

Unit 3: Body Systems

Content Area: **Science**

Course(s):

Time Period: **Marking Period 1**

Length: **15 Weeks**

Status: **Not Published**

Brief Summary of Unit

The focus of the course is the vocabulary specific to the body systems: integumentary, skeletal, muscular, cardiovascular, lymphatic, immune, respiratory, digestive, urinary, reproductive, endocrine, and nervous.

Standards

- LA.RH.11-12.1 Accurately cite strong and thorough textual evidence, (e.g., via discussion, written response, etc.), to support analysis of primary and secondary sources, connecting insights gained from specific details to develop an understanding of the text as a whole.
- LA.RST.11-12.2 Determine the central ideas, themes, or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.
- LA.RST.11-12.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11-12 texts and topics.
- LA.RST.11-12.5 Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.
- LA.RST.11-12.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.
- LA.WHST.11-12.2 Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.
- LA.WHST.11-12.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
- LA.WHST.11-12.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.
- LA.WHST.11-12.9 Draw evidence from informational texts to support analysis, reflection, and research.
- LA.SL.11-12.5 Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.
- CRP.K-12.CRP1 Act as a responsible and contributing citizen and employee.
- CRP.K-12.CRP2 Apply appropriate academic and technical skills.
- CRP.K-12.CRP3 Attend to personal health and financial well-being.

CRP.K-12.CRP9	Model integrity, ethical leadership and effective management.
CRP.K-12.CRP10	Plan education and career paths aligned to personal goals.
SCI.9-12.HS.SF	Structure and Function
SCI.9-12.HS-LS1-3	Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis.
SCI.9-12.HS-LS1-1	Construct an explanation based on evidence for how the structure of DNA determines the structure of proteins which carry out the essential functions of life through systems of specialized cells.
SCI.9-12.HS-LS1-2	Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.

Transfer

- Understand how health issues can cause by a problem to one or more body system.
- Understand how their body systems work together to perform everyday functions.

Essential Questions

- What is the basic anatomy and physiology of each body system?
- What vocabulary is unique to each body system?
- Which word forms reappear as directions, conditions, or procedures in every system?

Science and Engineering Practices

- Developing and Using Models Develop and use a model based on evidence to illustrate the relationships between systems or between components of a system. (HS-LS1-1)

Disciplinary Code

- HS-LS1: From Molecules to Organisms: Structures and Processes HS-LS1.A: Structure and Function
Multicellular organisms have a hierarchical structural organization, in which any one system is made up of numerous parts and is itself a component of the next level. Systems of specialized cells within organisms help them perform the essential functions of life. Feedback mechanisms maintain a living system's internal conditions within certain limits and mediate behaviors, allowing it to remain alive and functional even as external conditions change within some range. Feedback mechanisms can encourage (through positive feedback) or discourage (negative feedback) what is going on inside the living system.

Crosscutting Concepts

- Stability and Change Feedback (negative or positive) can stabilize or destabilize a system. (HS-LS1-3)
- Structure and Function Investigating or designing new systems or structures requires a detailed examination of the properties of different materials, the structures of different components, and connections of components to reveal its function and/or solve a problem. (HS-LS1-1)

- Systems and System Models Models (e.g., physical, mathematical, computer models) can be used to simulate systems and interactions (including energy, matter, and information flows) within and between systems at different scales. (HS-LS1-1)

Evidence/Performance Tasks

- Describe the anatomy and physiology of each system.
- Identify the key terms listed at the end of this unit.
- Identify the specialized cells and tissues found in each system.
- Identify the abbreviations associated with each system.
- Identify the diagnostic procedures for each system.
- Identify the pathology associated with each system.
- Identify the pharmacology associated with each system.
- Identify the therapeutic procedures associated with each system.
- Recognize that the health of the organism can be affected by a problem with any system.
- Students will develop and utilize models to identify and describe the structures and functions of the component organs of each body system.
- Students will illustrate how the interactions between organs and systems provide different functions.
- Students will recognize, define, spell and pronounce the medical terms in this unit, and interpret abbreviations associated with body organization.
- Students will use their models to describe the different organs and systems, and relate to actual human form.
- Students will use their models to relate component parts of systems, how they affect each other, and how they interact to contribute to a fully functioning person.
- Understand that the organism is the sum of all of its systems.
- Understand that there is a special vocabulary used in medicine to accurately and succinctly communicate every aspect of a patient's condition.

