SCORING KEY:  
A = Item performed satisfactorily “unprompted”  
B = Item performed unsatisfactorily “unprompted”  
C = Item omitted  
D = Item performed satisfactorily “prompted”  
E = Item performed unsatisfactorily “prompted”

*Please note that references to gender in the checklist items are represented by “she/her/herself”, but “he/him/himself” is implied.*

1. **Wash hands with soap or hand sanitizer before starting examination.**  
   **Note:** If you do not do so, the patient will ask you to wash your hands. However, you will not receive credit for this item.

2. **VITAL SIGNS**  
   **2.** Measure blood pressure bilaterally. Pages 20-26
   **3.** Hold up and support outstretched arm perpendicular to heart bilaterally while measuring blood pressure. Page 22
   **4.** Place cuff snugly in correct anatomical location bilaterally. Pages 22-23  
   **Note:** Credit will not be given if any part of the gown is tucked into the cuff. This must be done completely on skin.
   **5.** Palpate radial pulse (thumb side of wrist) using fingertips for at least 15 seconds. Pages 18 & 19, Fig. 3-4  
   **Note:** Credit is only given if pulse is taken for a full 15 seconds.
   **6.** Measure the respiratory rate for at least 15 seconds. Page 20. Credit is only given if rate is measured for a full 15 seconds. **Note:** Student may place her hand on upper epigastric area and count respirations or may just observe.

3. **HEAD AND SINUSES**  
   **7.** Examine the Skull, Hair and Scalp. Pages 34-35  
   **Step # 1:** Inspect the skull for its general size, shape and contours.  
   **Step # 2:** Note the hair texture and quantity.  
   **Step # 3:** Examine the scalp for skin lesions. Have patient bend her head slightly forward. Inspect the skin by parting the hair in several places with your fingers. Note scaliness, lumps, or other skin lesions.  
   **Step # 4:** Palpate the scalp. Use the palmar aspects of the fingertips. Feel front to back with short sweeping motions. Note lumps or tender areas.
   **8.** **Frontal Sinus** bilaterally - Palpate or percuss for tenderness above each eye. Page 86, #2, Fig. 4-90
   **9.** **Maxillary Sinus** bilaterally - Palpate or percuss for tenderness below each eye. Page 86, #3, Fig. 4-91  
   **Note:** Must ask patient about pain or tenderness for items #8 and #9.

4. **LYMPH NODES AND THYROID**  
   **10.** **Preauricular nodes** bilaterally - palpate in front of ears. Page 96, Fig. 4-108
   **11.** **Posterior auricular nodes** bilaterally - palpate behind ears. Page 96, Fig. 4-109
   **12.** **Occipital nodes** bilaterally - palpate at the base of the skull. Page 96, Fig. 4-110
   **13.** **Anterior cervical nodes** bilaterally - palpate anterior to and over the sternocleidomastoid muscle throughout its whole length. (A minimum of 3 areas needs to be palpated.) Page 98, Fig. 4-113
14. **Posterior cervical nodes bilaterally** - palpate posterior to and under the sternocleidomastoid muscle throughout its whole length. (A minimum of 3 areas needs to be palpated.) Page 98, Fig. 4-114

15. **Supraclavicular nodes bilaterally** - palpate above the collarbone - must be done on skin for credit. Page 98, Fig. 4-116


17. **Submandibular lymph nodes bilaterally** - palpate between tonsillar and submental nodes. Page 98, Fig. 4-112

18. **Submental lymph nodes bilaterally** - palpate directly under the chin. Page 98, Fig. 4-111

19. **Prior to palpating the thyroid, observe the thyroid gland by asking patient to swallow.** This will give the examiner a visual cue as to where the patient’s thyroid is located.

20. **Thyroid gland** - palpate first without swallowing and then with swallowing. Pages 100-105

   *Recommended Technique: Examiner stands behind patient. However, this may be done while standing in front of the patient, as well.*  
   **Note:** Be prepared to offer the patient a cup of water in case the patient is having difficulty swallowing.

