

Standards Correlations

Introduction to Health and Medical Sciences

8302 36 weeks / 8301 18 weeks

Task	SOL Correlations	HOSA Correlations
Demonstrating Personal Qualities and Abilities		
Demonstrate creativity and innovation.	<p>English: 6.1, 6.3, 6.4, 6.6, 6.7, 6.9, 7.1, 7.3, 7.4, 7.6, 7.7, 7.9, 8.1, 8.3, 8.4, 8.6, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8</p> <p>History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WG.4, WHI.1, WHII.1</p> <p>Mathematics: 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.10, 6.11, 6.12, 7.2, 7.3, 7.8, 7.9, 8.2, 8.4, 8.6, 8.7, 8.11, 8.12, 8.17, 8.18, A.9, AFDA.3, AFDA.4, AFDA.5, AFDA.6, AFDA.7, AFDA.8, AII.9, COM.1, COM.3, COM.4, COM.5, COM.8, DM.7, DM.1*, DM.10, DM.2*, DM.3*, PS.3*, PS.4*, PS.7*, PS.9*, PS.10*</p> <p>Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PS.1</p>	
Demonstrate critical thinking and problem solving.	<p>English: 6.1, 6.3, 6.4, 6.5, 6.6, 6.7, 6.9, 7.1, 7.3, 7.4, 7.5, 7.6, 7.7, 7.9, 8.1, 8.3, 8.4, 8.5, 8.6, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8</p> <p>History and Social Science: CE.1, CE.4, CE.11, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WG.4, WHI.1, WHII.1</p> <p>Mathematics: 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.10, 6.11, 7.2, 7.3, 7.8, 7.12, 7.13, 8.2, 8.4, 8.8, 8.9, 8.10, 8.11, A.8, A.9, G.1, G.13, G.14, AFDA.3, AFDA.5, AFDA.8, AII.9, AII.10, AII.11, COM.1, COM.3, COM.4, COM.5, COM.8, DM.4, DM.7, DM.1*, DM.2*, DM.3*, DM.9*, PS.9*, PS.10*</p>	

Task	SOL Correlations	HOSA Correlations
	Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PS.1	
Demonstrate initiative and self-direction.	English: 6.1, 6.4, 6.6, 6.7, 6.9, 7.1, 7.4, 7.6, 7.7, 7.9, 8.1, 8.4, 8.6, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.11, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1	
Demonstrate integrity.	English: 6.1, 7.1, 8.1, 9.1, 9.5, 10.1, 10.5, 11.1, 11.5, 12.1, 12.5 History and Social Science: CE.1, CE.3, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1	
Demonstrate work ethic.	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: CH.1	
Demonstrating Interpersonal Skills		
Demonstrate conflict-resolution skills.	English: 6.1, 6.2, 6.4, 6.6, 6.7, 6.9, 7.1, 7.2, 7.4, 7.6, 7.7, 7.9, 8.1, 8.2, 8.4, 8.6, 8.7, 8.9, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, VUS.1	
Demonstrate listening and speaking skills.	English: 6.1, 6.2, 6.4, 6.6, 7.1, 7.2, 7.4, 7.6, 8.1, 8.2, 8.4, 8.6, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1	
Demonstrate respect for diversity.	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.3, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, USII.9, VUS.1, VUS.13, WG.1, WHI.1, WHII.1	
Demonstrate customer service skills.	English: 6.1, 6.4, 6.7, 7.1, 7.4, 7.7, 8.1, 8.4, 8.7, 9.1, 9.5, 9.6, 10.1, 10.5, 10.6, 11.1, 11.5, 11.6, 12.1, 12.5, 12.6 History and Social Science: CE.1, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1	