Learning Plan

- Key Terms: Integumentary System Prefix 1. epi Suffixes 2. opsy 3. phagia Combining Forms
- 4. cutaneo, dermato, dermo, derma 5. kerato 6. melano 7. histio, histo 8. phago 9. lipo 10. sebo 11. hidro 12. pili, pilo 13. unguo, onchyo 14. bio 15. crypto 16. myco 17. hemato 18. koilo 19. chromo 20. albino 21. vitio 22. erythro 23. erythemo, erythema 24. pyo 25. gangreno 26. granulo 27. blepharo 28. rhytido 29. plico 30. cryo 31. tarso Diagnostic Vocabulary 32. biopsy 33. incisional biopsy 34. excisional biopsy 35. needle biopsy 36. exfoliative cytology Pathology 37. seborrhea 38. acne vulgaris 39. comedo 40. sebaceous cyst 41. hyperhidrosis 42. anhidrosis 43. pilonidal 44. hirsutism 45. alopecia 46. alopecia areata 47. alopecia totalis 48. alopecia universalis 49. onchia 50. paronychia 51. onchyphagia 52. onchocryptosis 53. onchomycosis 54. subungual hematoma 55. koilonychias 56. clubbing 57. dyschromia 58. melanosis 59. albinism 60. vitiligo 61. lesion 62. contusion 63. papule 64. plaque 65. macule 66. patch 67. scale 68. crust 69. wheal 70. ecchymosis 71. petechiae 72. verrucae 73. birthmark 74. cyst 75. pustule 76. vesicle 77. bulla 78. abscess 79. laceration 80. ulcer 81. decubitus ulcer 82. fissure 83. fistula 84. dermatosis 85. keratosis 86. dermatitis 87. contact dermatitis 88. pruritus 89.

- urticaria 90. erythroderma 91. erythema 92. xeroderma 93. psoriasis 94. eczema
 95. purpura 96. abrasion 97. cellulites 98. pyoderma 99. impetigo 100. furuncle
 101. carbuncle 102. dermatomycosis 103. gangrene 104. putrefaction 105.
 scleroderma 106. scabies 107. pediculosis 108. actinic keratosis 109. malignant
 melanoma 110. basal cell carcinoma
- 111. Calcium channel blockers 112. ACE inhibitors (angiotensin converting enzyme)
 - 111. squamous cell carcinoma 112. granuloma 113. granulation tissue 114. pyogenic granuloma 115. skin tags 116. polyp 117. cicatrix 118. keloid 119. papilloma 120. lipoma 121. burn 122. first degree burn 123. second degree burn 124. third degree burn Surgical Procedures 125. debridement 126. incision & drainage 127. chemical peel 128. dermabrasion 129. cauterization 130. cryosurgery 131. L.A.S.E.R. 132. rhinophyma 133. port-wine stain 134. tattoo removal 135. blepharoplasty 136. rhytidectomy 137. liposuction 138. lipectomy 139. placation 140. sclerotherapy
 - 111. squamous cell carcinoma 112. granuloma 113. granulation tissue 114. pyogenic granuloma 115. skin tags 116. polyp 117. cicatrix 118. keloid 119. papilloma 120. lipoma 121. burn 122. first degree burn 123. second degree burn 124. third degree burn Surgical Procedures 125. debridement 126. incision & drainage 127. chemical peel 128. dermabrasion 129. cauterization 130. cryosurgery 131. L.A.S.E.R. 132. rhinophyma 133. port-wine stain 134. tattoo removal 135. blepharoplasty 136. rhytidectomy 137. liposuction 138. lipectomy 139. placation 140. sclerotherapy
 - 111. squamous cell carcinoma 112. granuloma 113. granulation tissue 114. pyogenic granuloma 115. skin tags 116. polyp 117. cicatrix 118. keloid 119. papilloma 120. lipoma 121. burn 122. first degree burn 123. second degree burn 124. third degree burn Surgical Procedures 125. debridement 126. incision & drainage 127. chemical peel 128. dermabrasion 129. cauterization 130. cryosurgery 131. L.A.S.E.R. 132. rhinophyma 133. port-wine stain 134. tattoo removal 135. blepharoplasty 136. rhytidectomy 137. liposuction 138. lipectomy 139. placation 140. sclerotherapy
 - 116. strabismus 117. esotropia 118. exotropia 119. monochromatism 120. nyctalopia 121. presbyopia 122. hemianopsia 123. ametropia 124. astigmatism 125. myopia 126. hyperopia 127. hypermetropia 128. blindness 129. amblyopia 130. scotoma
- Procedures of eyes 131. orbitotomy 132. tarsectomy 133. tarsorrhaphy 134. conjunctivoplasty 135. corneal transplant 136. iridectomy 137. lensectomy 138. extracapsular extraction 139. intracapsular cataract extraction 140. phacoemulsification 141. intraocular lens 142. aphakia 143. pseudophakia 144. laser treatment 145. pinna, auricle 146. external auditory canal 147. tympanic membrane 148. mastoid cells 149. auditory ossicles 150. malleus 151. incus 152. stapes 153. Eustachian tube 154. oval window 155. cochlea 156. cochlear duct 157. organ of Corti 158. semicircular canals 159. nerve fibers 160. air conduction 161. bone conduction Diagnostic procedures 162. audiology 163. audiometry 164. speech audiometry 165. tympanometry 166. monaural, binaural Pathology of ears 167. otopathy 168. otalgia 169. otitis 170. otitis externa 171. otorrhea 172. otopyorrhea 173. otorrhagia 174. otomycosis 175. impacted cerumen 176. eustachitis 177. patulous Eustachian tube 178. mastoidalgia 179. mastoiditis 180. myringitis 181. acute otitis media 182. serous otitis media 183. purulent otitis media 184. otosclerosis 185. labyrinthitis 186. Meniere's disease 187. Tinnitus 188. deafness 189. presbycusis 190. conductive hearing loss 191. sensorineural hearing loss 192. noise-induced hearing loss Procedures of ears 193. otoplasty 194. myringectomy 195. tympanocentesis 196. myringoplasty 197. tympanoplasty 198. myringotomy 199. tympanostomy tubes 200. stapedectomy 201. mastoidectomy 202. fenestration 203. labyrinthectomy 204. labyrinthotomy
- 119. Tic douloureux 120. cerebral palsy 121. spasticity 122. athetosis 123. tremor 124. seizure 125. generalized tonic-clonic seizure 126. tonic convulsion 127. clonic convulsion 128. epilepsy 129. grand mal epilepsy 130. absence epilepsy 131. epileptic aura

