

5. What organs does the superior mesenteric artery supply? The intestine.

6. 15

1. Adjust the image to match the diagram below, and then label the diagram.

A) Inferior vena cava B) Right external iliac vein C) femoral vein D) Great saphenous vein E) deep femoral vein F) abdominal aorta G) left common iliac artery H) left external iliac artery I) Left internal iliac artery J) deep femoral artery K) left femoral artery

2. What two arteries represent the terminal branches of the abdominal aorta?

Right and left common iliac artery.

3. What are the two terminal branches of the common iliac artery? The right and left internal and external iliac artery.

4. Into what vein does the great saphenous vein drain? The popliteal vein.

5. What large artery, representing the continuation of the external iliac artery, provides the chief arterial supply to the lower limb? The femoral artery.

6. 16

1. Adjust the images in both windows so that they match the diagram below, and then place the correct names of the labeled letters in the appropriate spaces below the diagrams.

A) Common iliac artery

B) External iliac artery C) Internal iliac artery D) Femoral artery E) Lateral circumflex femoral artery F) Deep femoral artery G) descending branch of lateral circumflex femoral artery H) Descending genicular artery I) popliteal artery

2. Adjust the image in both windows to match the following diagrams and then label the diagrams. A) Popliteal artery B) Medial inferior genicular artery C) Anterior tibial artery D) post tibial artery E) Fibular (peroneal) artery F) dorsalis pedis artery G) dorsal metatarsal artery H) Arcuate artery I) medial plantar artery J) lateral plantar artery

K) Plantar arterial arch L) Plantar digital artery M) plantar metatarsal artery

3. What is the third largest artery of the posterior knee region? Popliteal artery

4. Into what two arteries does the popliteal artery divide? Anterior and posterior tibial artery.

5. Which terminal branch of the popliteal artery is the larger?

6. Some of the arteries identified in the previous diagram are genicular arteries. What does the prefix genu mean, and how is the term related to its arterial region? The term genu means knee or any knee like structure; located posterior to the knee.