Task	SOL Correlations	HOSA Correlations
Collaborate with team members	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.3, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1	
Demonstrating Professional Competencies		
Demonstrate big-picture thinking.	English: 6.1, 6.4, 7.1, 7.4, 8.1, 8.4, 9.1, 9.5, 10.1, 10.5, 11.1, 11.5, 12.1, 12.5 History and Social Science: CE.1, CE.4, CE.12, GOVT.1, GOVT.15, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1	
Demonstrate career- and life-management skills.	English: 6.1, 6.7, 7.1, 7.7, 8.1, 8.7, 9.1, 9.6, 10.1, 10.6, 11.1, 11.6, 12.1, 12.6 History and Social Science: CE.1, CE.4, CE.12, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 8.4	
Demonstrate continuous learning and adaptability.	English: 6.1, 6.4, 6.7, 6.9, 7.1, 7.4, 7.7, 7.9, 8.1, 8.4, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.3, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: BIO.1, CH.1, LS.1, PH.1, PH.4, PS.1	
Manage time and resources.	English: 6.1, 6.2, 6.4, 6.7, 6.9, 7.1, 7.2, 7.4, 7.7, 7.9, 8.1, 8.2, 8.4, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.2, 11.5, 11.6, 11.8, 12.2, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.11, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 6.10, 6.11, 6.12, 7.2, 7.3, 7.8, 7.9, 7.10, 7.11, 7.12, 7.13, 8.4, 8.11, 8.12, 8.13, 8.14, 8.17, 8.18, A.4, A.5, A.8, A.9, AFDA.3, AFDA.4, AFDA.5, AFDA.6, AFDA.7, AFDA.8, COM.1, COM.3, COM.5, COM.8	

Task	SOL Correlations	HOSA Correlations
Demonstrate information-literacy skills.	English: 6.1, 6.2, 6.4, 6.6, 6.7, 6.9, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 7.9, 8.1, 8.2, 8.3, 8.4, 8.6, 8.7, 8.9, 9.2, 9.5, 9.6, 9.8, 10.2, 10.5, 10.6, 10.8, 11.2, 11.5, 11.6, 11.8, 12.2, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 6.10, 6.11, 7.8, 7.9, 8.11, 8.12, A.8, A.9, AFDA.3, AFDA.4, AFDA.6, AFDA.7, AFDA.8, DM.8, PS.1*, PS.2*, PS.3*, PS.4*, PS.7*, PS.8*, PS.9*, PS.10* Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PH.1, PS.1	
Demonstrate an understanding of information security.	English: 6.1, 6.2, 6.3, 6.4, 6.6, 6.7, 6.8, 6.9, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 7.8, 7.9, 8.1, 8.2, 8.3, 8.4, 8.6, 8.7, 8.8, 8.9, 9.1, 9.2, 9.5, 9.6, 9.8, 10.1, 10.2, 10.5, 10.6, 10.8, 11.1, 11.2, 11.5, 11.6, 11.8, 12.1, 12.2, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: COM.10	
Maintain working knowledge of current information-technology (IT) systems.	English: 6.1, 6.3, 6.4, 6.6, 6.9, 7.1, 7.3, 7.4, 7.6, 7.9, 8.1, 8.3, 8.4, 8.6, 8.9 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 7.8, COM.1, COM.2, COM.7, COM.9, COM.10, COM.11, COM.16, COM.18, PS.17 Science: BIO.1, CH.1, ES.1, PH.1	
Demonstrate proficiency with technologies, tools, and machines common to a specific occupation.	History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 6.10, 6.11, 7.9, 8.4, A.7, A.8, A.9, AFDA.1, AFDA.3, AFDA.5, AII.4, AII.7, AII.9, COM.1, COM.7, COM.10, COM.11, COM.12, COM.16 Science: CH.1, ES.1, LS.1, PH.1, PS.1	

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Apply mathematical skills to job-specific tasks.	English: 6.4, 6.6, 6.7, 7.4, 7.6, 7.7, 8.4, 8.6, 8.7, 9.5, 9.6, 10.5, 10.6, 11.5, 11.6, 12.5, 12.6 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 6.1, 6.2, 6.5, 6.6, 6.12, 6.13, 6.14, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.8, 7.9, 7.11, 7.12, 7.13, 8.4, 8.5, 8.6, 8.8, 8.9, 8.10, 8.11, 8.12, 8.13, 8.14, 8.15, 8.16, 8.17, 8.18, A.1, A.3, A.4, A.5, A.7, A.8, A.9, AFDA.1, AFDA.3, AFDA.5, AFDA.8, AII.3, AII.7, AII.9, AII.10, COM.1, COM.7 Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PH.1, PS.1	
Demonstrate professionalism.	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1	
Demonstrate reading and writing skills.	English: 6.1, 6.6, 6.7, 7.1, 7.6, 7.7, 8.1, 8.6, 8.7, 9.1, 9.5, 9.6, 9.7, 10.1, 10.5, 10.6, 10.7, 11.1, 11.5, 11.6, 11.7, 12.1, 12.5, 12.6, 12.7 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: 6.1, PH.1, PS.1	
Demonstrate workplace safety.	English: 6.4, 7.4, 8.4, 9.5, 10.5, 11.5, 12.5 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: CH.1	
Examining All Aspects of an Industry		
Examine aspects of planning within an industry/organization.	History and Social Science: GOVT.16	
Examine aspects of management within an		