Surgical procedures 132. lobotomy 133. lobectomy 134. electroshock therapy 135. neurectomy 136. neuroplasty 137. neurorrhaphy 138. neurotomy 139. sympathectomy 140. anesthesia 141. anesthetic 142. topical anesthesia 143. local anesthesia 144. regional anesthesia 145. epidural anesthesia 146. general anesthesia

- 123. prostatitis 124. prostatorrhea 125. Procedures 126. hypophysectomy 127. chemical thyroidectomy 128. lobectomy 129. parathyroidectomy 130. adrenalectomy 131. pancreatectomy 132. pancreatotomy 133. thymectomy 134. pinealectomy 135. oophorectomy, ovariectomy 136. salpingectomy 137. hysteropexy 138. vaginal hysterectomy 139. total abdominal hysterectomy 140. dilation & curettage (D & C) 141. cervicectomy 142. conization 143. colporrhaphy 144. vaginoplasty 145. hymenectomy 146. lumpectomy 147. mastectomy 148. mammoplasty 149. breast augmentation 150. mastopexy 151. cesarean delivery 152. episiotomy 153. episiorrhaphy 154. Apgar score 155. circumcision 156. orchidectomy 157. castration 158. sterilization 159. vasectomy 160. prostatectomy\ 161. transurethral prostatectomy
- 124. cleft lip 125. cleft palate 126. leukoplakia 127. dental caries 128.dental plaque 129. periodontitis 130. gingivitis 131. bruxism 132. malocclusion 133. esophagaglia 134. esophageal reflux 135. esophageal varices 136. pyrosis 137. hiatal hernia 138. dysphagia 139. gastrosis 140. gastritis 141. gastrorrhagia 142. gastrorrhea 143. gastrorrhesis 144. gastric ulcers 145. peptic ulcers 146. perforating ulcer 147. anorexia 148. achlorhydria 149. dyspepsia 150. regurgitation 151. nausea 152. emesis 153. hematemesis 154. hyperemesis 155.aerophagia 156. eructation 157. flatus 158. borborygmus 159. gastroenteritis 160. enteritis 161. ileitis 162. ileus 163. Crohn's disease 164. diverticulitis 165. diverticulum 166. colitis 167. melena 168. intestinal obstruction 169. strangulating obstruction 170. volvulus 171. intussusception 172. inguinal hernia 173. amebic dysentery 174. cholera 175. shigellosis 176. typhoid fever 177. hepatitis 178. hepatitis A 179. hepatitis B 180. hepatitis C 181. cirrhosis 182. jaundice 183. ascites 184. hepatomegaly 185. hepatorrhagia 186. hepatorrhesis 187. hepatorrhesis 188. cholecystalgia 189. cholecystitis 190. gallstone 191. cholelithiasis 192. cheiloplasty 193. palatoplasty 194. maxillofacial surgery 195. odontectomy 196. gingivectomy 197. esophagectomy 198. esophagoplasty 199. emetic 200. antiemetic 201. nasogastric intubation 202. gastrectomy 203. gastrotomy 204. pyloroplasty 205. vagotomy 206. colostomy 207. colectomy 208. gastroduodenostomy 209. anastomosis 210. diverticulectomy 211. ileectomy 212. proctectomy 213. proctoplasty 214. proctoplexy 215. anoplasty 216. ostomy 217. stoma 218. gastrostomy 219. enterocolostomy 220. effluent 221. ileostomy 222. tranverse colostomy 223. descending colostomy 224. sigmoid colostomy 225. ascending colostomy 226. hepatectomy 227. hepatorrhaphy 228. hepatotomy 229. laparoscopic cholecystectomy 230. choledocholithotomy Urinary System Prefixes 2. retro 3. an 4. epi 5. para 6. poly Suffixes 7. chrome 8. uria 9. emia 10.osis, pathy 11. ectasis 12. ptosis 13. lithiasis 14. cele 15. lysis 16. tripsy Combining forms 17. urino, uro 18. reno, nephro 19. cortico 20. medullo 21. glomerulo 22. pyelo
- 23. cysto, vesico 24. urethro 25. meato 26. pyo 27. litho 28. vagina 29. spado 30. oligo 31. hemo Vocabulary 32. urea 33. homeostasis 34. intravesical 35. urethral meatus, urinary meatus 36. micturition 37. urochrome 38. catheterization (catheter) 39. cytoscopy (cytoscope) 40. intravenous pyelogram 41. KUB 42. intravenous urography (urogram) 43. voiding cystourethrogram 44. urinalysis 45. anuria, anuresis 46. uremia, uremic poisoning 47. renal failure 48. acute renal failure 49. chronic renal failure 50. nephrotic syndrome, nephrosis, nephropathy 51. nephritis 52. nephrectasis 53. nephromalacia 54. nephrosclerosis 55. nephroptosis 56. prolapse 57. suppuration 58. renal colic 59. hydronephrosis 60. glomerulonephritis 61. pyelitis 62. pyelonephritis 63. calculus 64. nephrolith 65. nephrolithiasis 66. ureterolith 67. cystitis 68. cystolith 69. ureterectasis 70. ureterorrhagia 71. ureterostenosis 72. hydroureter 73. cystalgia, cystodyni 74. interstitial cystiti 75. UTI 76. cystocele 77. cystorrhagia 78. vesovaginal fissure 79. urethralgia 80. urethritis 81. urethrorrhagia 82. urethrorrhrea 83. urethrostenosis 84. epispadias 85. hypospadias 86. paraspadias 87. urinary retention 88. diuresis 89.

