

Integrated Education and Training (IET)

Basic Skills Lesson

FIT 4 Healthcare/ Foundational Skills in Healthcare

Developed by the



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Integrated Education and Training Informational Cover Page

FIT 4 Healthcare/Foundational Skills in Healthcare Basic Skills Lesson Plan Overview

Title: FIT 4 Healthcare/Foundational Skills in Healthcare

Training Provider: Pennsylvania College of Technology Workforce Development and Continuing Education

Description of Occupational Training: FIT 4 Healthcare is a foundational training designed to inform participants of the Healthcare sector. PA CareerLink® Lycoming County offers workshops to participants such as interview skills, application tips, and Word and Excel classes. A job fair with healthcare providers is scheduled as a culminating event. Participants earn First Aid and CPR certification.

Hours of Training: 32 occupational training, 30 workforce preparation and soft skills

Hours of Basic Skills Training: 12

Integrated Education and Training Program Objectives:

- Provide participants the basic foundational skills necessary to obtain a position in the healthcare sector.
- Increase knowledge of medical terminology and skills awareness so that participants are more marketable to employers.

Fit 4 Basic Skills Objectives:

- Provide basic skills instruction in reading, writing, and math to students enrolled in the FIT 4 Healthcare training.

Intended Audience:

- PA CareerLink® customers and adult education students who are seeking information about the healthcare sector. Individuals who are looking for employment opportunities. Training would be appropriate for those at an Educational Functioning Level of High Intermediate ABE.

Assessment Tools:

Formative:

- Vocabulary check-ins
- Math skill reviews
- Participation in group activities

Summative:

- TABE® Survey 9/10

Introduction to the lesson plan layout: The lesson plan template was designed to capture objectives and activities of each lesson. The lesson plans references both College and Career Readiness Standards and the Foundation Skills Framework.

Process of developing the curriculum:

- Met with occupational instructor on several occasions to discuss goals and objectives of the training.
- Reviewed class materials to determine the basic reading, writing, and math skills needed by the participants.
- Met with PA CareerLink® Instructor to discuss the workforce component.

Foundational Skills in Healthcare

Lesson Topic	Career Exploration
Objective(s)	Students will explore careers and pathways in the healthcare sector. Students will complete a job web of skills and abilities, required training and education, wages, and job outlook for a position of interest.
Length	2 hrs.

Foundation Skills Information				
Basic Workplace Skills		Basic Employability		Basic Workplace Knowledge
	Uses Technology		Demonstrates Interpersonal Relations	Applies Health and Safety Concepts
	Observes Critically		Demonstrates Self-Management Strategies	Understands process of product/service
	Listens with understanding	X	Works in teams	Demonstrates quality consciousness
X	Speaks clearly and concisely		Solves Problems	X Understands Finances
X	Writes Clearly and Concisely		Makes Decisions	Works within Organizational Structure and Culture
X	Reads with Understanding			
	Applies Mathematical Concepts and Operations			
	Locates and Uses Resources			

CCRS (Anchor/Standard/Resource)	Math	Reading	Writing	Language
		CCR 7.D (RI.6.7)	CCR 6.C (W.4.6)	

Materials	<p>Flip chart paper and markers</p> <p>www.Pacareerzone.org</p> <p>Job web</p>
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Foundational Skills in Healthcare

Anticipatory Set	<p>Divide students into teams and have them brainstorm and list jobs in healthcare. Encourage them to consider technical jobs as well as support service positions.</p> <p>Ask each team to report out to the whole group. Discuss the opportunities of each job family.</p>
Instructional Procedure	<p>Using www.pacareerzone.org direct students or demonstrate finding the “Assess Yourself” tab. Ask students to complete the Interest Profiler to discover what their interests are and how they relate to their work preferences.</p> <p>Under the tab “Explore Job Families,” instruct students to review healthcare occupations and compare jobs considering skills needed, job tasks, and education requirements.</p>
Guided Practice	<p>Instruct students to choose one occupation to create a job map of skills needed, education requirements, wages, and outlook.</p>
Closure	<p>As a group, re-visit the lists the teams created. Are there jobs that the students didn’t consider? Has their perspective of the field broadened?</p> <p>If time allows, have students create a career pathways map of a job choice.</p>

Foundational Skills in Healthcare

Lesson Topic	Word Parts-The Basis of Medical Terminology
Objective(s)	Students will analyze and decode words composed of four elements: the root, combining form, prefix, and suffix. Students will define common words used in the medical sector.
Length	2 hrs.