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industry/organization.		
Examine aspects of financial responsibility within an industry/organization.		
Examine technical and production skills required of workers within an industry/organization.		
Examine principles of technology that underlie an industry/organization.		
Examine labor issues related to an industry/organization.	History and Social Science: GOVT.16	
Examine community issues related to an industry/organization.	History and Social Science: GOVT.16	
Examine health, safety, and environmental issues related to an industry/organization.	History and Social Science: GOVT.16	
Addressing Elements of Student Life		

Task	SOL Correlations	HOSA Correlations
Identify the purposes and goals of the student organization.		
Explain the benefits and responsibilities of membership in the student organization as a student and in professional/civic organizations as an adult.		
Demonstrate leadership skills through participation in student organization activities, such as meetings, programs, and projects.		
Identify Internet safety issues and procedures for complying with acceptable use standards.		
Exploring Work-Based Learning		
Identify the types of work-based learning (WBL) opportunities.		

Task	SOL Correlations	HOSA Correlations
Reflect on lessons learned during the WBL experience.		
Explore career opportunities related to the WBL experience.		
Participate in a WBL experience, when appropriate.		
Understanding the U.S. Healthcare System		
Highlight the major developments of healthcare history.	English: 9.5, 9.8, 10.5, 10.8, 11.5, 11.8, 12.5, 12.8 History and Social Science: WG.17, WHI.5, WHII.4, WHII.8, WHII.14 Science: BIO.3	Teamwork Events o HOSA Bowl
Differentiate among the types of health insurance.	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: VUS.8, WHII.8	Teamwork Events o HOSA Bowl
Differentiate among the types of medical care delivery systems.	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: VUS.14, WG.17, WHII.14	Teamwork Events o HOSA Bowl
Describe the roles of healthcare team members.	English: 9.5, 10.5, 11.5, 12.5	Teamwork Events o Health Career Display
Differentiate among the scope and functions of the Virginia Department of Health Professions and the Virginia	English: 9.5, 9.8, 10.5, 10.8, 11.5, 11.8, 12.5, 12.8 History and Social Science: GOVT.8, GOVT.9	

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Department of Health.		
Examine the influence of the Internet on the healthcare industry and on the individual consumer.	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: VUS.14, WG.17, WHII.14	Health Science Events o Knowledge Test: Medical Law and Ethics
Learning Basic Healthcare Terminology		
Identify common medical prefixes, roots, and suffixes and their meanings, and medical terms related to human systems.	English: 9.3, 9.5, 10.3, 10.5, 11.3, 11.5, 12.3, 12.5 History and Social Science: WHI.5, WHI.6, WHII.4	Health Science Events o Medical Spelling o Medical Terminology Teamwork Events o HOSA Bowl
Describe how word parts are combined to form medical terms.	English: 9.3, 9.5, 10.3, 10.5, 11.3, 11.5, 12.3, 12.5 History and Social Science: WHI.5, WHI.6	Health Science Events o Medical Spelling o Medical Terminology Teamwork Events o HOSA Bowl
Interpret common abbreviations used in the healthcare field.	English: 9.3, 9.5 History and Social Science: WHI.5, WHI.6	Health Science Events o Medical Spelling o Medical Terminology Teamwork Events o HOSA Bowl
Define terminology that relates to the various elements and systems of the body.	English: 9.3, 9.5, 10.3, 10.5, 11.3, 11.5, 12.3, 12.5 History and Social Science: WHI.15, WHII.2, WHII.4 Science: BIO.4	Health Science Events o Medical Terminology Teamwork Events o HOSA Bowl
Understanding Anatomy and Physiology		

