Cognitive Domain
1. Spell and define key terms
2. List and describe common disorders of the alimentary canal and accessory organs
3. Identify and explain the purpose of common procedures and tests associated with the gastrointestinal system
4. Describe the roles and responsibilities of the medical assistant in diagnosing and treating disorders of the gastrointestinal system
5. Identify common pathologies related to each body system
6. Describe implications for treatment related to pathology

Psychomotor Domain
1. Assisting with colon procedures (Procedure 32-1)
2. Assist physician with patient care
3. Prepare a patient for procedures and/or treatments
4. Practice standard precautions
5. Document patient care
6. Document patient education
7. Practice within the standard of care for a medical assistant

Affective Domain
1. Apply critical thinking skills in performing patient assessment and care
2. Use language/verbal skills that enable patients’ understanding
3. Demonstrate empathy in communicating with patients, family, and staff
4. Use appropriate body language and other nonverbal skills in communicating with patients, family, and staff
5. Demonstrate awareness of the territorial boundaries of the person with whom you are communicating
6. Demonstrate sensitivity appropriate to the message being delivered
7. Demonstrate recognition of the patient’s level of understanding in communications
8. Recognize and protect personal boundaries in communicating with others
9. Demonstrate respect for individual diversity, incorporating awareness of one’s own biases in areas including gender, race, religion, age, and economic status
10. Apply active listening skills
11. Apply local, state, and federal health care legislation and regulation appropriate to the medical assisting practice setting
<table>
<thead>
<tr>
<th>ABHES Competencies</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Assist the physician with the regimen of diagnostic and treatment modalities</td>
<td>5. Communicate on the recipient’s level of comprehension</td>
</tr>
<tr>
<td>as they relate to each body system</td>
<td>6. Serve as a liaison between the physician and others</td>
</tr>
<tr>
<td>2. Prepare patient for examinations and treatments</td>
<td>7. Show empathy and impartiality when dealing with patients</td>
</tr>
<tr>
<td>3. Recognize and understand various treatment protocols</td>
<td>8. Document accurately</td>
</tr>
<tr>
<td>4. Comply with federal, state, and local health laws and regulations</td>
<td></td>
</tr>
</tbody>
</table>
MULTIPLE CHOICE

Circle the letter preceding the correct answer.

1. Which of the following can trigger an outbreak of the herpes simplex virus?
   a. Food allergy
   b. Illness
   c. Lack of sleep
   d. Medication
   e. Poor diet

2. What commonly causes leukoplakia to develop?
   a. Hereditary genes
   b. Excessive alcohol intake
   c. Lack of exercise
   d. Tobacco irritation
   e. Obesity

3. Why should a patient complaining of heartburn be assessed immediately?
   a. The symptoms of gastroesophageal reflux disease may be similar to the chest pain of a patient with cardiac problems.
   b. A patient with heartburn is more likely to develop a serious heart condition.
   c. Heartburn is a symptom of a weak lower esophageal sphincter.
   d. It is important to assess any gastrointestinal disorder immediately because they are usually serious.
   e. Heartburn may be symptomatic of Barrett esophagus, which requires immediate surgery.

4. Abnormal contact between the upper teeth and lower teeth is:
   a. malocclusion.
   b. dental caries.
   c. stomatitis.
   d. candidiasis.
   e. gingivitis.

5. If a patient is suffering from peptic ulcers, the symptoms will be most severe when the patient:
   a. is hungry.
   b. has a bowel movement.
   c. lies on his back.
   d. chews his food.
   e. is digesting a meal.

6. Gastroenteritis could become life threatening if a patient:
   a. is pregnant.
   b. suffers from diabetes mellitus.
   c. needs a heart operation.
   d. consumes excess alcohol.
   e. does not receive treatment immediately.

7. The study of morbid obesity is called:
   a. orthodontistry.
   b. gerontology.
   c. bariatrics.
   d. gastroenterology.
   e. pediatrics.

8. What is the minimum body mass index that a patient must have to be considered for gastric bypass surgery?
   a. 25
   b. 30
   c. 35
   d. 40
   e. 45
9. Crohn disease becomes life threatening when:
   a. the bowel walls become inflamed and the lymph nodes enlarge.
   b. the fluid from the intestinal contents cannot be absorbed.
   c. edema of the bowel wall takes place.
   d. scarring narrows the colon and obstructs the bowel.
   e. patients have periods of constipation, anorexia, and fever.