**EYES**

21. **Test visual acuity bilaterally and separately with a pocket visual screening chart** by holding the chart 14” from patient’s face. It is acceptable for patient to hold the card herself.  
   **Note:** If patient wears glasses, patient should be allowed to keep them on during this exam. Pages 36-38

22. **Test visual fields bilaterally** (four quadrants for each eye by confrontation, each eye separately).  
   **Note:** Make sure your fingers are outside of the patient’s field of vision before you begin this test. Check with the patient as you test each quadrant to be sure that your fingers cannot be seen at the onset.

   The following instructions are slightly different than the technique listed in Novey, but should be considered the standard for this examination:

   Step # 1: Stand approximately 12” from patient.
   Step # 2: Ask patient to cover or close her right eye. You should then cover or close your left eye.
   Step # 3: Extend your right arm, **outside of the patient's and your own field of vision.** Ask patient if she can see your hand/fingers. If patient says “yes”, adjust your hand until **neither you nor the patient can see your hand/fingers.**  
   **You must perform this step each time you extend your arm in Steps 5, 6 and 7 below.**
   Step # 4: Wiggle your fingers while bringing arm in slowly at the diagonals. Ask patient to inform you when your fingers are visible.
   Step # 5: With patient’s right eye still covered/closed and your left eye still covered/closed, extend your left arm (repeat what was done in step # 3) and wiggle your fingers while bringing arm in slowly at the diagonals. Again, ask patient to inform you as to when your fingers are visible.
   Step # 6: Ask patient to cover/close her left eye. You should then cover/close your right eye. Extend your left arm and wiggle your fingers while bringing arm in slowly at the diagonals. Ask patient to inform you when your fingers are visible.
   Step # 7: With patient’s left eye still covered/closed and your right eye still covered/closed, extend your right arm and wiggle your fingers while bringing arm in slowly at the diagonals. Again, ask patient to inform you as to when your fingers are visible.  
   **Both eyes (4 diagonals or quadrants) must be tested for credit.** Pages 430 and 431, Fig. 12-2, 3, 4

23. **Check for convergence** by holding your finger in front of patient’s face and moving your finger in towards patient’s nose. You should start at arm’s length and go about 5-8 centimeters from nose.  
   **Note:** Not found in Novey, but found in Bates, page 184. The videotape is also a source for this technique.
24. **Test cranial nerves III, IV, and VI** by asking patient to hold her head completely still and follow only your finger, looking rightward and leftward, up and out, up and in, down and out, and down and in to the **extremes of gaze**. You must test the **6 cardinal positions for credit**. Pages 50, 51, 52, Fig. 4-32-39

25. **Test cranial nerve VII motor function** by asking patient to close her eyes as student tries to force the eyelids open (upper division). Page 436, Fig. 12-17. **Note:** Another method that is accepted is asking the patient to force her eyelid closed against resistance.

26. **Observe pupillary responses bilaterally**: Pages 48 & 49, Fig. 4-30, 31

   **Note:** The Direct Response is tested as you shine penlight into patient’s eye. You will first look into that eye for a direct response to the light. Remove light from eye and let pupil return to normal. Then shine penlight in that same eye, while observing pupil of the opposite eye. The Indirect Response to light (consensual) is tested by looking into the eye not exposed to the direct light.

27. **Inspect eye for the condition of the lid, cornea, and conjunctiva bilaterally**. Pages 38-47

   **Step #1:** Ask patient to pull down her lower eyelids and look up while you examine the eyes.

   **Step #2:** Ask patient to pull up on her upper eyelids and look down while you examine the eyes.

   (By having the patient pull up and down on own eyelids, you can prevent infection).

   If performing with lights dimmed must use penlight or other light source for credit.

28. **Hold ophthalmoscope at proper distance** to visualize the posterior structures of the eye. Should move in to within a thumb’s width away from patient’s eye. Page 63, Fig. 4-51 and Fig. 4-52.

