

Medical Terminology Activities

Course

Principles of Health Science

Unit

Communication

Essential Question

When should students use Medical Terminology?

TEKS

*130.202(c)
1B, 1C, 1D, 1F
2B, 2D*

Prior Student Learning

Basic understanding of roots, prefixes and suffixes

Estimated time

Varies with each activity

Rationale

Medical language is used by all members of the healthcare team. It is essential for students to develop the knowledge of medical language.

Objectives

Upon completion of this lesson, the student will be able to

- demonstrate the use of precise medical language to clearly communicate ideas;
- accurately interpret, transcribe, and communicate using medical terms; and
- interpret technical material.

Engage

Dr. Smith enters the nurse's station and begins to dictate notes saying that Mrs. Jones needs to have an exploratory laparotomy, but he suspects he will end up doing a bilateral salpingoophorectomy. Before the surgery he wants a CXR, EKG, CBC and ABG done, stat. You suddenly feel thankful that Mrs. Anderson spent so much time teaching you medical terminology.

Key Points

Review the key points from the "Medical Language" Lesson.

Activity

1. Medical Roots Body (4-7 hours)
2. Mini-Me – a smaller version of the medical roots body (2-4 hours)
3. Computer Disease Research Report (1-2 hours)
4. Chalk Line – Body Mapping (1-1 ½ hours)
5. Potato Man Surgery (2 hours)
6. Organ Man Project (4 hours group time in class; allow time outside of class for the group to get together, then presentation time for each group)

Assessment

Varies with each activity

Materials

Varies, and listed with activity

Accommodations for Learning Differences

For reinforcement, the student may utilize a computer software program to practice medical terminology.

For enrichment, the student will create a new game to help classmates learn the medical language.

For enrichment, the student will participate in an HOSA Medical Terminology competitive event (www.hosa.org)

National and State Education Standards

National Health Science Cluster Standards

HLC02.01 Communications

Health care workers will know the various methods of giving and obtaining information. They will communicate effectively, both orally and in writing.

TEKS

130.202(c)(1)C interpret technical material related to the health science industry;

130.202(c)(1)D organize, compile, and write ideas into reports and summaries;

130.202(c)(1)E plan and prepare effective oral presentations;

130.202(c)(1)F formulate responses using precise language to communicate ideas;

130.202(c)(2)B demonstrate effective communication skills for responding to the needs of individuals in a diverse society; and

130.202(c)(2)D accurately interpret, transcribe, and communicate medical vocabulary using appropriate technology.

Texas College and Career Readiness Standards

English/language art

B.1 Identify new words and concepts acquired through study of their relationships to other words and concepts.

B2. Apply knowledge of roots and affixes to infer the meanings of new words.

B3. Use reference guides to confirm the meanings of new words or concepts.

Cross- Disciplinary standards-Foundational Skills

A2. Use a variety of strategies to understand the meanings of new words

Medical Roots Activity Guideline Sheet

1. Using either a large piece of construction paper or butcher paper, sketch the outline of a body (students, you may want to have a friend lay on the butcher paper for the outline).
2. Utilizing the **Medical Roots Word List** look up terms for layman's, or common, meaning. EX. Aden means gland.
3. Take the list and place both the medical term and the layman term at an appropriate place on the body outline (many terms are found all over body. EX. Angi means vessel. Just pick one of the possible spots). Spelling should be correct.
4. Draw and color in organs on the body. Coloring will add a 3-D effect for areas where many organs lay on top of each other.

Medical Roots – Body

Locate the following Medical Terms on the body

- | | |
|--------------------|--------------------|
| 1. aden _____ | 40. latero _____ |
| 2. adren _____ | 41. angi _____ |
| 3. appendic _____ | 42. arter _____ |
| 4. arthr _____ | 43. aur _____ |
| 5. blephar _____ | 44. bronchus _____ |
| 6. bucc _____ | 46. cardi _____ |
| 7. cephal _____ | 47. cerebr _____ |
| 8. cervix _____ | 48. cheil _____ |
| 9. chole _____ | 49. chondr _____ |
| 10. col _____ | 50. cost _____ |
| 11. crani _____ | 51. cut _____ |
| 12. cyst _____ | 52. cyt _____ |
| 13. dactyl _____ | 53. dent _____ |
| 14. derm _____ | 54. dors _____ |
| 15. enter _____ | 55. gastro _____ |
| 16. gingival _____ | 56. gloss _____ |
| 17. hemo _____ | 57. hepat _____ |
| 18. histo _____ | 58. hyster _____ |
| 19. lapar _____ | 59. lingua _____ |
| 20. lipo _____ | 60. mamm _____ |
| 21. mast _____ | 61. myo _____ |
| 22. myelo _____ | 62. myring _____ |
| 23. naso _____ | 63. nephr _____ |
| 24. neuro _____ | 64. ocular _____ |
| 25. odont _____ | 65. oophor _____ |
| 26. ophthalm _____ | 66. orch _____ |