	dysuria 90.	oliguria 91.	polyuria 92.	nocturia 93.	enuresis 94.	dialysis
95.	hemodialysis 96.	incontinence 97.	urinary stress incontinence 98.		lithotripsy 99.	
	nephrolithotomy 100.	nephropexy 101.	peritoneal dialysis 102.		nephrectomy 103.	
	renal transplantation 104.	nephrolysis 105.	nephrostomy 106.		cystetomy 107.	
	cystorrhaphy 108.	cystopexy 109.	cystoplasty 110.	lithotomy 111.	pyeloplasty 112.	
	pyelotomy 113.	ureterectomy 114.		ureteroplasty 115.	ureterorrhaphy 116.	
	urethroplasty 117.		meatotomy 118.	urethropexy 119.	urethrorrhaphy 120.	
	urethrostomy 121.		urethrotomy			
	• Circulatory System Prefixes 1. epi 2. endo 3. pro 4. brady 5. tachy 6. per 7. an 8. anti					
	Suffixes 9. cyte 10. phage 11.	itis 12.	spasm 13.	fusion 14.	crasia 15.	
	omo 16. emia 17. penia 18.		stasis Combining Form 19.	cardio 20.	arterio	
21.	phlebo, veno 22.	hemo/hemato 23.	myo 24.	atrio 25.	ventriculo 26.	valvo, valvulo 27.
	angio, vaso 28.	aorto 29.	sero 30.	fibrino 31.	thrombo 32.	erythro 33.
	reticulo 34.	macro 35.	phago 36.	echo 37.	arthero 38.	ischo 39.
40.	aneurysmo 41.	albumino 42.	lipo 43.	bilirubin Vocabulary 44.	septum 45.	tricuspid
	valve 46.	mitral valve 47.	pulmonary semilunar valve 48.	aortic semilunar valve Diagnostic		
	Vocabulary 49.	stress test 50.	angiography 51.	angiogram 52.	angiography 53.	
	angiogram 54.	phlebography 55.	phlebogram 56.	cardiac catheterization 57.		
	echocardiography Pathology 58.	coronary artery disease (CAD) 59.	atheroma 60.	angina		
	pectoris 61.	myocardial infarction 62.	infarct 63.	ischemic heart disease (IHD) 64.	ischemia	
65.	congestive heart failure (CHF) 66.	mitral valve prolapse 67.	heart murmur 68.	cardia		
	arrhythmia 69.	palpitation 70.	fibrillation 71.	atrial fibrillation 72.	ventricular fibrillation 73.	
	flutter 74.	aneurysm 75.	hemangioma 76.	varicose veins 77.	hemorrhoids 78.	
	hyperfusion 79.	thrombosis 80.	thrombus 81.	thrombotic occlusion 82.	coronary	
	thrombosis 83.	thrombophlebitis 84.	embolus 85.	embolism 86.	dyscrasnia 87.	
	hematoma 88.	septicemia 89.	hyperuricemia 90.		erythrocytosis 91.	
	leukemia 92.	anemia 93.	aplastic anemia 94.		sickle cell anemia Drugs used for	
	Cardiovascular system 95.	percutaneous transluminal coronary angioplasty (PTCA) 96.	stent 97.			
	endarterectomy 98.	carotid endarterectomy 99.		coronary artery bypass surgery		
100.	defibrillation 101.		cardiopulmonary resuscitation (CPR) 102.	transfusion 103.		
	vasoconstrictor 104.		vasodilator 105.	tissue plasminogen activator (TPA) 106.		
	antiarrhythmic 107.		anticoagulant 108.	antihypertensive 109.	diuretic 110.	
	Beta-blocking drugs					

- Define the terms associated with the integumentary system.
- Describe pregnancy, childbirth, and the postpartum period and the diagnosis, pathology and procedures related to them.
- Describe the accessory organs of the integumentary system.
- Describe the anatomy and physiology of the endocrine system, and its role in maintaining homeostasis.
- Describe the anatomy and physiology of the lymphatic and immune systems, including the lymphatic vessels, lymph nodes, the tonsils, spleen, and thymus.
- Describe the anatomy of a long bone, and label a diagram of a long bone.
- Describe the different types of immunity.
- Describe the different types of joints, and give examples.
- Describe the heart in terms of chambers, valves, blood flow, heartbeat and heart sounds.
- Describe the major structures and functions of the urinary system.
- Describe the processes of digestion, absorption and metabolism.
- Describe the structures and functions of the cardiovascular system.
- Describe the structures and functions of the ears. Use the model to demonstrate and label the diagrams.
- Describe the structures and functions of the eyes and adnexa. Use the model to demonstrate and label

the diagrams.