29. **Hold ophthalmoscope with right hand** to look through scope with your right eye when inspecting patient’s right eye. Page 58

30. **Hold ophthalmoscope with left hand** to look through scope with your left eye when inspecting patient’s left eye. Page 58

**EARS**

31. **Test auditory acuity bilaterally**. Instruct the patient to close eyes. Whisper into each ear at a distance of two feet. (An alternative method is to create a sound by rubbing your thumb and fingers together at a distance of about 10 cm from each ear, separately). Page 440

32. **Inspect the external ear bilaterally**, looking in front, and then pull ear forward to look behind the ear. Pages 74-75

33. **Examine internal ear with otoscope bilaterally** by pulling up on patient’s ear and inserting the speculum and carefully examining the internal ear. For credit: Speculum must be used. Pages 74-80

34. **Perform the Rinne Test bilaterally** using the 512 Hz tuning fork. Pages 440-442, Fig. 12-25, 26, 27, 28

   **Step #1:** To create a sound, hold the tuning fork by its base. Strike it gently on the heel of your hand, or with the reflex hammer.

   **Step #2:** Place the tuning fork on the mastoid process (the bony ridge behind the ear) and ask patient to tell you if she can hear (not feel) the sound of the tuning fork. If she can, hold it there until she signals that the sound has faded away.

   **Step #3:** At that point, without stopping the vibration of the fork, move the fork as near to the external ear canal as possible, sweeping away overlying hair, if necessary. Ask if she can again hear the tuning fork. If she can, have her indicate when she signals that she can no longer hear it. If so, this is normal conduction (where air conduction exceeds bone conduction and matches your own threshold of hearing).

35. **Perform the Weber Test - Using the 512 Hz tuning fork.** Page 442, Fig. 12-29

   **Step #1:** Activate the fork.

   **Step #2:** Press the base of the fork firmly on the apex of the skull in the midline. If she cannot hear the fork, press the base on the middle of the forehead.

   **Step #3:** Ask where she hears it. Normally, it is heard in the midline. Abnormally, it lateralizes to one
side, either toward the side of air conduction loss or away from the side of bone conduction (sensor neural) loss.

**NOSE**

36. **Test patency of nasal cavity bilaterally.** Instruct the patient to close one nostril while sniffing in through the other. Then test the other nostril in the same manner. Page 82, Fig. 4-86

**MOUTH AND THROAT**

37. Inspect the lips, gums, tongue, and teeth with the help of a tongue blade and light. You must pull patient's cheeks out with the tongue depressor and inspect the teeth and gums on both sides of the mouth. You must also have the patient lift her tongue and inspect the floor of the mouth. Ask patient to pull lips up and down to inspect front teeth and gums. Pages 88-93

38. **Inspect the posterior pharynx.** Using a penlight and a tongue depressor, instruct patient to breathe through an open mouth only and not through the nose. This facilitates the inspection of the posterior pharynx. Page 94

39. **Observe the elevation of the palate by instructing patient to say “ah”** using a tongue depressor and penlight. Pages 94-95.

40. **Test cranial nerve XII** by asking patient to protrude the tongue and observe for deviation from the midline. Then have the patient move it from side to side as you observe. Page 450-451

41. **Test cranial nerve V** motor function. Page 432, Fig. 12-5
   Step # 1: Place your hands on both sides of patient's face on the masseter muscles.
   Step # 2: Ask patient to bite down while palpating the contraction of the masseter muscles.

42. **Test cranial nerve VII (lower division)** motor function by asking patient to show the teeth. Page 436, Fig. 12-18

43. **Test cranial nerve XI: Check the strength of the Sternomastoids bilaterally.** Page 448, Fig. 12-40
   Have patient keep her head in the midline as you try to push the chin to one side and then the other. When she resists you, the direction you are pushing points to the muscle you are testing. Watch for bulging.

44. **Test cranial nerve XI: Check strength of Upper Trapezius bilaterally.** Page 448, Fig. 12-41
   Step #1: Place your hands on the patient’s shoulders (see photo in Novey for location).
   Step #2: Have patient attempt to shrug her shoulders upward against your resistance.

**LUNGS AND THORAX - Note: All percussion and auscultation must be done on skin with fingers. For credit: all auscultation must include full inhalation and exhalation.**

45. **Percuss the posterior lung fields bilaterally and symmetrically**, over the upper, middle and lower lung fields, comparing the left side and the right side at each of the three levels. Pages 164, 165, 168

46. **Auscultate the posterior lung fields bilaterally and symmetrically**, comparing right and left - three levels. Instruct patient to breathe through an open mouth before auscultation. Pages 170, 171

47. **Percuss the anterior lung fields (at least one level) on the upper chest, bilaterally and symmetrically.** Page 166

48. **Auscultate the anterior lung fields (only one level), bilaterally and symmetrically.** Instruct patient to breathe through an open mouth before auscultation. Pages 170, 171

**BREAST EXAM - Part 1**

49. **With the patient in the sitting position,** ask her to lower her gown so that both breasts are visible.