27. oss _____

28. oto _____

29. phleb _____

30. pleura _____

31. pod _____

32. pulmon _____

33. ren _____

35. salpingo _____

36. spondyl _____

37. thorac _____

38. valv _____

39. vena _____

67. osteo _____

68. pedes _____

69. phren _____

70. pneum _____

71. proct _____

72. pyelo _____

73. rhino _____

74. splen _____

75. stoma _____

76. utero _____

77. vaso _____

78. ventr _____

Medical Roots - Body Rubric

Students name _____

Punctuality (10) _____

Visual Appeal

Color (8) _____

Neatness (7) _____

Spelling (5) _____

Detail/Unique
Artistic (15) _____

Required Information

Use of all 78 terms (40) _____

Correct meaning and Location of terms

Example: naso/nose, and **both terms** would be found on the face where one would expect to find the nose.

(20) _____

Total points _____ (possible 105 points)

Mini-Me Instructions

Look up and complete the medical root sheet. Then complete the project by placing the words correctly on the body diagram.

EX. the medical term “gloss,” or “lingua,” means “tongue,” and it’s found in the mouth or oral cavity. You do not have to draw in organs, but placement of the line or word needs to be very close in location. You may have an anterior and posterior diagram to allow for more space to place the organs. You do not need to put each organ on both sides; put them on the side of the body that makes the most sense. With words like “vein” or “nerves,” which can be found throughout the entire body, you simply need to pick one and label it where it would be found; for instance, the renal vein and the word for it are placed where I would expect to find it the renal vein if I cut open your little mini-me. Be creative and have fun with it. Make sure all 78 terms are located correctly.

Mini-Me Rubric

Students name _____

Punctuality (10) _____

Visual Appeal

Color (8) _____

Neatness (7) _____

Spelling (5) _____

Detail/Unique
Artistic (15) _____

Required Information

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Example: naso/nose, and **both terms** would be found on the face where one would expect to find the nose.

(20) _____

Total points _____ (possible 105 points)