- Describe the structures and functions of the muscular system including muscle fibers, fascia tendons, aponeuroses and the three types of muscles.

- Describe the structures and functions of the nervous system.

- Design a public service announcement to educate the public on skin cancer and the dangers of tanning.

- Differentiate among the three different types of blood vessels and give the function of each.

- Differentiate between the axial and appendicular skeleton.

- Digestive System Prefixes 1. anti Suffixes 2. phagia 3. lithiasis 4. pexy Combining forms 5. alimento 6. oro, stomato 7. cheilo, labio 8. bucco 9. palato 10. rugo 11. uvulo

12. glosso, linguo 13. denti, dento, odonto 14. deciduo (think deciduous trees) 15. gingivo 16. esophago 17. pyloro 18. entero 19. duodeneti, duodeno 20. jejunio 21.

ileo 22. colo, colon 23. ceco 24. appendo, appendico 25. sigmoido 26. recto 27.

ano 28. procto 29. hepato 30. chole 31. cysto 32. pancreato 33.

meta 34. villi 35. stalsis 36. hemo, hemato 37. pyro 38. hiato 39. pepso

40. gastro 41. diverti Vocabulary 42. alimentary canal 43. gastrointestinal tract 44. mouth 45. lips/labia 46. buccal 47. palate – hard & soft 48. rugae 49. uvula 50. tongue 51. dentition 52. maxillary, mandibular arches 53.

edentulous 54. primary dentition, deciduous dentition 55. permanent dentition 56.

peridontium 57. alveolar ridge 58. gingiva 59. salivary glands 60. parotid glands

61. sublingual glands 62. submandibular glands 63. gullet 64. cardiac sphincter 65. fundus 66. body(stomach) 67. antrum 68. pylorus 69. small bowel 70. duodenum 71. jejunum 72. ileum 73. ileocecal valve 74. ileocecal

sphincter 75. cecum 76. vermiform appendix 77. ascending colon 78. transverse colon 79. descending colon 80. sigmoid colon 81. rectum 82. anus 83. anal sphincter 84.

hepatic 85. glucose 86. glycogen 87. bile 88. hepatic duct 89. cystic duct 90.

bilirubin 91. common bile duct 92. pancreas 93. pancreatic duct 94.

digestion 95. metabolism 96. anabolism 97. catabolism 98. absorption 99. nutrient villi 101. mastication 102. salivary amylase 103. deglutition 104. epiglottis 105.

peristalsis 106. hydrochloric acid 107. protease 108. pepsin 109. lipase 110.

chyme 111. trypsin, lipase, amylase 112. emulsification 113. feces 114.

defecation 115. GI series 116. hemoccult 117. anoscopy 118. esophagoscopy 119.

gastroscopy 120. colonoscopy 121. sigmoidoscopy 122. aphthous stomatitis 123. herpes

labialis

- Endocrine and Reproductive System Prefixes 1. anti 2. pan 3. ply 4. eu 5. para 6. ad 7. hydro 8. trans 9. ante 10. peri 11. primi 12. contra 13. Suffix 14. tropic

15. dipsia 16. uria 17. ism 18. emia 19. oma 20. cele 21. pexy Combining forms 22. crino 23. pituito 24. luteo 25. lacto, lacti 26. somato 27. melano 28.

acro 29. thyro, thyroido 30. toxico 31. calci 32. reno 33. adreno, adrenalo 34.

cortico 35. medullo 36. andro 37. pancreato 38. thymo 39. pinealo

40. gonado 41. gyneco 42. perineo 43. didymo, orcho, orchio, orchid 44. spermo, spermato 45. semini 46. prostate 47. peni, priapo 48. oligo 49. oophoro, ovario 50.

ooo, ovi, ovo 51. salpingo 52. hystero, metro, metrio, utero 53. flexo 54. fundo 55.

corpo 56. cervico 57. endo 58. colpo, vagino 59. vulvo, episio 60. mammo 61.

masto 62. meno, menstru, menstruato 63. ejaculato 64. feti, feto 65. umbilico

66. gesto, gestato 67. pregn 68. nulli 69. gravido 70. parto 71.

operculo 72. pelvi 73. retro 74. leuko 75. galacto 76. aborto Vocabulary 77.

pituitism 78. panhypopituitism 79. hypophysitis 80. hyperpituitism 81.

gigantism 82. acromegaly 83. diabetes insipidus 84. thyroiditis 85. Hashimotos's

thyroiditis 86. Myxedema 87. cretinism 88. thyrotoxicosis 89. Graves' disease 90.