50. **Instruct patient to raise arms outstretched above the head** and examine each breast for dimpling, contour changes, and skin discoloration. Page 184, Fig. 7-5
51. **Instruct patient to hold hands against hips and press inward.** Inspect again for dimpling. Page 184, Fig. 7-6

52. **Palpate the axillary nodes bilaterally** in the following four areas: 1) anterior axillary fold; 2) posterior axillary fold; 3) along the proximal humerus; and 4) deep in the axillary vault. Pages 192-195  **Note:** This examination may be performed over or under the gown.

**ASK PATIENT TO TAKE THE SUPINE POSITION ON THE EXAMINATION TABLE**

**BREAST EXAM - Part 2**

53. **Instruct patient to lie down supine.** Instruct patient to raise the ipsilateral arm above her head. Pages 186-191.

*Recommended Technique:* The “strip” technique - with your fingers never losing contact with the breast, descend from top to bottom and bottom to top in vertical lines until all regions (including the nipple as part of the breast tissue) have been palpated.

54. **Breast palpation bilaterally.** Use the both hands or the middle three fingers of your dominant hand to palpate the breast starting at the top of the breast on the side of the sternum. Repeat on the opposite breast remembering to instruct patient to raise the ipsilateral arm above her head. Pages 186-191.

55. **Breast palpation bilaterally using 3 types of pressure.** Starting with a light pressure, then a medium pressure, then a firm pressure on each area covered. Fingers must never lose contact with the skin of the breast.

56. **Breast palpation bilaterally covering all breast tissue borders.** The borders of the breast tissue area are from the clavicle to the bottom of the ribcage, and from the mid-sternal line to the mid axillary line.

**HEART - Note:** All palpation and auscultation must be done on skin.

**NOTE:** Regarding the term “palpation” when used during the cardiac examination: this palpation is designed to feel for pulses, thrills, etc. You are not feeling for masses. Therefore, your fingers should not move in a circular motion but rather should remain motionless in the appropriate anatomical location.

57. **Elevate the trunk, head and neck 30 – 45 degrees so that the jugular venous pulse is visible.** If no jugular venous pulse is visible, return patient to the supine position and check again for a visible right jugular vein. Pages 114-116. **Note:** Only one pulse in one side of the neck needs to be examined.

**NOTE:** The heart exam may be done with patient sitting upright or supine.

58. **Palpate the aortic area** (2nd intercostal space on the right). Pages 124-125 Using only the **pads** of the fingers, not the fingertips.

59. **Palpate the pulmonic area** (2nd and 3rd intercostal spaces on the left). Pages 124-125 Using only the **pads** of the fingers, not the fingertips.

60. **Palpate the tricuspid area** (4th and 5th intercostal spaces at the left sternal edge). Pages 124-125 Using only the **pads** of the fingers, not the fingertips.

61. **Palpate the mitral (cardiac apex) area** (5th intercostal space, midclavicular line). Pages 122-123 Using only the **pads** of the fingers, not the fingertips.

**CARDIAC AUSCULTATION - PAGES 130 - 135:**

**NOTE:** For credit on items 62-69 you must demonstrate proper location of cardiac landmarks and correct and appropriate use of stethoscope.

62. **Auscultate the aortic area** using the diaphragm of the stethoscope.
63. Auscultate the pulmonic area using the diaphragm of the stethoscope.