Foundation Skills Information				
Basic Workplace Skills		Basic Employability		Basic Workplace Knowledge
X	Uses Technology		Demonstrates Interpersonal Relations	Applies Health and Safety Concepts
	Observes Critically		Demonstrates Self-Management Strategies	Understands process of product/service
	Listens with understanding		Works in teams	Demonstrates quality consciousness
	Speaks clearly and concisely		Solves Problems	Understands Finances
X	Writes Clearly and Concisely		Makes Decisions	Works within Organizational Structure and Culture
X	Reads with Understanding			
	Applies Mathematical Concepts and Operations			
	Locates and Uses Resources			

CCRS (Anchor/Standard/Resource)	Math	Reading	Writing	Language
		RF.3.C CCR 7.D (RI.6.7)		CCR 4.D

Materials	<p>Chart of Word Elements- Roots and Combining Forms</p> <p>Medical Dictionary (<u>Stedman's Medical Dictionary for the Health Professions and Nursing / Edition 7</u>, <u>Merriam-Webster's Medical Dictionary</u>)</p> <p>Online medical dictionaries (http://www.online-medical-dictionary.org, http://dictionary.webmd.com)</p>
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Foundational Skills in Healthcare

Anticipatory Set	<p>Medical terminology is the language used among health care professionals. As part of a medical team, you'll need to know the most commonly used medical words to communicate. Give the example that even a receptionist at a small physician's office will need to know that a <i>myocardial infarction</i> means a heart attack and therefore should not have appeared on patients billing form who was seen for a sore throat and fever.</p>
Instructional Procedure	<p>Define the last part of a word, the suffix. Define the first part of a word, the prefix. Define the middle, the root. Define the combining form, which is the root plus a vowel. The most common vowel is "o".</p> <p>Look at Chart of Word Parts for a few common examples of a root plus the combining vowel and the meaning.</p> <p>Introduce students to a print version of a medical dictionary if available. Introduce and examine online versions, if possible.</p>
Guided Practice	<p>Choose 5 terms from the New Word Parts handout. Search for these word in a medical dictionary. Look at the word parts. Are there links to common words? For example, the word <i>cardiology</i> may contain links to cardiac arrest, carditis, and myocardium.</p>
Closure	<p>For the 5 terms that the students chose to define, write the prefixes, suffixes, combining forms, and word roots on 3X5 cards. These cards are an excellent study tool for future training.</p>

Foundational Skills in Healthcare

Lesson Topic	Communication Skills in Customer Service
Objective(s)	Students will evaluate and practice good verbal and nonverbal communication skills in order to provide good customer service to patients and patient family and visitors in a medical facility or home.
Length	2 hrs.

Foundation Skills Information				
Basic Workplace Skills		Basic Employability		Basic Workplace Knowledge
	Uses Technology		Demonstrates Interpersonal Relations	Applies Health and Safety Concepts
	Observes Critically		Demonstrates Self-Management Strategies	Understands process of product/service
	Listens with understanding	X	Works in teams	Demonstrates quality consciousness
X	Speaks clearly and concisely		Solves Problems	Understands Finances
	Writes Clearly and Concisely		Makes Decisions	X Works within Organizational Structure and Culture
	Reads with Understanding			
	Applies Mathematical Concepts and Operations			
	Locates and Uses Resources			

CCRS (Anchor/Standard/Resource)	Math	Reading	Writing	Language
				CCR 1D

Materials	<p>Self-Appraisal Communications Self-Appraisal found at : http://www.newlineideas.com/communication-style-quiz.html</p> <p>Correcting Statements</p> <p>Handout Role playing scenarios found at: http://slincs.coe.utk.edu/lpm/ky/health_manual/comm_skills1.pdf</p>
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Foundational Skills in Healthcare

Anticipatory Set	Explain that all of us are constantly in a state of giving and receiving messages. Problems arise when one does not receive the message sent in the communication as it was intended, or when one sends a nonverbal message that contradicts the spoken word. Instruct students to complete the on-line communication self- appraisal and discuss the findings.
Instructional Procedure	Use 15 minutes of lecture style format to discuss the importance of verbal and nonverbal communication cues such as tone of voice, body language, and eye contact. Make sure students know appearance can disclose several pieces of information about us. Explain that effective listening is also important in communication.
Guided Practice	Students will turn negative statements into positive ones in a worksheet titled "Correcting Statements." Discuss results and how the difference in statements could be make you a communication "winner or loser."
Closure	Students will role play scenarios that will allow them to practice their communication and listening skills. Facilitate discussions about strengths and weaknesses.

Foundational Skills in Healthcare

Lesson Topic	Written Communication I-Sentence Structure
Objective(s)	Students will be able to identify the three basic types of sentence structure: simple, compound, and complex. Students will review different styles of charting in medical records.
Length	3 hrs.