hyperthyroidism 91. goiter 92. exophthalmos 93. hypoparathyroidism 94.

tetany 95. hypocalcemia 96. hyperparathyroidism 97. hypercalcemia 98.

adrenopathy 99. adrenalitis 100. Addison's disease 101. aldosteronism 102. Conn's

syndrome 103. Cushing's disease 104. pheochromocytoma 105. pnacreatalgia 106.

hyperinsulinism 107. hyperglycemia/hypoglycemia 108. insulinoma 109. thymitis 110.

thymoma 111. pinealopathy 112. hypergonadism/ hypogonadism 113.
oophoritis 114. ovarian cyst 115. ovariorrhexis 116. salpingitis 117. azoospermia
118. oligospermia 119. feminism 120. testitis 121. anarchism 122. epididymitis

- Explain how the body elicits an immune response.
- Explain how the body elicits an immune response.
- Explain how urine is formed in the nephrons by filtration, re-absorption, and secretion. Be able to label a nephron.
- Identify and describe the major structures and functions of the female reproductive system. Use the model and label the diagram.
- Identify and describe the major structures and functions of the male reproductive system. Use the model and label the diagram.
- Identify and describe the major structures and functions of the respiratory system. Label a diagram.
- Identify and describe the structures and functions of the integumentary system.
- Identify the major components of blood and the functions of each.
- Identify the major parts of the brain by location and function. Use the model to demonstrate and label the diagrams.
- Identify the major structures and functions of the digestive system, including the alimentary canal and accessory structures. Use the model to point out these structures and label the diagrams.
- Identify the major structures and functions of the skeletal system. Label a drawing.
- Identify the three major divisions of the nervous system and describe the structures and functions of each.
- Label a diagram of the heart, and trace the path of blood through the heart, indicating where blood is oxygenated and deoxygenated.
- List and describe the four purposes of the skin.
- List and describe the three layers of skin and their functions. Be able to label a diagram of the skin.
- Make a life-sized outline of a human body, and have groups of students design an assigned gland to place in the correct position on the drawing. Each group must then thoroughly explain the function of the gland, and how its hormones affect the body's function.
- Muscular System Prefixes 1. ab 2. ad 3. ex 4. bi 5. tri 6. quadro/i 7. hemi 8. brady Suffix 9. paresis 10. plegia 11. asthenia 12. lysis 13. cele 14. desis 15. malacia 16. physis Combining Forms 17. myo 18. fascio 19. teno, tendo, tendon 20. fibro, fibrous 21. aponeuro 22. cardio 23. kinesio/kinesis 24. neuro 25. tono 26. ducto 27. flexo 28. tenso 29. levo, levato 30. presso 31. sterno 32. cleido 33. clavicula 34. masto 35. caro 36. sphinctero 37. electro 38. radiculo 39. taxo 40. adheso 41. torti Vocabulary 42. fascia 43. tendon 44. aponeurosis 45. striated 46. skeletal muscle 47. smooth muscle 48. cardiac muscle (myocardium) 49. kinesiology 50. contraction 51. relaxation 52. myoneural junction 53. range of motion 54. abduction 55. abductor 56. adduction 57. adductor 58. flexion 59. flexor 60. extensor 61. hyperextension 62. elevation 63. levator 64. rotation 65. rotator muscle 66. circumduction 67. supination 68. pronation 69. muscle insertion 70. electromyography 71. electrogram 72. electroneuromyography 73. ergonomics 74. repetitive stress disorders 75. myofascial damage 76. carpal tunnel syndrome 77. epicondylitis 78. cervical radiculopathy 79. fibroma 80. ataxia 81. dystaxia 82. atonic 83. dystonic 84. hypotonia 85. myotonia 86. muscle atrophy 87. hyperkinesia 88. bradykinesia 89. dyskinesia 90. paralysis 91. myoparesis 92. hemiparesis 93. hemiplegia 94. paraplegia 95. quadriplegia 96. myasthenia 97. myolysis 98. adhesion 99. myocele 100. hernia 101. myosclerosis 102. tenectomy 103. tenonectomy 104. tenotomy 105. tenolysis 106. herniorrhaphy 107. sphincterotomy