64. Auscultate the tricuspid area using the diaphragm of the stethoscope.

65. Auscultate the mitral (cardiac apex) area using the diaphragm of the stethoscope.

66. Auscultate the aortic area using the bell of the stethoscope.

67. Auscultate the pulmonic area using the bell of the stethoscope.

68. Auscultate the tricuspid area using the bell of the stethoscope.

69. Auscultate the mitral (apical) area using the bell of the stethoscope.

**PULSES - Note: All pulses must be done on skin.**

70. Auscultate carotid pulses prior to palpation. Page 126

71. Auscultate the carotid artery bilaterally. Instruct patient to hold breath before auscultation. Pages 130-131

72. Palpate the carotid pulses, one at a time, bilaterally. (Stay below the tip of the thyroid cartilage. It's roughly at the level of the cricoid cartilage, between the trachea and sternomastoid muscle.) Pages 126-127. Also found in Bates, pages 269-270.

73. Palpate the femoral pulses, one at a time, bilaterally. Pages 240-241, Fig. 8-70

74. Palpate the popliteal pulses, one at a time, bilaterally. Bates, Page 484

For popliteal pulses: have patient supine or seated. Using both hands to support the weight of the leg, palpate the pulse deeply. This is found on page 350 in "The Art & Science of Bedside Diagnosis", Joseph D. Sapira, M.D. This is the method used in the videotape.

75. Palpate the posterior tibial pulses bilaterally (at the ankle behind and slightly below the medial malleolus). Bates, page 485

76. Palpate the dorsalis pedis pulses bilaterally (located on top of foot, midway between the toes and the ankle, along the tendon line). Bates, page 485

**ABDOMEN - Note: All auscultation, percussion and palpation must be done on skin.**

77. Adjust the examination table to be flat. Position patient to be supine; stand on the patient’s right side. Page 204

78. Auscultate prior to manipulation or palpation. Page 200, Section D: Order of Examination Techniques

79. Auscultate one quadrant of the abdomen for a minimum of 5 seconds for credit. The right lower quadrant is typically the area auscultated. Auscultating each of the four quadrants, as shown on the DVD, is encouraged. Pages 210-215

80. Percuss liver span prior to any abdominal palpation.

81. Percuss the liver span from just below right nipple line to just below right rib cage, listening for the sound to change. Pages 218-221

82. Palpate the liver edge. Place your hand in the proper location. Ask patient to take a deep breath as you attempt to push up and under right rib cage, without causing pain to the patient. Applying a bit more pressure during exhalation, as shown on the DVD, is encouraged. Pages 228-234

83. Palpate the spleen. Place your hand in the proper location and ask patient to take a deep breath as you push up and in, at the bottom of the left rib cage, without causing pain to patient. This can be done either
supine or in the right lateral decubitus position. Applying a bit more pressure during exhalation, as shown on the DVD, is encouraged. Pages 234-237

84. Palpate the left upper quadrant using two pressures (gently then firmly). Pages 224-226, 242-243
85. Palpate the right upper quadrant using two pressures (gently then firmly). Pages 224-226, 242-243
86. Palpate the right lower quadrant using two pressures (gently then firmly). Pages 224-226, 242-243
87. Palpate the left lower quadrant using two pressures (gently then firmly). Pages 224-226, 242-243

ASK PATIENT TO SIT UP ON EXAMINATION TABLE

MUSCULOSKELETAL

88. Inspect and palpate hand bilaterally (palm, dorsum and fingers). Page 370
89. Assess finger extension by asking patient to spread the fingers bilaterally. Pages 370-371
90. Assess finger flexion by asking patient to make a fist with hand bilaterally. Pages 370-371
91. Inspect and palpate wrist bilaterally for redness and swelling. Pages 370-371
92. Screen range of motion for wrist bilaterally. May be done actively or passively. Pages 370-371
   Step # 1: Have patient flex and extend each wrist while you observe. Fig. 11-14
   Step # 2: Observe radial and ulnar deviation. Fig. 11-15
93. Inspect and palpate elbow bilaterally. Inspect the olecranon areas for bursal or joint swelling, and over the ulnar ridge for nodules. Pages 370-371, Fig. 11-13
94. Screen range of motion of elbow bilaterally. May be done actively or passively. Pages 370-371, Fig. 11-12
   Step # 1: With the patient’s arms at the sides and elbows flexed to minimize shoulder movement, have patient supinate and pronate. Observe movement of elbow. (Bates, Page 497.)
   Step # 2: Have patient flex and extend each elbow. Observe movement of elbow.
95. Shoulder Flexion: Stand behind patient and have patient’s gown completely untied and open in the back. Observe shoulder flexion by asking patient to bring the arms forward with palms down and then raise them overhead. Pages 368-369
96. Shoulder External Rotation: Stand behind patient and have patient’s gown completely untied and open in the back. Instruct patient to clasp both hands behind the neck and to pull the elbows back while you observe from behind. Pages 368-369
97. Shoulder Internal Rotation: Stand behind patient and have patient’s gown completely untied and open in the back. Instruct the patient to place both hands behind the back as high up on the back as possible while you observe from behind. Pages 368-369