Mini-Me Roots

Locate the following Medical Terms on the body

1. aden _____

2. adren _____

3. appendic _____

4. arthr _____

5. blephar _____

6. bucc _____

7. cephal _____

8. cervix _____

9. chole _____

10. col _____

11. crani _____

12. cyst _____

13. dactyl _____

14. derm _____

15. enter _____

16. gingival _____

17. hemo _____

18. histo _____

19. lapar _____

20. lipo _____

21. mast _____

22. myelo _____

23. naso _____

24. neuro _____

25. odont _____

26. ophthalm _____

40. later _____

41. angi _____

42. arter _____

43. aur _____

44. bronchus _____

46. cardi _____

47. cerebr _____

48. cheil _____

49. chondr _____

50. cost _____

51. cut _____

52. cyt _____

53. dent _____

54. dors _____

55. gastro _____

56. gloss _____

57. hepat _____

58. hyster _____

59. lingua _____

60. mamm _____

61. myo _____

62. myring _____

63. nephr _____

64. ocular _____

65. oophor _____

66. orch _____

27. oss _____

28. oto _____

29. phleb _____

30. pleura _____

31. pod _____

32. pulmon _____

33. ren _____

35. salpingo _____

36. spondyl _____

37. thorac _____

38. valv _____

39. vena _____

67. osteo _____

68. pedes _____

69. phren _____

70. pneum _____

71. proct _____

72. pyelo _____

73. rhino _____

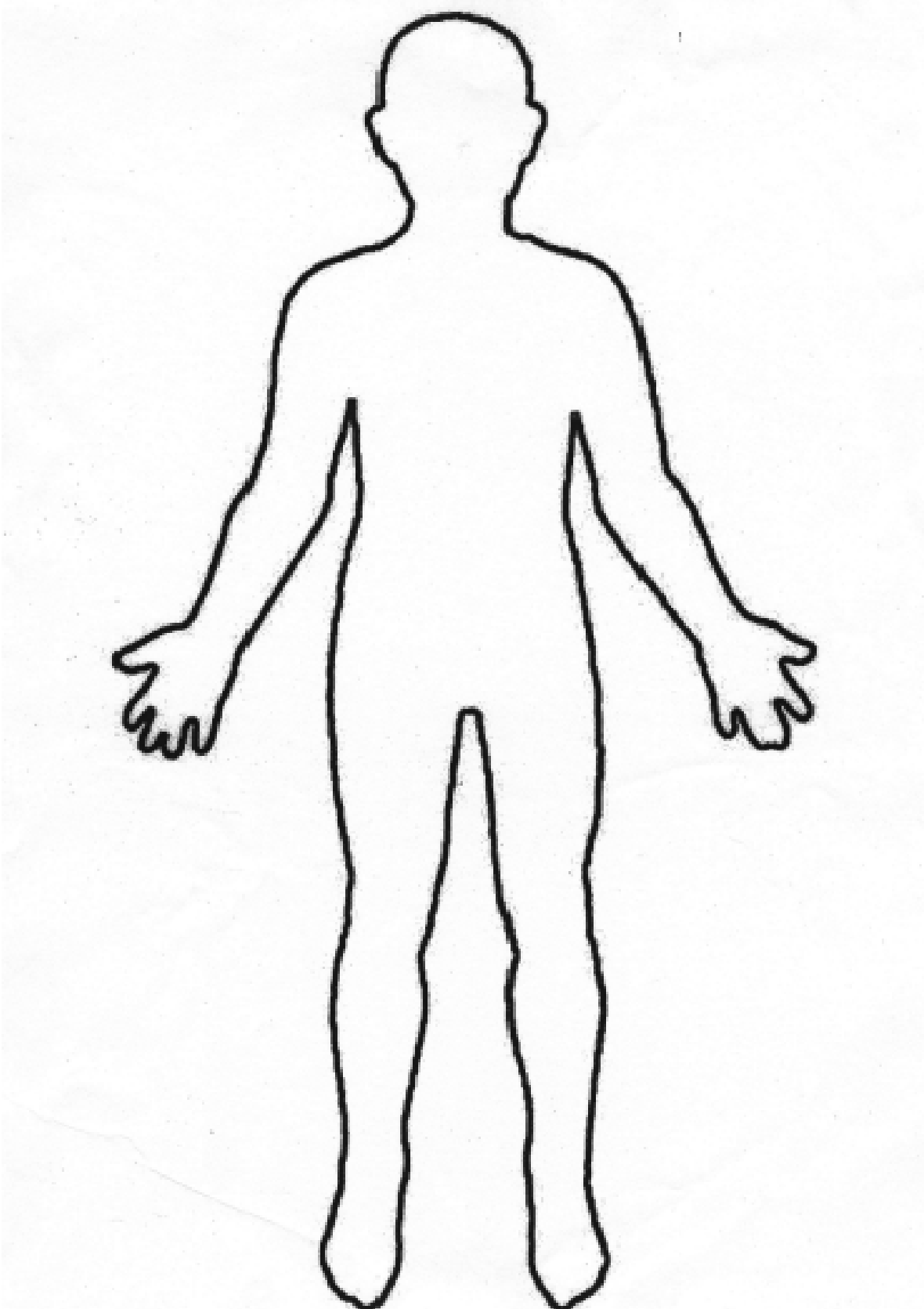
74. splen _____

75. stoma _____

76. utero _____

77. vaso _____

78. ventr _____



Name _____

Computer Disease Research Report

On the computer, research your assigned disorder. Then tomorrow, you will give a factual 1-2 minute report. When giving your oral report (pronunciation practice), you must include the name of the disease, symptoms, diagnostic tests to diagnose the disease, treatment, medications, and operations, if any.