Foundation Skills Information

Basic Workplace Skills		Basic Employability		Basic Workplace Knowledge	
	Uses Technology		Demonstrates Interpersonal Relations		Applies Health and Safety Concepts
	Observes Critically		Demonstrates Self-Management Strategies		Understands process of product/service
	Listens with understanding		Works in teams		Demonstrates quality consciousness
	Speaks clearly and concisely		Solves Problems		Understands Finances
X	Writes Clearly and Concisely		Makes Decisions		Works within Organizational Structure and Culture
	Reads with Understanding				
	Applies Mathematical Concepts and Operations				
	Locates and Uses Resources				

CCRS (Anchor/Standard/Resource)	Math	Reading	Writing	Language
			CCR4.C (W.5.4)	

Materials	<p>White board</p> <p><u>Achieving Success on the TABE Level D</u></p> <p>Guidelines for Medical Documentation. Handout found at www.ncqa.org</p> <p>Excerpt from a sample medical chart</p>
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Foundational Skills in Healthcare

Anticipatory Set	Give a teacher-made pre-assessment on identifying sentence structure. Review answers to determine areas of strength and weakness.
Instructional Procedure	<p>Review the two basic parts of a sentence: a subject and a predicate. Explain that subjects and predicates may be compound. Practice identifying subjects and predicates by putting sample sentences on the white board.</p> <p>Discuss run-ons and fragments and provide examples of each.</p> <p>Define the three sentence structures as simple, compound, and complex. Using discussion and examples, teach the importance of comma placement. Use <u>Achieving Success on the TABE Reading Level D</u> for practice.</p> <p>Point out that writing for medical professionals is very different from other forms of writing. Medical writers use abbreviations, codes, and phrases unique to their field. Ask students how a medical professionals writing may differ from that of a novelist.</p> <p>Review handout on charting and documenting.</p>
Guided Practice	Provide students with an excerpt from a medical chart that includes abbreviations, words, and symbols. Instruct students to translate this excerpt into complete sentences as they would do for a letter or formal report.
Closure	Ask one or two students share their writing with the group.

Foundational Skills in Healthcare

Lesson Topic	Written Communication II-Punctuation
Objective(s)	Students will be able to use appropriate end punctuation. Students will understand when to use parenthesis, dashes, hyphens, and other internal punctuation in order to write effective logs.
Length	2 hrs.

Foundation Skills Information

Basic Workplace Skills		Basic Employability		Basic Workplace Knowledge	
	Uses Technology		Demonstrates Interpersonal Relations		Applies Health and Safety Concepts
	Observes Critically		Demonstrates Self-Management Strategies		Understands process of product/service
	Listens with understanding		Works in teams		Demonstrates quality consciousness
	Speaks clearly and concisely		Solves Problems		Understands Finances
X	Writes Clearly and Concisely		Makes Decisions		Works within Organizational Structure and Culture
	Reads with Understanding				
	Applies Mathematical Concepts and Operations				
	Locates and Uses Resources				

CCRS (Anchor/Standard/Resource)	Math	Reading	Writing	Language
			CCR4.C (W.5.4) CCR5.C (W.5.5)	CCR2.C.a,c,f, CCR2.E.a

Materials	<p><u>Achieving Success on the TABE Level D</u></p> <p>Sample healthcare worker log</p> <p>Scenario from a direct care worker found at: http://www.med.unc.edu/medselect/resources/sample-notes/sample-initial-visit-note-1</p>
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Foundational Skills in Healthcare

Anticipatory Set	Students will look at a shift log from a home healthcare worker that did not use proper punctuation. Discuss the importance of documentation and how shift logs could become a legal document.
Instructional Procedure	<p><u>Using Achieving Success on the TABE</u>, review proper comma usage and rules.</p> <p>Examine the use of parenthesis, the dash, the hyphen, and the apostrophe.</p> <p>Discuss proper nouns and capitalization.</p>
Guided Practice	Review the previous shift log and correct the punctuation. Discuss.
Closure	Using proper sentence structure and punctuation, students will write a shift log from a scenario of a home health aide. Facilitate a closing discussion.

Foundational Skills in Healthcare

Lesson Topic	Understanding Fractions
Objective(s)	Students will define a fraction, represent them in lowest terms, and solve addition and subtraction problems using fractions. Students will solve multiplication and division problems using fractions and mixed numbers and understand their application in a healthcare context.
Length	3 hrs.