ASK PATIENT TO TAKE THE SUPINE POSITION ON THE EXAMINATION TABLE

98. Inspect and palpate knee bilaterally. Pages 392-393
   Step # 1: Note any muscle atrophy, especially of the quadriceps. Fig. 11-60
   Step # 2: Examine the fossae above (medial and lateral) and below (behind) the knee. They should all be visible.
   Step # 3: Note the shape and size of the patella.
   Step # 4: Note any skin lesions, such as psoriasis.
99. Screen full range of motion of knee bilaterally. Pages 392, 394-397
   With hand on knee, flex each knee, then extend and raise each knee. As it rises, view the joint, front and back for swelling.
100. Assess hip flexion bilaterally. Bates, page 623
*Recommended Technique: Grasping the heel and moving the thigh up toward the thorax, as far as it will go. NOTE: Do not combine items #99 and #100; must perform each item separately for credit.

101. **External and Internal Hip Rotation.** Pages 386-389. * Recommended Technique: Return the thigh to a position perpendicular to the exam table while holding the shin parallel to the exam table. Now, move the ankle laterally to assess hip internal rotation. Move the ankle medially to assess hip external rotation. Return the leg to the table. Repeat these examinations on the other leg.

102. **Inspect and palpate ankle bilaterally:** Pages 396-399
When inspecting the ankles, check for swelling or redness in the gastroc-soleus complex (Fig. 11-75), and in all surfaces of the ankle joint. Pay close attention to any swelling around the malleoli.

103. **Screen Range of Motion of Ankle bilaterally.** Pages 400-401
Step # 1: Observe plantar and dorsal flexion in both ankles. Fig. 11-81, 82
Step # 2: Observe inversion and eversion in both ankles. Fig. 11-83, 84
Step # 3: Observe motion in a circle.

104. **Inspect the mid foot and toes bilaterally.** (Must look between toes for credit) Pages 402-407

105. **Inspect the plantar surface bilaterally.** Page 406

**ASK PATIENT TO STAND**

106. **Assess neck flexion** by instructing patient to place her chin on her chest. Pages 364-366, Fig. 11-4

107. **Assess neck extension** by asking patient to look up at the ceiling. Pages 364-366, Fig. 11-4

108. **Assess rotation of the neck bilaterally** by asking patient to place chin on right and left shoulder and turn head as far as it will go. Pages 364-366

109. **Assess lateral bending of the neck bilaterally** by asking patient to incline each ear toward each shoulder. Pages 364-366, Fig. 11-5

110. **Observe the alignment of the knees, heels and feet:** (Tell patient that you are observing alignment)
Ask patient to stand, and position yourself behind patient. Have patient's gown completely untied and open in the back. Carefully observe the alignment of the patient's knees, heels and feet.

**NOTE:** For items 111, 112 and 113, inform the patient that you are going to place your hands on their hips, over the gown, to guard the patient from losing their balance and falling, and also as a way to keep the gown from falling off the patient as they perform the maneuvers.

111. **Assess thoracolumbar lateral flexion bilaterally** by asking patient to bend torso to the right and to the left with knees straight. Stand behind patient and have patient’s gown completely untied and open in the back. Pages 408-411, Fig. 11-105

112. **Assess lumbar flexion** by asking patient to bend forward at the waist and to attempt to touch the toes with knees straight. Stand behind patient and have patient’s gown completely untied and open in the back. Pages 408-409, Fig. 11-102

113. **Assess lumbar extension** by asking patient to bend backwards with knees straight. Stand behind patient and have patient’s gown completely untied and open in the back. Pages 408-411, Fig. 11-104