- Name and describe the functions of the hormones secreted by each of the endocrine glands. Make a chart or flash cards for review.
- Name and describe the structures of the urinary system. Use the models of the system and label the diagrams.
- Nervous System Prefixes 1. epi 2. sub 3. hydro Suffixes 4. lepsy 5. cele 6. phasia 7. esthesia Combining forms 8. neuri/neuro 9. ganglio/ganglion 10. plexo 11. dendro 12. axo 13. synapso, synapo 14. glio 15. encephalo 16. meningo, meningio 17. duro 18. cerebro 19. cortico 20. convoluto 21. gyro 22. sulco 23. thalamo 24. cerebello 25. medullo 26. myelo 27. somni, somno 28. nocti 29. ambulo, ambulato 30. narco 31. cephalo 32. concusso 33. contuso 34. hemato 35. polio 36. radicul/o 37. causo, causto 38. atheto Vocabulary 39. reflex 40. meninges 41. dura mater 42. epidural 43. arachnoid membrane 44. pia mater 45. cerebrospinal fluid 46. cerebrum 47. cerebral cortex 48. convolution (gyri) 49. fissures (sulci) 50. frontal lobe 51. parietal lobe 52. occipital lobe 53. temporal lobe 54. ventricle 55. thalamus 56. hypothalamus 57. cerebellum 58. brainstem 59. midbrain 60. pons 61. medulla oblongata 62. sympathetic nervous system 63. parasympathetic nervous system Diagnostic Procedures 64. magnetic resonance imaging 65. ultrasound 66. electroencephalography 67. Encephalography 68. myelography 69. myelography Levels of Consciousness 70. conscious 71. lethargy 72. stupor 73. coma Pathology 74. syncope 75. somnolence 76. somnambulism 77. narcolepsy 78. meningitis 79. encephalopathy 80. encephalitis 81. cephalgia 82. migraine headache 83. hydrocephalus 84. encephalocele 85. meningocele 86. meningocele 87. Parkinson's disease 88. Alzheimer's disease 89. Tetanus 90. concussion 91. cerebral contusion 92. cranial hematoma 93. amnesia 94. aphasia 95. dysphasia 96. aphasia 97. agnosia 98. stroke (CVA) 99. transient ischemic attack (TIA) 100. ischemic stroke 101. cerebral thrombosis 102. hemorrhagic stroke 103. myelitis 104. myelosis 105. poliomyelitis 106. postpolio syndrome 107. radiculitis 108. multiple sclerosis 109. demyelination 110. neuralgia 111. neuritis 112. paralysis 113. paresthesia 114. hyperesthesia 115. causalgia 116. Bell's palsy 117. sciatica 118. amyotrophic lateral sclerosis

- Preview the essential questions and connect to learning throughout the unit.
- Recognize, define spell and pronounce the terms related to muscle movements and how muscles are named.
- Recognize, define spell and pronounce the terms related to the diagnosis, pathology and procedures, pharmacology, and abbreviations related to the blood.
- Recognize, define spell and pronounce the terms related to the diagnosis, pathology and procedures, pharmacology, and abbreviations related to the cardiovascular system.
- Recognize, define spell and pronounce the terms related to the diagnosis, pathology and procedures, pharmacology, and abbreviations related to the digestive system.
- Recognize, define spell and pronounce the terms related to the diagnosis, pathology and procedures, pharmacology, and abbreviations related to the endocrine system.
- Recognize, define spell and pronounce the terms related to the diagnosis, pathology and procedures, pharmacology, and abbreviations related to the eye and ear.
- Recognize, define spell and pronounce the terms related to the diagnosis, pathology and procedures, pharmacology, and abbreviations related to the female reproductive system
- Recognize, define spell and pronounce the terms related to the diagnosis, pathology and procedures, pharmacology, and abbreviations related to the integumentary system.
- Recognize, define spell and pronounce the terms related to the diagnosis, pathology and procedures, pharmacology, and abbreviations related to the male reproductive system
- Recognize, define spell and pronounce the terms related to the diagnosis, pathology and procedures, pharmacology, and abbreviations related to the muscular system.

- Recognize, define spell and pronounce the terms related to the diagnosis, pathology and procedures, pharmacology, and abbreviations related to the nervous system.
- Recognize, define spell and pronounce the terms related to the diagnosis, pathology and procedures, pharmacology, and abbreviations related to the respiratory system.
- Recognize, define spell and pronounce the terms related to the diagnosis, pathology and procedures, pharmacology, and abbreviations related to the skeletal system.
- Recognize, define spell and pronounce the terms related to the diagnosis, pathology and procedures, pharmacology, and abbreviations related to the urinary system.
- Respiratory System Prefixes 1. pneu 2. eu 3. brady 4. tachy 5. a Suffixes 6. thorax 7. pnea 8. meter 9. plegia 10. spasm 11. ectasis 12. ptysis Combining forms 13. naso 14. septo 15. sinuso 16. olfacto 17. pharyngo 18. oro 19. laryngo 20. tracheo 21. thoraco 22. broncho, bronchio 23. bronchiolo 24. alveolo 25. lobo 26. pneumo, pneumono 27. pulmo, pulmono 28. pleuro 29. phreno 30. spiro 31. oxi, oxo, oxy 32. cyano 33. phono 34. atelo 35. hemo Vocabulary 36. nasal septum 37. cilia 38. olfactory receptors 39. sinus 40. glottis 41. thyroid cartilage 42. thoracic cavity 43. mediastinum 44. diaphragm 45. phrenic nerve 46. inhalation 47. exhalation 48. phlegm 49. sputum 50. laryngectomy 51. pneumorrhagia 52. atelectasis 53. mucous 54. mucus 55. pleural effusion 56. Smoker's