Foundation Skills Information

Basic Workplace Skills		Basic Employability		Basic Workplace Knowledge	
	Uses Technology		Demonstrates Interpersonal Relations		Applies Health and Safety Concepts
	Observes Critically		Demonstrates Self-Management Strategies		Understands process of product/service
	Listens with understanding		Works in teams		Demonstrates quality consciousness
	Speaks clearly and concisely		Solves Problems		Understands Finances
	Writes Clearly and Concisely		Makes Decisions		Works within Organizational Structure and Culture
	Reads with Understanding				
X	Applies Mathematical Concepts and Operations				
	Locates and Uses Resources				

CCRS (Anchor/Standard/Resource)	Math	Reading	Writing	Language
	4.NF.1-4			

Materials	<p><u>Number Power Fractions, Decimals, and Percents</u> , pgs. 8-60</p> <p>Flip chart and markers</p> <p><u>Mathematics Skills for Healthcare Providers</u> pgs. 16-20</p> <p>http://slincs.coe.utk.edu/lpm/ky/health_manual/math_skills_6.pdf</p>
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Foundational Skills in Healthcare

Anticipatory Set	Using a brainstorming activity, ask: What is a fraction? How are fractions used in the healthcare sector? Write responses on a flip chart and post for further discussion and review.
Instructional Procedure	<p>Provide examples and demonstration to help students understand what a fraction is, the different forms, and how to change them.</p> <p>Teach students how to add, subtract, multiply, and divide fractions, and simplify the answers.</p>
Guided Practice	Instruct students to complete word problems found in online resource. Examples include math from nurse assistant, dietary, and environmental services positions.
Closure	Review answers to practice problems. Compare their beginning thoughts of the use of fractions in healthcare to the practice problems.

Foundational Skills in Healthcare

Lesson Topic	Understanding Decimals
Objective(s)	Students will define a decimal and solve addition and subtraction problems using decimals. Students will solve multiplication and division problems using decimals. Students will be convert decimals to fractions and fractions to decimals and understand their application in a healthcare context.
Length	2 hrs.

Foundation Skills Information

Basic Workplace Skills		Basic Employability		Basic Workplace Knowledge	
	Uses Technology		Demonstrates Interpersonal Relations		Applies Health and Safety Concepts
	Observes Critically		Demonstrates Self-Management Strategies		Understands process of product/service
	Listens with understanding		Works in teams		Demonstrates quality consciousness
	Speaks clearly and concisely		Solves Problems		Understands Finances
	Writes Clearly and Concisely		Makes Decisions		Works within Organizational Structure and Culture
	Reads with Understanding				
	Applies Mathematical Concepts and Operations				
	Locates and Uses Resources				

CCRS (Anchor/Standard/Resource)	Math	Reading	Writing	Language
	5.NBT.1-6 4.NF.6			

Materials	<p><u>Number Power Fractions, Decimals, and Percents</u> pgs. 62-97</p> <p>Decimals in Healthcare questions taken from www.skillsworkshop.org/</p>
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Foundational Skills in Healthcare

Anticipatory Set	Choose a sample question from the Decimals in Healthcare pages to put on the board. Talk about the importance of decimals in that particular situation.
Instructional Procedure	<p>Provide examples and demonstration to help students understand place value and apply their knowledge to rounding place values to the hundred thousandth.</p> <p>Provide examples and demonstration to help students understand how to add, subtract, multiply, and divide decimal values.</p> <p>Provide examples and demonstration to help students understand how to convert decimals to fractions and fractions to decimals.</p>
Guided Practice	Instruct students to complete practice problems in the text book. Review trouble problems and all answers.
Closure	<p>Assign decimals in healthcare questions to students to complete.</p> <p>Review as a class.</p>

Foundational Skills in Healthcare

Lesson Topic	Measurement-The Basics of Medication Math
Objective(s)	Students will demonstrate effective knowledge of common equivalents by completing conversion activities. Students will read basic scales, meters, and gauges and explore their use in a healthcare setting.
Length	2 hrs.

Foundation Skills Information

Basic Workplace Skills		Basic Employability		Basic Workplace Knowledge	
	Uses Technology		Demonstrates Interpersonal Relations		Applies Health and Safety Concepts
	Observes Critically		Demonstrates Self-Management Strategies		Understands process of product/service
	Listens with understanding		Works in teams		Demonstrates quality consciousness
	Speaks clearly and concisely		Solves Problems		Understands Finances
	Writes Clearly and Concisely		Makes Decisions		Works within Organizational Structure and Culture
	Reads with Understanding				
X	Applies Mathematical Concepts and Operations				
	Locates and Uses Resources				

CCRS (Anchor/Standard/Resource)	Math	Reading	Writing	Language
	2.MD.3-4			

Materials	<p><i>Achieving Success on the TABE Level M</i></p> <p><u>Measuring and managing fluid balance</u>, found at: www.nursingtimes.net/Journals/1/Files/2011/8/1/Fluid%20balanceCorr.pdf.pdf</p>
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Foundational Skills in Healthcare

Anticipatory Set	Read article with students. The article discusses the proper fluid balance in the human body. This would be of particular interest to someone who is going into home healthcare or nursing home care.
Instructional Procedure	Using <i>Achieving Success on the TABE Level M</i> pg. 124 & 125, instruct students to work individually to familiarize themselves with appropriate units of measurement. Instructor will explain and model converting units within a customary and metric system.
Guided Practice	Instruct students to complete practice problems from the TABE book.
Closure	Refer students back to the article on fluid balance and hydration. Students will consider the input and output logs. Practicing converting ounces to cubic centimeters with the conversion rate of ounces \div 30 = mL or cc or mL or cc \times 30 = ounces.