114. **Kidney Punch Tenderness:** Perform fist percussion of the costovertebral angles bilaterally by gently punching on the right & left side of patient’s back, just below the rib cage. For credit, **must ask patient if she feels pain.** Bates, page 344

**NEUROLOGICAL**

115. **Romberg Test:** Pages 454-455, Fig. 12-47, 48
Step # 1: Instruct patient to stand with her arms down at her sides and with her feet completely together with eyes open. Watch for obvious unsteadiness. If she remains steady, continue with the test.
Step # 2: Move closer to the patient. Place your hands on her shoulders. Ask her to close eyes and then
reassure the patient that you will not let her fall.
Step # 3: **Remove your hands to a few inches away**, ready to catch her if necessary. Observe the patient for signs of swaying for at least **15 seconds**. **Note:** Credit is only given if test is conducted for a **full 15 seconds**, the patient’s feet are together and if the student’s hands are not touching the patient during the 15 seconds.

116. **Ask patient to walk while you observe the gait.** Pages 452-453

117. **Ask patient to walk on her toes while you observe.** Pages 452-453

118. **Ask patient to walk on heels while you observe.** Pages 452-453

119. **Ask patient to walk heel-to-toe (tandem gait) while you observe.** Pages 452-453

**ASK PATIENT TO HAVE A SEAT ON THE EXAMINATION TABLE**

120. **Drift Test:** Page 456, Fig. 12-49
   Step # 1: Ask patient to close her eyes and hold both arms out in front of her, palms up.
   Step # 2: Observe for at least **15 seconds** for signs of one of the arms dropping below the other.
   **Note:** Credit is only given if test is conducted for a **full 15 seconds**.

   **Note:** Items #121-126 must be tested against resistance

121. **Test patient’s grip strength bilaterally** by asking patient to squeeze your index finger as you try to pull it out of patient’s grip. Pages 384-385 and 456-457

122. **Test the deltoid muscle strength bilaterally** by pushing downward on the patient’s abducted arms. Pages 462-469

123. **Test the biceps muscle strength bilaterally** by positioning patient’s elbow to a 90-degree bend, palm facing the patient. Then brace your hand on the biceps, grasp the wrist and pull. Pages 462-469

124. **Test the triceps muscle strength bilaterally** by positioning patient’s elbow to a 90-degree bend, palm facing the patient. Then brace your hand on the triceps, grasp wrist, and push. Pages 462-469

125. **Test the hip flexor muscle strength bilaterally but separately** by having patient seated on table with legs dangling. Resist flexion by having patient raise each knee or leg as you push down on thigh. Pages 472-473

126. **Test the lower leg muscle strength bilaterally** by asking the patient to push away your hand (placed on the ankle); then ask patient to pull towards herself. Pages 472-473

For items 127-130 tendon must be palpated before assessing reflex

127. **Test the biceps reflex bilaterally.** Pages 482-483
   Step # 1: With the elbow slightly flexed and forearm resting in the patient’s lap, palm down, palpate the biceps tendon with your thumb and press in to produce moderate tension.
   Step # 2: Stretch the tendon by striking your thumbnail (Fig. 12-100). You will find up to 3 motions. Note speed and intensity of each response.

128. **Test the brachioradialis reflex bilaterally.** Pages 484 - 485, Fig. 12-101
   Step # 1: Let the patient’s arm rest in her lap, elbow bent, and forearm halfway between supination and pronation.
   Step # 2: Palpate the radial styloid (at the wrist by the base of the thumb) and move 2 inches proximally.
   Step # 3: Palpate the tendon over the radius.
   Step # 4: Stretch the tendon by slightly dorsiflexing the wrist and striking the tendon directly (recommended) or by pressing down with finger and then striking your interposed finger. Watch for flexion and supination of the forearm.

129. **Test the triceps reflex bilaterally.** Pages 484 - 485, Fig. 12-102, 103, 104, 105
   Step # 1: Position yourself posterior to the patient. Her arms are still in her lap.
   Step # 2: Palpate the triceps tendon just above the olecranon (Fig. 12-102). If you have trouble finding the tendon, press on the tendon as she extends her arm against your resistance. The tendon will tighten and
bulge.
Step # 3: Strike the tendon directly, without an interposed finger (Fig. 12-103). (Stay clear of the ulnar groove, just medial to the tendon.) Watch for extension of the forearm or contraction of the muscle. ("Scarecrow" method is also accepted.)