Name of disease: _____

Signs and symptoms:

Testing performed for diagnosis:

Current Treatments: (List both medications and procedures)

Probable prognosis:

BODY PLAN AND ORGANIZATION
ACTIVITY - Chalk Line (Body Mapping)

Student's names:

Objective: Students will work as a team, reviewing the major body organizational terms.

Materials:

You will need sidewalk chalk.

Strategy:

Students will go outside, or to a large area, with a variety of colored chalk, or you may use butcher paper and markers indoors. Instruct one student out of each group to lie down in the anatomical position and have their body traced onto the concrete or paper. Your group may also choose to have a supine, prone, or lateral body, but those positions must be labeled. Explain that the group is to draw and label all of the information listed below.

Include the following:

1. Body Planes include terms associated with each plane 10 points _____
2. Body Cavities (5 major) 10 points _____
3. Body Quadrants – use abbreviations 5 points _____
4. Body Regions 10 points _____
5. 6 of the axial skeletal bones 10 points _____
6. 8 of the appendicular skeletal bones 10 points _____
7. Show 5 muscle directional terms 10 Points _____
8. Color an oblique and transverse muscle and label 10 points _____

Neatness (15 points) _____

Team work (10 points) _____

Total _____ (100 possible)

Potato Man Surgery

Medical Terminology – Lab practical on body directions

Set up:

- Potatoes (1 for every 3 students)
- Broken Wooden skewers for the arms and legs
- Miniature marshmallows (for hands and feet)
- Freezer wrap torn in 18-inch lengths to use as the operating surface
- Round dot band aids
- Sandwich or snack bags for the pieces used to assemble the potato person
- Magic markers
- Crayons or colored pencils
- Masking tape
- Straws

The preceding class involved lecture on body directions, planes, and cavities. Give them some verbal sample instructions to practice the use of the terms.

The day of the potato surgery, put up an overhead transparency that has the following terms:

- Professionalism
- Privileged information
- Documentation

Lead a review on these terms and what they mean, then explain what it has to do with today's activity, i.e., no horsing around that can "endanger" the patient, no sharing information with other teams because they are not involved in the care of that patient, and everything has to be documented. If everything goes well, all they have to do is mark "OK".

Also, discuss what PACU stands for and show them the location of the white dish pan that is labeled PACU.

Grading – 10 points for each item, including prepping the patient. When grading, make notes about what is incorrect on their worksheet; draw what they did if necessary. If the grade is 70 or lower, make a remark about keeping their "malpractice insurance" paid up. Return the paper next class and dispose of the potatoes. They can get partial credit for some of the items.

Potato Man Surgery

On the next 3 pages are several activities that relate to the material using body direction terms. **Please read and follow the instructions carefully.**

Team assignments and duties for surgery: Determine what each person on the team will be doing (If there are only two people on the team, one will be the circulator, one will be the OR tech, and both will be surgeons). The circulator needs to come up and get supplies to set up the surgical area.

1. **Circulator:** _____ Duties: Sets up the surgical area and documents the proceedings of the surgery, as it is being done; this can be done on this worksheet in the “Notes” area. Preps the patient for OR.

2. **OR tech:** _____ Duties: Transports the patient to OR and to PACU (post anesthesia care unit). Once the circulator has set up the surgical area, the OR tech can come get the patient.

Note: The OR tech will also fill in as the surgeon’s assistant if an extra pair of hands is needed.

3. **Surgeon:** _____ Duties: Performs the actual surgical procedures.

REMEMBER: You are a surgical team. Each of you must carry out your duties for the welfare of the patient. The decisions of what to do to the patient are decided upon by the whole team before you do it.

Potato Surgery:

The Spud family was on its way to Idaho for a family reunion, when the car got mashed in a multicar accident. Your patient has several injuries that require surgical treatment.