Task	SOL Correlations	HOSA Correlations
Identify basic anatomical structure and body cavities.	History and Social Science: WHI.15, WHII.2, WHII.4 Science: BIO.4	Health Science Events o Medical Terminology Teamwork Events o HOSA Bowl
Identify chemical components of the body.	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: WHII.4 Science: BIO.2	Health Science Events o Knowledge Test: Pathophysiology Health Professions Events o Biomedical Laboratory Science o Clinical Nursing
Identify the structures and functions of the cell.	History and Social Science: WHII.4 Science: BIO.3	Health Science Events o Knowledge Test: Pathophysiology Health Professions Events o Clinical Nursing o Nursing Assisting Teamwork Events o HOSA Bowl
Identify the structures and functions of tissues.	History and Social Science: WHI.15, WHII.2, WHII.4	Health Science Events o Knowledge Test: Pathophysiology Health Professions Events o Clinical Nursing o Nursing Assisting Teamwork Events o HOSA Bowl
Identify the structures, functions, and diseases of the integumentary system.	English: 9.5, 10.5, 11.5, 12.5 Science: BIO.4	Health Science Events o Knowledge Test: Pathophysiology Health Professions Events o Clinical Nursing

Task	SOL Correlations	HOSA Correlations
		<ul style="list-style-type: none"> o Home Health Aide o Nursing Assisting Teamwork Events o HOSA Bowl
Identify the structures, functions, and diseases of the skeletal system.	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: WHI.15, WHII.2, WHII.4 Science: BIO.4	Health Science Events <ul style="list-style-type: none"> o Knowledge Test: Pathophysiology Health Professions Events <ul style="list-style-type: none"> o Clinical Nursing o Home Health Aide o Nursing Assisting Teamwork Events <ul style="list-style-type: none"> o HOSA Bowl
Identify the structures, functions, and diseases of the muscular system.	English: 9.5, 10.5, 11.5 History and Social Science: WHI.15, WHII.2, WHII.4 Science: BIO.4	Health Science Events <ul style="list-style-type: none"> o Knowledge Test: Pathophysiology Health Professions Events <ul style="list-style-type: none"> o Clinical Nursing o Nursing Assisting Teamwork Events <ul style="list-style-type: none"> o HOSA Bowl
Identify the structures, functions, and diseases of blood.	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: WHII.4 Science: BIO.4	Health Science Events <ul style="list-style-type: none"> o Knowledge Test: Pathophysiology Health Professions Events <ul style="list-style-type: none"> o Biomedical Laboratory Science o Clinical Nursing o Home Health Aide o Nursing Assisting Teamwork Events <ul style="list-style-type: none"> o HOSA Bowl

Task	SOL Correlations	HOSA Correlations
Identify the structures, functions, and diseases of the heart.	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: WHII.4 Science: BIO.4	Health Science Events o Knowledge Test: Pathophysiology Health Professions Events o Clinical Nursing o Home Health Aide o Nursing Assisting Teamwork Events o HOSA Bowl
Identify the structures, functions, and diseases of blood vessels and blood circulation.	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: WHII.4 Science: BIO.4	Health Science Events o Knowledge Test: Pathophysiology Health Professions Events o Clinical Nursing o Home Health Aide o Nursing Assisting Teamwork Events o HOSA Bowl
Identify the structures, functions, and diseases of the lymphatic system.	English: 9.5, 10.5, 11.5, 12.5 Science: BIO.4	Health Science Events o Knowledge Test: Pathophysiology Health Professions Events o Clinical Nursing o Home Health Aide o Nursing Assisting Teamwork Events o HOSA Bowl
Explain immunity and its relationship with the lymphatic system.	English: 9.5, 10.5, 11.5, 12.5 Science: BIO.4	Health Science Events o Knowledge Test: Pathophysiology Health Professions Events o Clinical Nursing

Task	SOL Correlations	HOSA Correlations
		Teamwork Events o HOSA Bowl
Identify the structures, functions, and diseases of the respiratory system.	English: 9.5, 10.5, 11.5, 12.5 Science: BIO.4	Health Science Events o Knowledge Test: Pathophysiology Health Professions Events o Clinical Nursing o Home Health Aide o Nursing Assisting Teamwork Events o HOSA Bowl
Identify the structures, functions, and diseases of the gastrointestinal system.	English: 9.5, 10.5, 11.5, 12.5 Science: BIO.4	Health Science Events o Knowledge Test: Pathophysiology o Knowledge Test: Nutrition Health Professions Events o Clinical Nursing o Home Health Aide o Nursing Assisting Teamwork Events o HOSA Bowl
Identify the structures, functions, and diseases of the endocrine system.	English: 9.5, 10.5, 11.5, 12.5 Science: BIO.4	Health Science Events o Knowledge Test: Pathophysiology Health Professions Events o Clinical Nursing o Nursing Assisting Teamwork Events o HOSA Bowl
Identify the structures, functions,	English: 9.5, 10.5, 11.5, 12.5 Science: BIO.4	Health Science Events