GUIDELINES FOR MEDICAL RECORD DOCUMENTATION

Consistent, current and complete documentation in the medical record is an essential component of quality patient care. The following 21 elements reflect a set of commonly accepted standards for medical record documentation. An organization may use these elements to develop standards for medical record documentation.

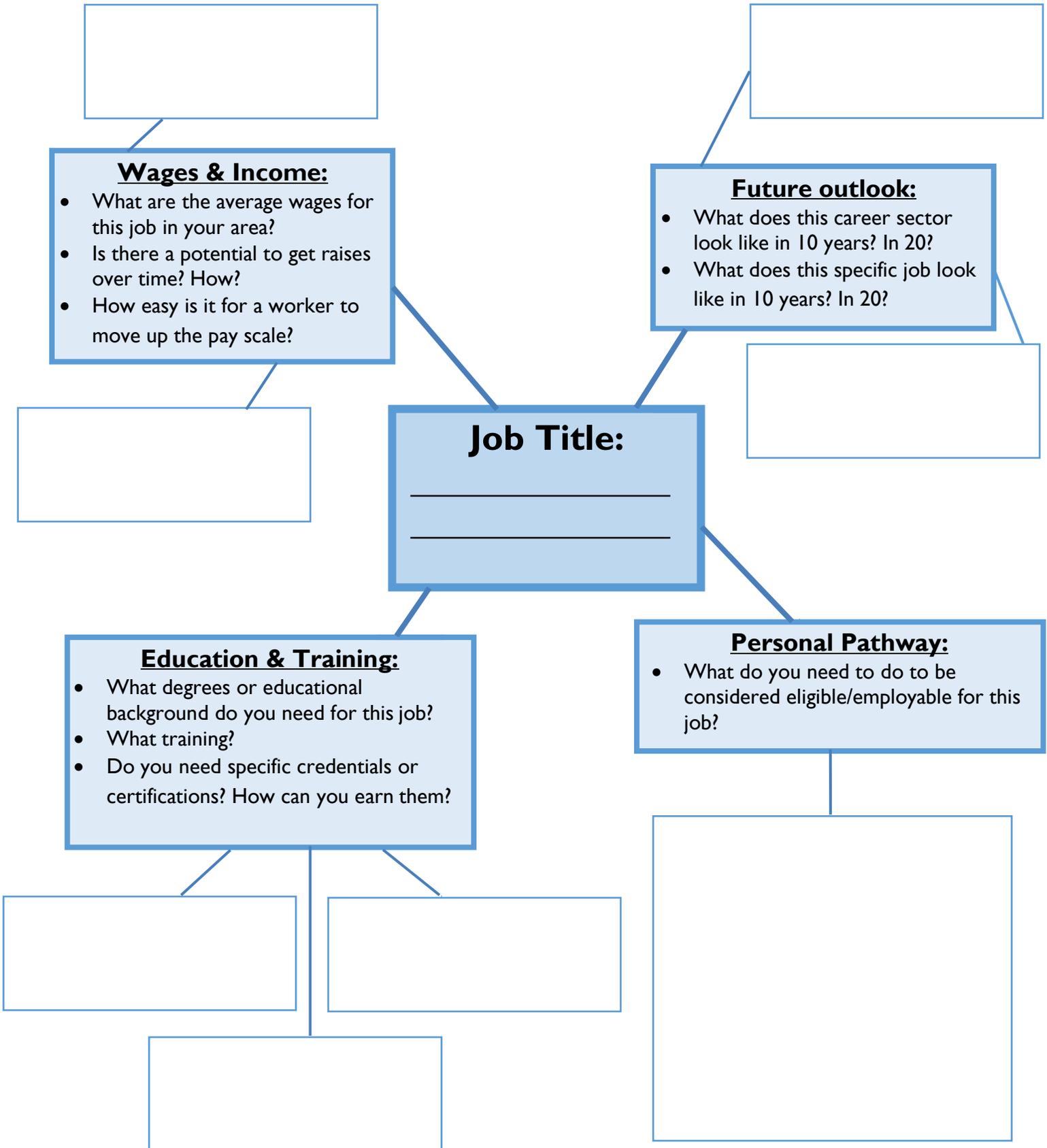
NCQA considers 6 of the 21 elements as core components to medical record documentation. Core elements are indicated by an asterisk (*).