Patient’s name: _____

1. Prep the patient for OR. The potato is the head and body of the patient. Draw on the eyes, ears, nose, mouth, and ribs with a magic marker. Insert the sticks to make the arms and legs. Place marshmallows on the ends of the sticks for the hands and feet. Notes:
2. Amputate the distal end of the left leg (inferior to the knee). Use the magic marker to color the part of the leg that was amputated. Notes:

3. The patient's spleen was ruptured during the accident and needs to be removed. Draw in the nine regions of the abdominal area and place an X in the left hypochondriac region.
Notes:

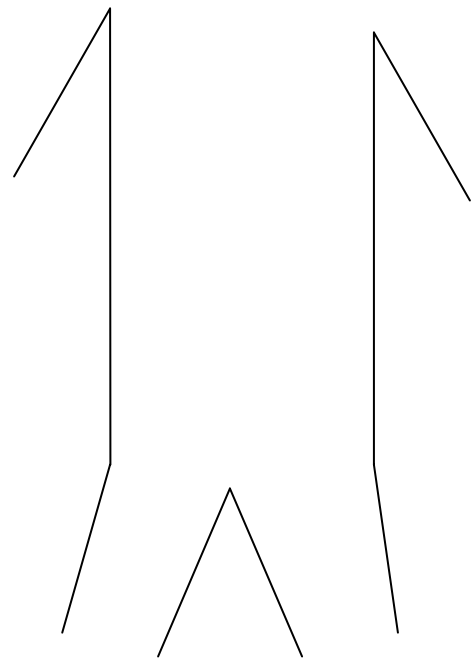
4. The patient has a laceration cephalic and anterior to the right ear. Please suture the laceration by drawing a short line with cross marks on it. (—|—|—|—) Notes:

5. On the dorsal side, clean and dress a superficial wound on the upper right torso, lateral to the midsagittal plane, by placing the round dot bandage on it. You may want to outline around the bandage with the magic marker, just in case the bandage does not stick well.
Notes:

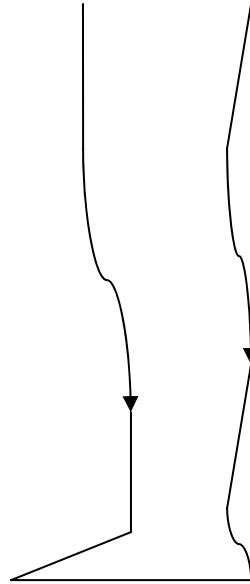
6. The patient suffered broken ribs causing a pneumothorax on the right side. Place a straw into the 5th and 6th intercostals spaces on the lateral side.

7. Write the names of the surgical team on the white paper and wrap the patient in it, using the masking tape provided. Place your patient in PACU and dispose of any trash. When your area has been cleaned up, continue with the following Tx (treatment) of two other patients.

Mr. Jones has had an appendectomy, which requires a dressing change. The appendix is located in the right iliac or inguinal region, with the distal portion of the appendix extending at an angle into the hypogastric region. Draw the nine abdominal regions and place an X on the diagram where the nurse will place the dressing. Also, color in the umbilical region and the left lumbar region using two different colors; shade the terms "umbilical" and "lumbar" with the colors you are using for those areas.



Jeff was injured in a bicycle accident. X-ray films reveal that he has a fracture of the right patella (kneecap). A cast is applied, beginning at the distal femoral region and extending to the upper pedal region. Place Xs where Jeff's cast begins and where it ends. (Hints: The femur is the large upper leg bone and the combining form "pedo" refers to the foot.)



"Organ Man Project"

In your assigned, group of 3-4 students work together to make your assigned organ system.

Rules for the project:

The organ system has to be life-sized for a normal adult female

They have to be correct in color, texture and size.

You cannot use anything that will mold or draw bugs (ie, no food products), and you cannot use anything toxic (ie, building materials with formaldehyde or asbestos, acids, etc).

The group must come up with a method in which their "project" will be neatly labeled with medical terms and hung, mounted, or displayed in the hallway.

During your presentation you should have a minimum of 2 disease processes in your system; you must include the name of the disease, symptoms, diagnostic tests to diagnose the disease, treatment, medications, and operations, if any. Each person in the group is responsible for presenting a portion of the project.

You will be given some time to work in class, but your group should also plan on working after school to complete your system design. I have allowed 2 weekends, so plan accordingly. I expect your group to work together to make a quality presentation and project.

You will be graded on the following:

On time – loss of 100 points from the total grade if not turned in on the due date

Creativity – up to 75 points

Accuracy of model – up to 75 points

Model Presentation – up to 75 points

Working together (group dynamics) – up to 50 points

Knowledge of the system (organs of the system, how they function, and how the disease process affects the system) – up to 150 points

Verbal presentation of the disease process as a group – up to 75 points

Total Possible points: 500

Total points awarded _____