130. Test the patellar reflex bilaterally. Pages 486-487, Fig. 12-106 and 12-107
Step # 1: Position the patient with her legs dangling freely. Then move to one side so that you do not get kicked.
Step # 2: Palpate the tendon just inferior to the patella (Fig. 12-106).
Step # 3: Tap briskly and observe extension of the knee or contraction of the quadriceps muscle (Fig. 12-107).

131. Test the Achilles (ankle) reflex bilaterally. Pages 486-487, Fig. 12-110
Step # 1: With the legs still dangling, grasp the foot by the ball, and slightly dorsiflex it.
Step # 2: Strike the tendon directly. Watch for the intensity of the plantar flexion and how quickly it relaxes afterward.

132. Test the Babinski reflex bilaterally. Pages 494-496, Fig. 12-121 and 12-122
Step # 1: Use the wooden end of a tongue depressor. DO NOT USE THE HANDLE OF THE REFLEX HAMMER OR ANY SHARP OBJECT DURING THIS EXAM.
Step # 2: Hold patient’s ankle and gently stroke the plantar surface. Begin by the heel on the lateral side. Continue upward to the ball, and then curve medially over the ball to the large toe.

Note: This test should not be painful for the patient. Inform the patient that it may tickle a little or feel slightly uncomfortable.

133. Test finger-to-nose coordination bilaterally by positioning your finger 2 feet from patient’s face at shoulder level. Have patient touch her index finger to your finger, then to her nose, alternating back and forth several times. Student should move their finger several times, in different directions, so patient must accurately alter directions. Pages 478-479

134. Demonstrate “Sharp and Dull” to patient, while the patient is watching, using the broken end of a Q-Tip for the sharp, and a cotton ball for dull. Pages 434-435

Note: For Items #135-137 Test both dull and sharp sensations in each area.

135 Test both sharp and dull on forearms and palms. Instruct patient to close her eyes prior to test. Both sensations must be tested in each area. As pictured on page 499 – Novey.

136. Test both sharp and dull on thighs, shins and feet with patient’s eyes still closed. Both sensations must be tested in each area. Pages 434-435, 498-500

137. Test both sharp and dull on the trunk at dermatome T4 (breast region) and dermatome T10 (umbilical region) with patient’s eyes still closed. Both sensations must be tested in each area. For patient comfort, please avoid the nipple when testing dermatone T4. As pictured on page 499 - Novey

138. Position Sense Demonstration: Pages 504-505, Fig. 12-139
Step # 1: Grasp the large toe only by the sides.
Step # 2: To avoid confusion, demonstrate to the patient, while patient is watching, what is meant by up and down motion of the large toe. The joint must be completely relaxed.

139. Position Sense Test bilaterally. Pages 504-505, Fig. 12-139
Step # 1: Ask patient to close her eyes, grasp large toe by the sides and then move the large toe in an up or down direction. No other toes should be touched while performing the maneuver.
Step # 2: Ask patient to tell you “up” or “down” after each motion.

140. Vibratory Sense Demonstration: Use a low pitched 128 Hz tuning fork.
Step # 1: Demonstrate to patient, while patient is watching you.
Step # 2: Hold tuning fork near its base and activate it by tapping it on the heel of your hand or by striking it with the reflex hammer. Always press it to a bony prominence.
Step # 3: Ask patient if she can feel the “vibration.”
141. **Vibratory Sense Test**: Pages 502-504
   Step # 1: Ask patient to close eyes or to look away.
   Step # 2: Test the vibration sense in each ankle or each big toe using the 128 Hz tuning fork.
   Step # 3: Ask patient if she feels a “vibration” and then ask the patient to inform you when the “vibration” stops.

142. **Test for Peripheral Edema bilaterally**. Check each shin for pitting edema by pressing on the lower anterior tibia or medial malleolus, or dorsum of foot for 3 - 5 seconds. Page 140, Fig. 5-37, 38
   Note: Must examine both legs. Must be done on skin. Must be done for at least 3 seconds for credit.