10. How does irritable bowel syndrome differ from Crohn disease?
   a. It does not involve weight loss.
   b. It is easily treatable.
   c. It is thought to be genetic.
   d. It requires a colectomy.
   e. It causes scarring.

Scenario for questions 11 and 12: A patient is diagnosed with diverticulitis.

11. Which of the following treatments would the physician most likely recommend?
   a. Antibiotics
   b. Bed rest
   c. Antifungal agent
   d. Bland food
   e. Drinking less water

12. What advice might the physician have you give to the patient to help maintain good bowel habits in future?
   b. Get some form of daily exercise.
   c. Try to force a bowel movement at least once a day.
   d. Use laxatives when suffering from constipation.
   e. Cut out food products that contain wheat.

13. How can a patient decrease his or her risk of developing a hernia?
   a. Avoid lifting heavy objects.
   b. Switch from processed to organic foods.
   c. Maintain good bowel habits.
   d. Have regular medical checkups.
   e. Walk at least a mile every day.

14. What is the most effective treatment for appendicitis?
   a. Antibiotics
   b. Ileostomy
   c. Appendectomy
   d. Cryosurgery
   e. Radiation

15. Which of these factors increases the production of intestinal gas?
   a. Excess water
   b. Spicy or fatty foods
   c. Peristalsis
   d. Fast metabolism
   e. Lack of exercise

16. The most likely method of contracting hepatitis B is:
   a. contaminated food.
   b. poor hygiene.
   c. contaminated blood.
   d. stagnant water.
   e. weak immune system.

17. For which of the following procedures would the patient usually be put under anesthesia?
   a. Anoscopy
   b. Sigmoidoscopy
   c. Nuclear imaging
   d. Ultrasonography
   e. Endoscopic retrograde cholangiopancreatography

18. What is the caustic chemical secreted by the lining of the stomach that may cause erosion if too much of it is secreted?
   a. Pepsin
   b. Hydrochloric acid
c. Insulin
d. Oral mucosa
e. Melena

19. How does lithotripsy break down gallstones to make them easy to pass?
   a. Lasers
   b. Sound waves
   c. Acidic liquid
   d. Heat
   e. Air pressure

20. Which piece of advice could best be given to a patient with a malabsorption syndrome by the physician?
   a. Drink more water.
   b. Eat less processed food.
   c. Take vitamin supplements.
   d. Cut out spicy foods.
   e. Exercise more often.

21. Which of these groups of people are at the highest risk of developing esophageal cancer?
   a. Teenagers
   b. Pregnant women
   c. Young children
   d. Elderly women
   e. Elderly men

22. A male patient comes to the physician's office complaining of an acute pain in his upper abdomen and back. He also suffers from indigestion and nausea, particularly when he tries to eat foods that have a high fat content. Which of the following gastrointestinal disorders does the patient probably have?
   a. Cholelithiasis
   b. Peptic ulcers
   c. Gastritis
   d. Leukoplakia
   e. Caries

---

**MATCHING**

Place the letter preceding the definition on the line next to the term.

**Key Terms**

**Definitions**

<table>
<thead>
<tr>
<th>Key Terms</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>23. _____ anorexia</td>
<td>a. an enlarged liver</td>
</tr>
<tr>
<td>24. _____ ascites</td>
<td>b. a substance used in a laboratory test for occult blood in the stool</td>
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<tr>
<td>25. _____ dysphagia</td>
<td>c. a device for blowing air, gas, or powder into a body cavity</td>
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<tr>
<td>26. _____ guaiac</td>
<td>d. the sum of chemical processes that result in growth, energy production, elimination of waste, and body functions performed as digested nutrients are distributed</td>
</tr>
<tr>
<td>27. _____ hematemesis</td>
<td>e. black, tarry stools caused by digested blood from the gastrointestinal tract</td>
</tr>
<tr>
<td>28. _____ heptomegaly</td>
<td>f. the contraction and relaxation of involuntary muscles of the alimentary canal, producing wavelike movements of products through the digestive system</td>
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<tr>
<td>29. _____ hepatotoxic</td>
<td>g. difficulty speaking</td>
</tr>
<tr>
<td>30. _____ insufflator</td>
<td>h. loss of appetite</td>
</tr>
<tr>
<td>31. _____ leukoplakia</td>
<td>i. a substance that can damage the liver</td>
</tr>
<tr>
<td>32. _____ malocclusion</td>
<td>j. an accumulation of serous fluid in the peritoneal cavity</td>
</tr>
</tbody>
</table>