1. Each page in the record contains the patient's name or ID number.
2. Personal biographical data include the address, employer, home and work telephone numbers and marital status.
3. All entries in the medical record contain the author's identification. Author identification may be a handwritten signature, unique electronic identifier or initials.
4. All entries are dated.
5. The record is legible to someone other than the writer.
- *6. Significant illnesses and medical conditions are indicated on the problem list.
- *7. Medication allergies and adverse reactions are prominently noted in the record. If the patient has no known allergies or history of adverse reactions, this is appropriately noted in the record.
- *8. Past medical history (for patients seen three or more times) is easily identified and includes serious accidents, operations and illnesses. For children and adolescents (18 years and younger), past medical history relates to prenatal care, birth, operations and childhood illnesses.
9. For patients 12 years and older, there is appropriate notation concerning the use of cigarettes, alcohol and substances (for patients seen three or more times, query substance abuse history).
10. The history and physical examination identifies appropriate subjective and objective information pertinent to the patient's presenting complaints.
11. Laboratory and other studies are ordered, as appropriate.
- *12. Working diagnoses are consistent with findings.
- *13. Treatment plans are consistent with diagnoses.
14. Encounter forms or notes have a notation, regarding follow-up care, calls or visits, when indicated. The specific time of return is noted in weeks, months or as needed.

15. Unresolved problems from previous office visits are addressed in subsequent visits.
16. There is review for under - or overutilization of consultants.
17. If a consultation is requested, there a note from the consultant in the record.
18. Consultation, laboratory and imaging reports filed in the chart are initialed by the practitioner who ordered them, to signify review. (Review and signature by professionals other than the ordering practitioner do not meet this requirement.) If the reports are presented electronically or by some other method, there is also representation of review by the ordering practitioner. Consultation and abnormal laboratory and imaging study results have an explicit notation in the record of follow-up plans.
- *19. There is no evidence that the patient is placed at inappropriate risk by a diagnostic or therapeutic procedure.
20. An immunization record (for children) is up to date or an appropriate history has been made in the medical record (for adults).
21. There is evidence that preventive screening and services are offered in accordance with the organization's practice guidelines.

Retrieved from National Committee for Quality Assurance web site: www.ncqa.org

Job Web:
Researching Information on Specific Jobs



Word Parts
New Words List

List of common medical terms with various prefixes & suffixes

Abdominocentesis
Analgesia Anencephalic
Cholelithotomy
Colitis
Encephalopathy
Endometritis
Hemostasis
Hepatitis
Hydronephrosis
Hypertrophy
Leucocytes
Meningitis
Myeloma
Neuropathy
Osteoporosis
Pericarditis
Phlebotomy
Quadriplegia
Venogram

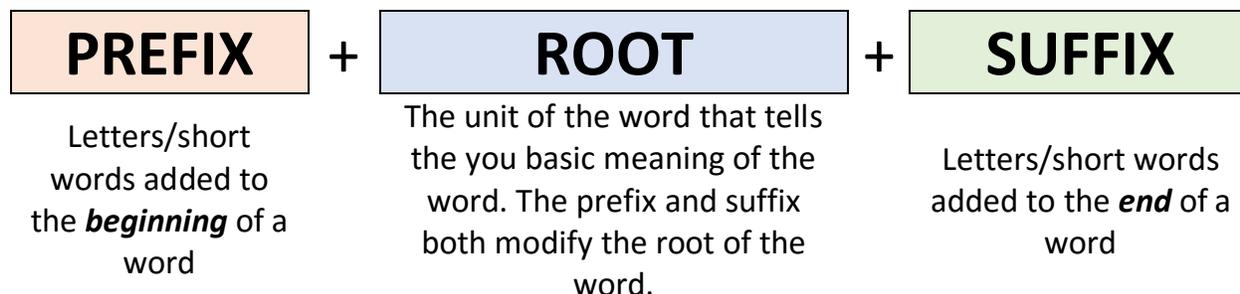
Correcting Statements

Some everyday words can be detrimental to work relationships. Change these negative or accusing statements into positive ones.

1. You never help me with the filing. You always leave the charts for me to do.
2. Don't do it that way. That's wrong.
3. It would have been nice if you were here two hours ago to help me.
4. Sir, you're late. We can't see you now.
5. No, you can't have more ice-cream.
6. The litter box smells. Don't you ever clean it?
7. I'm not here to listen to your personal affairs. Let me get back to work.
8. Your father has been an extreme handful. I am glad to see him go home.
9. Get off your phone. This isn't the time for that.
10. Your daughter has acute otitis media and needs an antibiotic.