Task	SOL Correlations	HOSA Correlations
and diseases of the reproductive system.		<ul style="list-style-type: none"> o Knowledge Test: Pathophysiology Health Professions Events o Clinical Nursing o Nursing Assisting Teamwork Events o HOSA Bowl
Identify the structures, functions and diseases of the nervous system.	English: 9.5, 10.5, 11.5, 12.5 Science: BIO.4	Health Science Events <ul style="list-style-type: none"> o Knowledge Test: Pathophysiology Health Professions Events o Clinical Nursing o Home Health Aide o Nursing Assisting Teamwork Events o HOSA Bowl
Identify the structures, functions and diseases of the urinary system.	English: 9.5, 10.5, 11.5, 12.5 Science: BIO.4	Health Science Events <ul style="list-style-type: none"> o Knowledge Test: Pathophysiology Health Professions Events o Clinical Nursing o Home Health Aide o Nursing Assisting Teamwork Events o HOSA Bowl
Identify the structures, functions, and diseases of the sensory system.	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: WHIIL.4 Science: BIO.4	Health Science Events <ul style="list-style-type: none"> o Knowledge Test: Pathophysiology Health Professions Events o Clinical Nursing o Home Health Aide o Nursing Assisting

Task	SOL Correlations	HOSA Correlations
		Teamwork Events o HOSA Bowl
Performing Medical Laboratory Procedures		
Describe specimen preparation and handling.	English: 9.5, 10.5, 11.5, 12.5 Science: BIO.1	Health Professions Events o Biomedical Laboratory Science o Medical Assisting o Nursing Assisting
Identify the diagnoses, laboratory tests, and procedures used in the treatment for the diseases/disorders of each body system.	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: WHII.4	Health Professions Events o Biomedical Laboratory Science o Clinical Nursing o Medical Assisting
Examine body fluids and cells for bacteria, parasites, and other microorganisms.	History and Social Science: WHII.4	Health Professions Events o Biomedical Laboratory Science o Medical Assisting
Analyze the chemical content of fluids and tissues.	History and Social Science: WHII.4	Health Professions Events o Biomedical Laboratory Science o Medical Assisting
Examine cells to determine the quantity of and/or to look for abnormal cells in blood and other body fluids and tissues.	History and Social Science: WHII.4	Health Professions Events o Biomedical Laboratory Science o Medical Assisting

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Assess lab findings, using automated equipment and computerized instruments.	History and Social Science: VUS.14, WG.17, WHII.4, WHII.14	Health Professions Events o Clinical Nursing
Document the results of laboratory findings.	English: 9.6, 10.6, 11.6, 12.6	Health Professions Events o Biomedical Laboratory Science o Medical Assisting
Report lab results to physicians.	English: 9.6, 9.8, 10.6, 10.8, 11.6, 11.8, 12.6, 12.8	Health Professions Events o Biomedical Laboratory Science o Medical Assisting
Understanding the Role of Nutrition in Health Care		
Identify the six essential nutrients, sources, and functions for optimal health and wellness.	English: 10.3, 10.5, 11.3, 11.5, 12.3, 12.5 Science: BIO.2	Health Science Events o Knowledge Test: Nutrition
Describe the digestion and metabolism of food.	English: 10.5, 11.5, 12.5 Science: BIO.4	Health Science Events o Knowledge Test: Nutrition
Describe dietary guidelines recommended for health promotion.	English: 10.5, 11.5, 12.5	Health Science Events o Knowledge Test: Nutrition
Identify the principles of food management and safety.	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: VUS.8, VUS.14	Health Science Events o Knowledge Test: Nutrition

