

# Lab Exam 3 Objectives

## Hematology

### Histology

Identify each of the following formed elements as well as the functions of each type.

Red blood cells (RBCs) or erythrocytes (ah RITH ro sites)
White blood cells (WBCs) or leukocytes (LOO ko sites)
Platelets or thrombocytes (THROM bo sites)

### Blood Typing

Procedure

Interpret blood typing results for ABO and Rh factor

## Circulatory System

**Anatomy of the Heart (note: boldface headings are NOT objectives)**

<b>Aorta</b>	<b>Blood vessels of myocardium</b>
Aortic arch	Cardiac vein
Ascending aorta	Coronary sinus
Descending aorta	Left coronary artery
<b>Valves &amp; associated structures</b>	Circumflex artery
Aortic semilunar valve	Left anterior descending artery
Bicuspid (mitral) valve (MY trahl)	Opening to coronary arteries
Pulmonic semilunar valve	Right coronary artery
Tricuspid valve	Marginal artery
Chordae tendineae (KOR day TEN dah nay)	Posterior interventricular artery
Papillary muscle	<b>Pulmonary blood vessels</b>
<b>Tissues</b>	Left pulmonary artery
Endocardium	Left pulmonary veins
Fibrous pericardium (PER ah KAR de um)	Pulmonary trunk
Myocardium	Right pulmonary artery
Parietal pericardium	Right pulmonary veins
Pericardial cavity	<b>Vena cavae</b>
Visceral pericardium (epicardium)	Inferior vena cava
<b>Chambers &amp; associated structures</b>	Superior vena cava
Auricle	
Fossa ovalis (o VA lus)	Apex of heart
Interatrial septum	Base of heart
Interventricular septum	Ligamentum arteriosum
Left atrium (A tre um)	Mediastinum
Left ventricle (VENT tri cul)	
Right atrium	
Right ventricle	

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## Sheep's Heart

Aorta	Myocardium
Aortic semilunar valve	Opening to coronary arteries
Apex	Papillary muscle (PAP ah ler ee)
Bicuspid valve	Pulmonary trunk
Chordae tendineae	Pulmonic semilunar valve
Fibrous pericardium	Right atrium
Inferior vena cava	Right ventricle
Interatrial septum	Superior vena cava
Interventricular septum	Tricuspid valve
Left atrium	Visceral pericardium (epicardium)
Left ventricle	

## Blood Pressure Monitoring

Sphygmomanometer	Diastolic (dahy uh STOL ik) blood pressure
Procedure	Normal values
Systolic (si STOL ik) blood pressure	

## Arteries & Veins

### Histology

Differentiate and identify an artery and vein.

### Major arteries

Anterior tibial	Facial
<b>Aorta</b>	Femoral (FEM or al)
Aortic arch	Inferior mesenteric (MES en TER ik)
Ascending aorta	Internal carotid (kah ROT id)
Descending aorta	Internal iliac (hypogastric) (IL ee ak)
Axillary (AK sah LER ee)	Popliteal
Brachial	Posterior tibial
Brachiocephalic (trunk) (BRAK e o sah FAL ik)	Radial
Celiac (trunk) (SE le ak)	Renal
Common carotid (kah ROT id) (right & left)	Subclavian (right & left)
Common iliac (IL ee ak) (right & left)	Superior mesenteric (MES en TER ik)
Deep palmar arch	Superficial temporal
Dorsalis pedis (PEED ahs)	Ulnar
External carotid (kah ROT id)	Vertebral
External iliac (IL ee ak)	

### Portal Circulation, Human

Hepatic portal vein	Splenic vein
Inferior mesenteric vein	Superior mesenteric vein

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## Major veins

Axillary	Great saphenous (sah FE nus)
Azygos (a ZYE gus)	Hepatic
Basilic (bah SIL ik)	Inferior vena cava
Brachial (note: 2 in each arm)	Internal iliac (hypogastric)
Brachiocephalic (right & left)	Internal jugular
Cephalic (sah FAL ik)	Median cubital (KU bi tal)
Common iliac (right & left)	Popliteal
External iliac	Renal
External jugular	Subclavian (right & left)
Femoral	Superior vena cava

## Lymphatic System

Axillary lymph nodes	Right lymphatic duct
Cervical lymph nodes	Spleen
Cisterna chyli (sis TER nah KYE lee)	Thoracic duct
Inguinal lymph nodes (ING gwah nal)	Thymus gland
Lymphatic vessels	

## Respiratory System

### Respiratory Organs (note: boldface headings are NOT objectives)

<b>Structures of nose/oral cavity/pharynx</b>	Hyoid bone
Auditory tube aperture	Thyroid cartilage
Laryngopharynx (lah RING go FAR ingks)	Vocal folds (cords)
Lingual tonsils (LING gwal)	
Naris (pl. nares)	<b>Structures of Tracheobronchial tree</b>
Nasal cavity	Alveolus (pl. alveoli) (al VE o lus) (al VE o lie)
Nasal conchae	Bronchiole (BRONG ke ol)
Inferior, Middle, and Superior	Bronchus (right & left) (BRONG kus) (pl. bronchi)
Nasopharynx (NAY zo FAR ingks)	Carina (kah RYE nah)
Oral cavity	Esophagus
Oral vestibule	Trachea
Oropharynx (O ro FAR ingks)	
Palate (hard & soft)	<b>Lung lobes and fissures</b>
Palatine tonsil	Diaphragm
Pharyngeal tonsil (adenoid) (AD ah noyd)	Horizontal fissure (right lung)
Tongue	Lower (inferior) lobe (right & left)
Uvula (U vu lah)	Lung (right & left)
<b>Structures of Larynx</b>	Middle lobe (note: right lung only)
Arytenoid cartilage (ah RIT ahn oid)	Oblique fissure (right & left lung)
Cricoid cartilage (KRY koyd)	Upper (superior) lobe (right & left)
Cricothyroid membrane	<b>Pleura</b>
Epiglottis	Parietal pleura
	Pleural cavity
	Visceral pleura

# Lab Exam 3 Objectives

## Spirometry: Lung Capacities

Procedure

Spirometer

### Volumes

Expiratory reserve volume	Tidal volume
Inspiratory reserve volume	Vital capacity