Word Parts

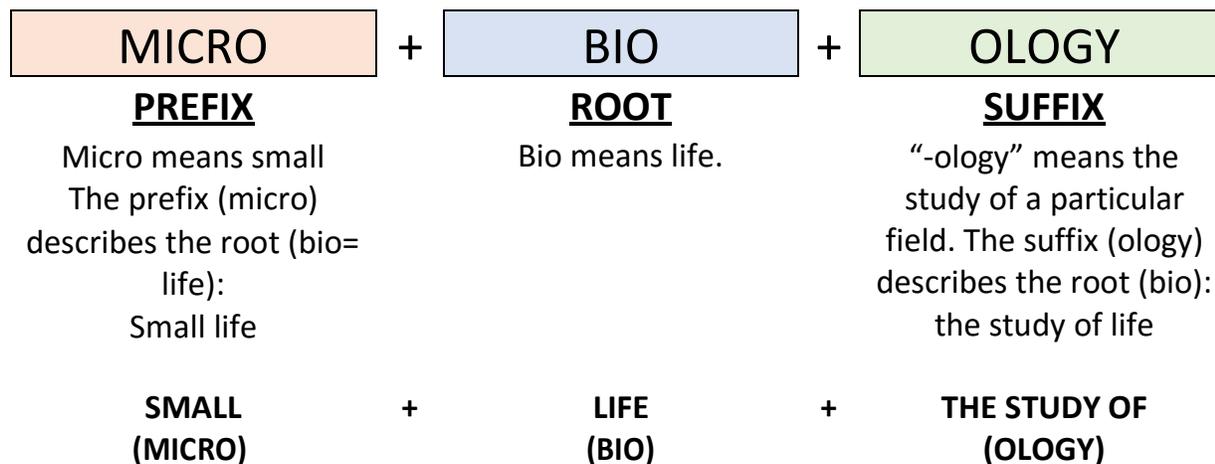
Words can be broken down into 3 different parts:



Examples:

MICROBIOLOGY = MICRO + BIO + OLOGY

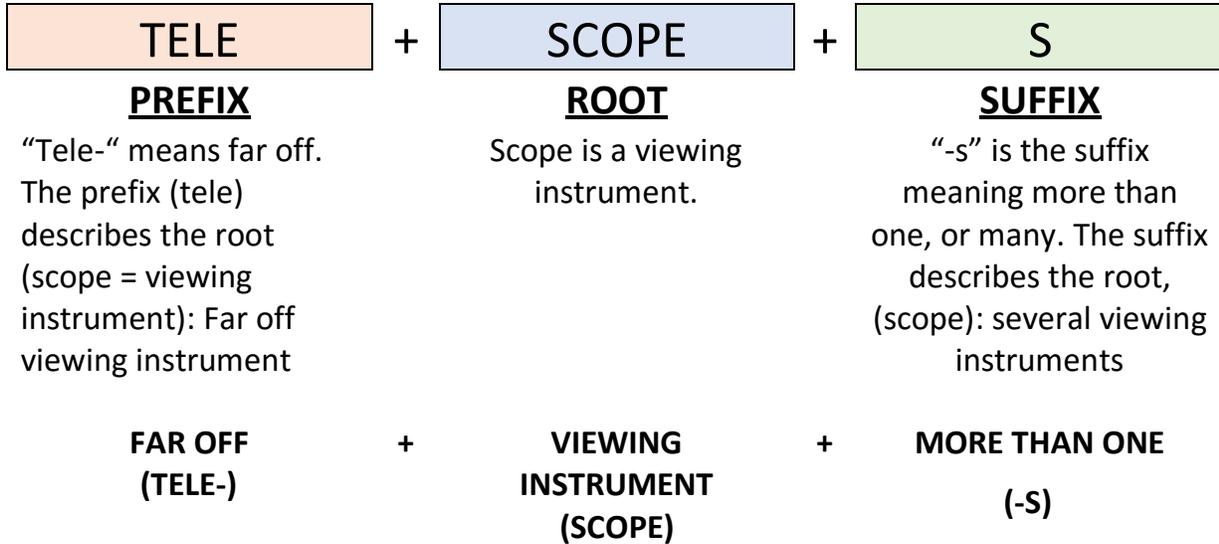
Microbiology is the study of small organisms, such as bacteria and viruses