Task	SOL Correlations	HOSA Correlations
Explain basic dietary management techniques.	English: 9.5, 10.5, 11.5, 12.5	Health Science Events o Knowledge Test: Nutrition
Identify common medical conditions related to poor nutrition.	English: 9.5, 10.5, 11.5, 12.5	Health Science Events o Knowledge Test: Behavioral Health o Knowledge Test: Nutrition
Identify dietary patterns.	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: WHII.15	Health Science Events o Knowledge Test: Nutrition o Knowledge Test: Transcultural Health Care
Exploring Pharmacology Fundamentals		
Identify general principles of pharmacology.	English: 9.5, 10.5, 11.5, 12.5	Health Science Events o Knowledge Test: Pharmacology Health Professions Events o Clinical Nursing o Pharmacy Science
Describe sources, types, and uses of common drugs.	English: 9.5, 10.5, 11.5, 12.5	Health Science Events o Knowledge Test: Pharmacology Health Professions Events o Clinical Nursing o Pharmacy Science
Explain the naming processes for drugs.	English: 9.5, 10.5, 11.5, 12.5	Health Science Events o Knowledge Test: Pharmacology Health Professions Events

Task	SOL Correlations	HOSA Correlations
		<ul style="list-style-type: none"> o Clinical Nursing o Pharmacy Science
Explain the importance of pharmacokinetics.	English: 9.5, 10.5, 11.5, 12.5	Health Science Events <ul style="list-style-type: none"> o Knowledge Test: Pharmacology Health Professions Events <ul style="list-style-type: none"> o Clinical Nursing o Pharmacy Science
Describe the elements of a prescription.	English: 9.5, 10.5, 11.5, 12.5	Health Science Events <ul style="list-style-type: none"> o Knowledge Test: Pharmacology Health Professions Events <ul style="list-style-type: none"> o Pharmacy Science
Explain common abbreviations used on prescriptions.	English: 9.5, 10.5, 11.5, 12.5	Health Science Events <ul style="list-style-type: none"> o Medical Terminology o Knowledge Test: Pharmacology Health Professions Events <ul style="list-style-type: none"> o Pharmacy Science
Calculate doses of medications.	History and Social Science: WHI.4, WHI.9 Mathematics: A.1, A.4	Health Science Events <ul style="list-style-type: none"> o Medical Math Health Professions Events <ul style="list-style-type: none"> o Clinical Nursing
Identify drug administration routes.	English: 9.5, 9.8, 10.5, 10.8, 11.5, 11.8, 12.5, 12.8	Health Science Events <ul style="list-style-type: none"> o Knowledge Test: Pharmacology Health Professions Events <ul style="list-style-type: none"> o Clinical Nursing o Pharmacy Science
Explain the importance of drugs	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: VUS.8, WHII.4, WHII.8	Health Science Events <ul style="list-style-type: none"> o Knowledge Test: Pharmacology

Task	SOL Correlations	HOSA Correlations
and supplements in preventive medicine.		Health Professions Events o Clinical Nursing o Pharmacy Science
Explain current state and federal regulations regarding the practice of pharmacy.	English: 9.5, 9.8, 10.5, 10.8, 11.5, 11.8, 12.5, 12.8 History and Social Science: GOVT.7, GOVT.8, VUS.13, VUS.14	Health Science Events o Knowledge Test: Pharmacology Health Professions Events o Pharmacy Science
Understanding Patient Care		
Summarize the approaches to health care for a variety of patient categories.	English: 9.5, 9.8, 10.5, 11.5, 12.5	Teamwork Events o HOSA Bowl
Explain the nature and importance of a medical history.	English: 9.5, 10.5, 11.5, 12.5	Health Professions Events o Clinical Nursing o Medical Assisting o Pharmacy Science Emergency Preparedness Events o Emergency Medical Technician
Examine concepts of care relating to ethnic, religious, cultural, and personal preferences.	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: VUS.13, WHII.15	Health Science Events o Knowledge Test: Transcultural Health Care
Explain the principles of effective communication.	English: 9.5, 10.5, 11.1, 11.5, 12.1, 12.5	Leadership Events o Interviewing Skills o Job-Seeking Skills o Prepared Speaking o Speaking Skills Teamwork Events