Respiratory System

- Skeletal System Suffixes 1. poietic 2. lysis 3. desis 4. clasis Combining forms 5. osteo, osse, ossi 6. myelo 7. hemato 8. chondro 9. arthro 10. ligamento 11. burso 12. synovio 13. costo 14. acousto 15. ankylo 16. spondylo 17. vertebro 18. lamino 19. thoraco 20. cranio 21. ilio 22. scolio 23. bifido 24. chemo 25. nucleo Vocabulary 26. red bone marrow 27. hematopoietic 28. cartilage 29. articular cartilage 30. meniscus 31. epiphysis 32. proximal epiphysis 33. distal epiphysis 34. diaphysis 35. articulation 36. articulate 37. suture joint (fibrous joint) 38. fontanelle 39. symphysis (cartilaginous joint) 40. synovial joint 41. ball & socket joint 42. hinge joint 43. ligament 44. tendon 45. axial skeleton 46. appendicular skeleton Diagnostic vocabulary 47. acoustagram 48. arthrocentesis 49. arthrography 50. arthroscopy 51. arthroscope Pathology of skeletal system 52. arthropathy 53. arthralgia, athrodynia 54. athrosclerosis 55. ankylosis 56. luxation 57. subluxation 58. chondropathy 59. chondromalacia 60. bursitis 61. arthritis 62. osteoarthritis 63. rheumatoid arthritis 64. ankylosis spondylitis 65. gouty arthritis 66. hyperuricemia 67. spondylosis 68. spondylitis 69. herniated disk, ruptured disk 70. lumbago 71. kyphosis 72. lordosis 73. scoliosis 74. spina bifida 75. spondylolisthesis 76. periostitis 77. ostealgia 78. osteitis 79. osteomyelitis 80. exostosis 81. osteonecrosis 82. sequestrum 83. osteomalacia 84. Rickets 85. Paget's disease 86. myeloma 87. Ewing's sarcoma 88. osteoporosis 89. fracture a. closed/simple b. open/compound c. comminuted d. impacted e. compression f. spiral g. greenstick/incomplete 90. fat embolus 91. crepititation (crepitus) Procedures 92. bursectomy 93. chondroplasty 94. synovectomy 95. arthrectomy 96. arthrodesis 97. arthrolysis 98. arthroplasty 99. diskectomy 100. percutaneous diskectomy 101. craniectomy 102. cranioplasty 103. craniotomy 104. osteoclasis 105. ostectomy 106. amputation 107. osteoplasty 108. osterorrhaphy 109. osteotomy 110. immobilization 111. surgical fixation
- Special Senses Prefixes 1. extra 2. intra 3. eso 4. exo Suffixes 5. ptosis 6. opia 7. pexy 8. cusis Combining forms 9. oculo 10. blepharo 11. cantho 12. tarso 13. conjuctivo 14. lacrimo, dacryo 15. sclero 16. corneo 17. kerato 18. choroido 19. iri, iro, irido, irito 20. pupillo, coreo 21. phaco 22. retino 23. maculo 24. luteo 25. foveo 26. aqueo 27. vitreo 28. ansio 29. diplo 30. strabi 31. chromo 32. nyctalo 33. presbyo 34. ametro 35. amblyo 36. scoot 37. pseudo 38. audio, audito 39. acouso, acusto 40. auri, auro 41. tympano, myringo 42. mastoido 43. labyrintho 44. cochleo 45. mono 46. pyo 47. myco Vocabulary 48. optic 49. ocular 50. extraocular 51. intraocular 52. adnexa 53. orbit 54. binocular 55. canthus 56. inner canthus 57.

epicanthus 58. tarsus 59. cilia 60. conjunctiva 61. lacrimal apparatus 62. lacrimal glands 63. lacrimal glands/ fluid 64. lacrimation 65. lacrimal canaliculi 66. dacryocyst 67. nasolacrimal duct 68. globe 69. sclera 70. cornea 71. choroids 72. iris 73. pupil 74. lens 75. ciliary muscles 76. retina 77. optic nerve 78. optic disk 79. macula lutea 80. fovea centralis 81. accommodation 82. refraction 83. emmetropia 84. convergence Diagnostic Procedures 85. refraction 86. visual acuity measurement 87. tonometry 88. pneumatic tonometer 89. slitlamp examination 90. mydriatic drops 91. cycloplegia Pathology of eyes 92. blepharitis 93. blepharoptosis 94. ectropion 95. entropion 96. hordeolum 97. chalazion 98. dacryocystitis 99. conjunctivitis 100. xerophthalmia 101. nystagmus 102. scleritis 103. keratitis 104. iritis 105. synechia 106. anisocoria 107. cataract 108. glaucoma 109. floater 110. retinopathy 111. diabetic retinopathy 112. retinal detachment 113. papilledema 114. macular degeneratio 115. diplopia

- View films on the process of regular vaginal delivery and a Caesarian section.

Materials

- Index cards
- Models and diagrams of the anatomical position, body planes, body cavities, and body regions
- Textbook: Medical Terminology: A Living Language by Bonnie F. Fremgen and Suzanne S. Frucht

Suggestions for Modifications

FOR SPECIAL EDUCATION STUDENTS , ELL, AT RISK AND STUDENTS GIFTED STUDENTS

- *The suggested timeline is subject to change as teachers and program supervisors find necessary.
- Activities can be adjusted for time or repeated to enhance the idea of scientific understanding.
- Adjust assessments and class work accordingly with your student's IEP/504/or other education plans.
- Alternative assessments can be provided in place of a traditional assessment (quiz or test).
- Have instructor's notes available for students as needed.