**k. the use of chemical agents to treat esophageal varices to produce fibrosis and hardening of the tissue**

Grade: ___________
33. _____ melena
   l. an inflammation of the mucous membranes of the mouth

34. _____ metabolism
   m. an abnormal contact between the teeth in the upper and lower jaw

35. _____ obturator
   n. the normal tension in a cell or the skin

36. _____ peristalsis
   o. vomiting blood or bloody vomitus

37. _____ sclerotherapy
   p. the smooth, rounded, removable inner portion of a hollow tube, such as an anoscope, that allows for easier insertion

38. _____ stomatitis
   q. white, thickened patches on the oral mucosa or tongue that are often precancerous

39. _____ turgor

**COG MATCHING**

Place the letter preceding the description on the line next to the name of the gastrointestinal disorder.

**Disorders**

40. _____ esophageal varices
    a. a chronic disorder characterized by discomfort in the chest due to the back-flow of gastric contents into the esophagus

41. _____ cholecystitis
    b. a condition that occurs when part of the stomach protrudes up through the diaphragm

42. _____ peptic ulcers
    c. varicose veins of the esophagus resulting from pressure within the esophageal veins

43. _____ stomatitis
    d. an acute or chronic inflammation of the gall bladder

44. _____ gastroesophageal reflux disease (GERD)
    e. erosions or sores in the GI tract left by sloughed tissue

45. _____ diverticulosis
    f. a disorder that usually occurs in the sigmoid colon, attributed to a diet deficient in roughage

46. _____ hiatal hernia
    g. an inflammation of the oral mucosa, caused by a virus, bacteria, or fungus

**COG MATCHING**

Place the letter preceding the description on the line next to the examination method.

**Examination Methods**

47. _____ endoscopic studies
    a. instilling barium into the GI tract orally or rectally to outline the organs and identify abnormalities

48. _____ nuclear imaging
    b. injecting radionuclides into the body and taking images using a nuclear scanning device to detect abnormalities

49. _____ ultrasonography
    c. using high-frequency sound waves to diagnose disorders of internal structures
50. _____ radiology studies  d. passing soft, flexible tubes into the stomach, small intestine, or colon for direct visualization of the organs
51. _____ sigmoidoscopy  e. a method of injecting dye into the ducts of the gallbladder and pancreas; used to visualize the esophagus, stomach, proximal duodenum, and pancreas with a flexible endoscope
52. _____ endoscopic retrograde cholangiopancreatography (ERCP)  f. the insertion of a metal or plastic anoscope into the rectal canal to inspect the anus and rectum and swab for cultures
53. _____ anoscopy  g. a visual examination of the sigmoid colon

IDENTIFICATION

Grade: ___________

54. A patient comes into the office with abdominal pain and indigestion. The physician diagnoses the patient with a hialtal hernia. Which of the following diet modifications and treatments would the physician most likely suggest to the patient? Circle the correct answers. There may be more than one.

a. Eat small, frequent meals.
b. Exercise vigorously three times a week.
c. Elevate the head of the bed when sleeping.
d. Do not eat for 2 hours before bedtime.
e. Drink less water.
f. Lose weight.