Task	SOL Correlations	HOSA Correlations
		<ul style="list-style-type: none"> o Biomedical Debate o Public Service Announcement <p>Emergency Preparedness Events</p> <ul style="list-style-type: none"> o Emergency Medical Technician
Apply principles of communication in establishing therapeutic relationships.	English: 9.1, 10.1, 11.1, 12.1	<p>Health Science Events</p> <ul style="list-style-type: none"> o Knowledge Test: Transcultural Health Care <p>Health Professions Events</p> <ul style="list-style-type: none"> o Clinical Nursing o Medical Assisting o Nursing Assisting <p>Emergency Preparedness Events</p> <ul style="list-style-type: none"> o Emergency Medical Technician
Explain the concept and importance of the Patient's Bill of Rights.	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: GOVT.11	<p>Health Science Events</p> <ul style="list-style-type: none"> o Knowledge Test: Medical Law and Ethics <p>Health Professions Events</p> <ul style="list-style-type: none"> o Clinical Nursing o Nursing Assisting
Explain the function and importance of advance directives for health care.	English: 9.5, 10.5, 11.5, 12.5	<p>Health Science Events</p> <ul style="list-style-type: none"> o Knowledge Test: Medical Law and Ethics <p>Teamwork Events</p> <ul style="list-style-type: none"> o HOSA Bowl
Examine the concepts of death and dying.	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: VUS.13, VUS.14, WG.17, WHIL.14	<p>Health Science Events</p> <ul style="list-style-type: none"> o Knowledge Test: Human Growth and Development

Task	SOL Correlations	HOSA Correlations
		o Knowledge Test: Medical Law and Ethics
Explain the concept of integrated and holistic care.	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: WHI.11, WHII.6	Health Science Events o Knowledge Test: Transcultural Health Care Teamwork Events o HOSA Bowl
Ensuring a Clean and Safe Healthcare Environment		
Explain the concept of infection control and asepsis.	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: WHII.4	Health Professions Events <ul style="list-style-type: none"> • Biomedical Laboratory Science • Clinical Nursing • Clinical Specialty • Dental Science • Home Health Aide • Medical Assisting • Nursing Assisting • Personal Care • Pharmacy Science • Physical Therapy • Sports Medicine • Veterinary Science Emergency Preparedness Events o CERT (Community Emergency Response Team) Skills o Emergency Medical Technician
Explain the chain of infection.	English: 9.3, 9.5, 10.3, 10.5, 11.3, 11.5, 12.3, 12.5 History and Social Science: WHII.4	Health Professions Events o Dental Science o Home Health Aide

Task	SOL Correlations	HOSA Correlations
		<ul style="list-style-type: none"> o Medical Assisting o Nursing Assisting o Personal Care
Demonstrate hand hygiene procedures.		
Explain transmission-based precautions.	English: 9.5, 9.8, 10.5, 10.8, 11.5, 11.8, 12.5, 12.8	<p>Health Professions Events</p> <ul style="list-style-type: none"> • Biomedical Laboratory Science • Clinical Nursing • Medical Assisting • Nursing Assisting • Personal Care • Pharmacy Science • Physical Therapy • Sports Medicine • Veterinary Science <p>Emergency Preparedness Events</p> <ul style="list-style-type: none"> o CERT (Community Emergency Response Team) Skills o CPR/First Aid o Emergency Medical Technician

Task	SOL Correlations	HOSA Correlations
Demonstrate the use of personal protective equipment (PPE) and safe workplace practices.		<p>Health Professions Events</p> <ul style="list-style-type: none"> • Clinical Nursing • Medical Assisting • Nursing Assisting • Personal Care • Pharmacy Science • Physical Therapy • Sports Medicine • Veterinary Science <p>Emergency Preparedness Events</p> <ul style="list-style-type: none"> o CERT (Community Emergency Response Team) Skills o CPR/First Aid o Emergency Medical Technician
Describe policies and procedures for handling and	English: 9.5, 9.8, 10.5, 10.8, 11.5, 11.8, 12.5, 12.8 History and Social Science: WHII.4	<p>Health Professions Events</p> <ul style="list-style-type: none"> • Biomedical Laboratory Science

Task	SOL Correlations	HOSA Correlations
disposing of infectious and/or hazardous materials.		<ul style="list-style-type: none"> • Clinical Nursing • Medical Assisting • Nursing Assisting • Personal Care • Pharmacy Science • Physical Therapy • Sports Medicine • Veterinary Science Emergency Preparedness Events <ul style="list-style-type: none"> o CERT (Community Emergency Response Team) Skills o CPR/First Aid o Emergency Medical Technician
Explain sterile processes.	English: 9.5, 10.5, 11.5, 12.5	Health Professions Events <ul style="list-style-type: none"> o Clinical Nursing o Medical Assisting
Identify the importance of the CDC and Occupational Safety and Health	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: GOVT.9, VUS.14, WG.17, WHII.14 Science: CH.1	Health Professions Events <ul style="list-style-type: none"> o Clinical Nursing o Home Health Aide o Nursing Assisting o Pharmacy Science