Microbiology = The study of small life

TELESCOPES = TELE + SCOPE + S

Telescopes are instruments that help humans see distances from far away

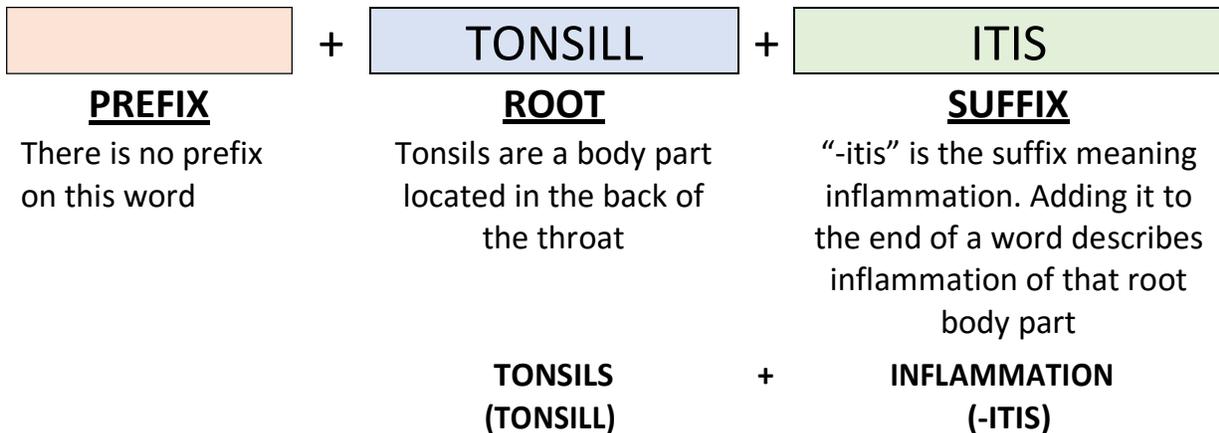


Telescopes = More than one far-off viewing instruments

Medical Terminology Examples:

TONSILLITIS = TONSIL + ITIS

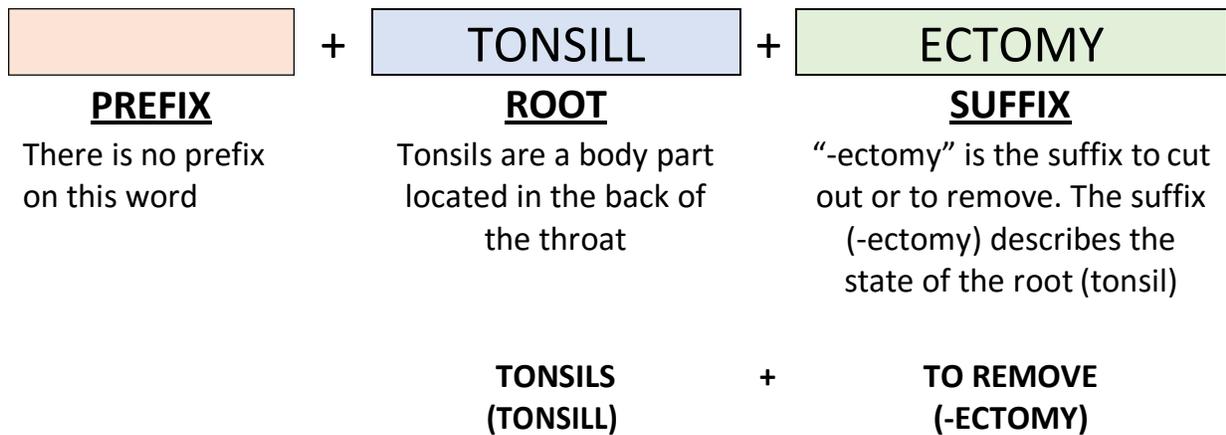
Tonsillitis is the inflammation of the Tonsils



Tonsillitis = Inflammation of the Tonsils

TONSILLECTOMY = TONSIL + ECTOMY

A tonsillectomy is the removal of the tonsils



Tonsillectomy = Removal of the tonsils

Common Prefixes & Suffixes in Medical Terminology:

Prefixes:

Word Part	Meaning	Example
A-, An-	Without, lack of	Abacterial (without bacteria)
Anti-	Against	Antibiotics (medicine used to treat bacterial infections)
Hyper-	Above, beyond	Hypertension (high blood pressure)
Hypo-	Below, deficient	Hypodermic (below the skin)
Macro-	Large	Macroglossia (unusually large tongue)
Micro-	Small	Microorganism (small organism)
Post-	After	Postaneurysmal (after an aneurysm,

Suffixes:

Word Part	Meaning	Example
-ectomy	To cut out or remove	Appendectomy
-gram	The image of (X-Ray)	Mammogram (X-Ray of the breast)
-itis	Inflammation	Appendicitis (inflammation of the appendix)
-ology	The study of	Cardiology (the study of the heart)
-osis	Abnormal condition	Sclerosis (abnormal hardening of body tissues)
-otomy	To cut into	Tracheotomy (to cut into the windpipe)
-ostomy	To make a mouth	Colostomy (to make a permanent opening in the colon)
-scopy/scopic	To look at	Colonoscopy (to look into the colon)