55. As a medical assistant, you may be called on to assist with colon procedures in the medical office. Place a check mark on the line next to the task(s) that the medical assistant would be responsible for performing in the medical office.

a. Instruct the patient in the procedure of stool sample collection.
b. Help to educate the patient about diet and the prevention of gastric disorders.
c. Prescribe pain medication and antibiotics.
d. Schedule radiographic and ultrasound procedures in an outpatient facility.
e. Test the stool specimen when it is returned to the office.
f. Compile detailed dietary regimens for obese patients.
g. Assist the physician in performing colon examinations.
h. Diagnose minor gastrointestinal disorders.
56. Which of the following factors increase a person’s risk of developing pancreatic cancer? Circle all that apply.
   a. being female
   b. drinking alcohol
   c. smoking
   d. being of African American descent
   e. being male
   f. being of Caucasian descent
   g. eating high-fat foods
   h. a history of working with industrial chemicals

57. Some gastrointestinal disorders require specialist knowledge and equipment outside of the physician’s office. In the table below, place a check mark in the appropriate box to indicate whether a procedure could be carried out in the physician’s office or would likely require an outpatient facility.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Physician’s Office</th>
<th>Outpatient Facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Ultrasonography</td>
<td></td>
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<tr>
<td>b. Anoscopy</td>
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<td></td>
</tr>
<tr>
<td>c. Endoscopic retrograde cholangiopancreatography</td>
<td></td>
<td></td>
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<tr>
<td>d. Nuclear imaging</td>
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<td></td>
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<tr>
<td>e. Sigmoidoscopy examination</td>
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</tbody>
</table>

58. Identify the part of the digestive system where the following gastrointestinal disorders occur.
   a. Appendicitis _________________________________________________________________________________
   b. Hepatitis __________________________________________________________________________________
   c. Cholelithiasis ______________________________________________________________________________
   d. Crohn disease _______________________________________________________________________________
   e. Peptic ulcers ______________________________________________________________________________
   f. Ulcerative colitis __________________________________________________________________________
   g. Diverticulosis ______________________________________________________________________________

59. List three symptoms that could indicate a patient is suffering from gastric cancer.
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
60. A 40-year-old woman comes to the physician’s office complaining of severe stomach cramps and vomiting. To help the physician assess her condition and make a diagnosis, the medical assistant should obtain some personal information. List four things that the physician will ask the patient before continuing with the exam.

61. A 25-year-old woman comes to the physician’s office complaining of fatigue and joint pain. She looks jaundiced, and when the physician asks her for her medical history, she says that she recently returned from a 3-month trip to Ghana. Which two tests will the physician most likely recommend?

62. As a medical assistant, part of your job may be to educate patients about the care of teeth and gums. List three things that you could tell a patient to do that might help to prevent dental caries.

63. Which is the more widely accepted instrument to use during an endoscopic study: a rigid sigmoidoscope or a flexible fiberoptic sigmoidoscope? Explain your answer.
COG TRUE OR FALSE?  
Indicate whether the statements are true or false by placing the letter T (true) or F (false) on the line preceding the statement.

64. _____ Oral cancers are more common among people who smoke.

65. _____ Cancer of the esophagus is common and can easily be treated.

66. _____ A sign that a patient has a problem with malabsorption of fats includes stools that are loose.

67. _____ Irritable bowel syndrome usually results in chronic weight loss.

COG CASE STUDIES FOR CRITICAL THINKING  

1. A 55-year-old woman comes to the physician’s office and asks about gastric bypass surgery. She says that she has tried every diet available and is unable to lose weight. She suffers from shortness of breath and an inability to walk for long distances. You take the woman’s vital signs and measure her height and weight. She appears to be in good health, but is at least 60 pounds over the ideal weight for her height. The physician later confirms these facts. Is the patient likely to be a candidate for gastric bypass surgery? Explain your answer.

2. The physician tells a patient that he would like to schedule an endoscopic retrograde cholangiopancreatography in a local outpatient facility. After the physician leaves the room, you notice that the patient looks confused and worried. How would you explain the procedure to the patient to reassure him?
3. Mr. Thompson, a 50-year-old patient, is scheduled to have an endoscopic examination on Wednesday morning. You have given him all the necessary information to prepare for the examination, including taking a laxative the night before and eating only a light meal on Tuesday evening, with no breakfast Wednesday morning. Mr. Thompson calls you an hour before his appointment to tell you that he forgot to take the laxative the previous evening and has eaten breakfast. Explain what you would do.

4. A 15-year-old female patient comes into the physician’s office with severe abdominal pains. She is extremely underweight for her height, and you suspect she might be anorexic. When the physician leaves the room, she confesses that she has been using laxatives every day to keep her weight down. Explain what you would do next.

5. A 50-year-old male patient has been diagnosed with pancreatic cancer. The patient is clearly devastated and tells you he has heard that people who develop pancreatic cancer have little chance of survival. What do you say to the patient?
**PROCEDURE 32-1 Assisting with Colon Procedures**

Name: ____________________________ Date: _______ Time: _______ Grade: _______

**EQUIPMENT/SUPPLIES:** Appropriate instrument (flexible or rigid sigmoidoscope, anoscope, or proctoscope); water-soluble lubricant; patient gown and drape; cotton swabs; suction (if not part of the scope); biopsy forceps; specimen container with preservative; completed laboratory requisition form; personal wipes or tissues; equipment for assessing vital signs; examination gloves

**STANDARDS:** Given the needed equipment and a place to work the student will perform this skill with _________% accuracy in a total of _________ minutes. *(Your instructor will tell you what the percentage and time limits will be before you begin.)*

**KEY:**
- 4 = Satisfactory
- 0 = Unsatisfactory
- NA = This step is not counted

<table>
<thead>
<tr>
<th>PROCEDURE STEPS</th>
<th>SELF</th>
<th>PARTNER</th>
<th>INSTRUCTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Wash your hands.</td>
<td></td>
<td></td>
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<tr>
<td>2. Assemble the equipment and supplies.</td>
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<tr>
<td>a. Place the name of the patient on the label on outside of specimen container.</td>
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<tr>
<td>b. Complete the laboratory requisition.</td>
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<tr>
<td>3. Check the illumination of the light source if a flexible sigmoidoscope. Turn off the power after checking for working order.</td>
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<tr>
<td>4. Greet and identify the patient and explain the procedure.</td>
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<tr>
<td>a. Inform patient that a sensation of pressure may be felt.</td>
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<tr>
<td>b. Tell the patient that the pressure is from the instrument.</td>
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<tr>
<td>c. Gas pressure may be felt when air is insufflated during the sigmoidoscopy.</td>
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<td>5. Instruct the patient to empty his or her urinary bladder.</td>
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<tr>
<td>6. Assess the vital signs and record in the medical record.</td>
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<tr>
<td>7. Have the patient undress from the waist down and gown and drape appropriately.</td>
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<tr>
<td>8. Assist the patient onto the examination table.</td>
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<tr>
<td>a. If the instrument is an anoscope or a fiberoptic device, the Sims position or a side-lying position is most comfortable.</td>
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<tr>
<td>b. If a rigid instrument is used, position patient when doctor is ready: knee-chest position or on a proctological table.</td>
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<tr>
<td>c. Drape the patient.</td>
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<tr>
<td>9. Assist the physician with lubricant, instruments, power, swabs, suction, etc.</td>
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<tr>
<td>10. Monitor the patient’s response and offer reassurance.</td>
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<tr>
<td>a. Instruct the patient to breathe slowly through pursed lips.</td>
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<tr>
<td>b. Encourage relaxing as much as possible.</td>
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</table>
### 11. When the physician is finished:

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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>a. Assist the patient into a comfortable position and allow a rest period.</td>
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<tr>
<td>b. Offer personal cleaning wipes or tissues.</td>
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<tr>
<td>c. Take the patient’s vital signs before allowing him or her to stand.</td>
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<tr>
<td>d. Assist the patient from the table and with dressing as needed.</td>
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<tr>
<td>e. Give the patient any instructions regarding postprocedure care.</td>
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</table>

### 12. Clean the room and route the specimen to the laboratory with the requisition.

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### 13. Disinfect or dispose of the supplies and equipment as appropriate.

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### 14. Wash your hands.

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### 15. Document the procedure.

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### CALCULATION

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<tr>
<th>Total Possible Points:</th>
<th>☐</th>
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<tbody>
<tr>
<td>Total Points Earned:</td>
<td>☐</td>
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<td>☐</td>
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<tr>
<td>Multiplied by 100 =</td>
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<td>☐</td>
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<tr>
<td>Divided by Total Possible Points =</td>
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**PASS**  **FAIL**  **COMMENTS:**

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</table>

Student’s signature ______________________ Date _______

Partner’s signature ______________________ Date _______

Instructor’s signature ______________________ Date _______