Task	SOL Correlations	HOSA Correlations
Administration (OSHA) guidelines.		Teamwork Events o HOSA Bowl
Identify emergency protection areas and devices.	Science: CH.1	Health Professions Events o Clinical Nursing o Nursing Assisting o Pharmacy Science
Explain methods of fire safety.	English: 9.5, 10.5, 11.5, 12.5	Health Professions Events o Nursing Assisting Teamwork Events o HOSA Bowl
Identify environmental hazards.	History and Social Science: VUS.13, VUS.14, WG.17, WHIL.14	Health Professions Events o Home Health Aide o Nursing Assisting Emergency Preparedness Events o CERT (Community Emergency Response Team) Skills o Emergency Medical Technician
Describe the principles of body mechanics.		
Explain radiographic safety.	English: 9.5, 9.8, 10.5, 10.8, 11.5, 11.8, 12.5, 12.8	
Explain the importance of maintaining a safe and clean work environment.	English: 9.5, 10.5, 11.5, 12.5 Science: BIO.1, CH.1	Health Professions Events o Biomedical Laboratory Science o Clinical Nursing o Medical Assisting o Nursing Assisting o Personal Care o Pharmacy Science

Task	SOL Correlations	HOSA Correlations
		<ul style="list-style-type: none"> o Physical Therapy o Sports Medicine o Veterinary Science
Performing Administrative Functions in the Healthcare Profession		
Explain the process and importance of patient identification.	English: 9.5, 10.5, 11.5, 12.5	Health Professions Events <ul style="list-style-type: none"> o Biomedical Laboratory Science o Clinical Nursing o Medical Assisting o Nursing Assisting o Personal Care o Pharmacy Science o Physical Therapy o Sports Medicine Emergency Preparedness Events <ul style="list-style-type: none"> o Emergency Medical Technician
Explain the purpose of medical records.	English: 9.5, 10.5, 11.5, 12.5	Health Science Events <ul style="list-style-type: none"> o Knowledge Test: Medical Law and Ethics
Identify the components of the electronic medical record (EMR).	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: VUS.14, WG.17, WHII.14 Science: BIO.1	
Handling Traumatic and Medical Emergencies		
Explain basic traumatic and medical emergency procedures.	English: 9.5, 10.5, 11.5, 12.5	Health Professions Events <ul style="list-style-type: none"> o Clinical Nursing o Medical Assisting o Nursing Assisting Emergency Preparedness Events

Task	SOL Correlations	HOSA Correlations
		<ul style="list-style-type: none"> o CERT (Community Emergency Response Team) Skills o CPR/First Aid o Emergency Medical Technician
Identify the essential components of disaster planning.	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: VUS.14, WHII.14	Emergency Preparedness Events <ul style="list-style-type: none"> o CERT (Community Emergency Response Team) Skills
Identify items found in a basic emergency kit.	English: 9.5, 10.5, 11.5, 12.5	Emergency Preparedness Events <ul style="list-style-type: none"> o CERT (Community Emergency Response Team) Skills o Emergency Medical Technician
Describe the causes, symptoms, and treatments of selected medical emergencies.	English: 9.5, 10.5, 11.5, 12.5	Health Professions Events <ul style="list-style-type: none"> o Clinical Nursing o Nursing Assisting Emergency Preparedness Events <ul style="list-style-type: none"> o CERT (Community Emergency Response Team) Skills o Emergency Medical Technician
Demonstrate CPR with the AED.		Emergency Preparedness Events <ul style="list-style-type: none"> o CPR/First Aid o Emergency Medical Technician

Task	SOL Correlations	HOSA Correlations
Exploring Biotechnology Concepts		
Explain the concept of biotechnology.	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: VUS.14, WG.17, WHII.14 Science: BIO.1, BIO.5	Health Professions Events o Biomedical Laboratory Science
Identify the effects of innovations in biotechnology.	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: VUS.14, WG.17, WHII.14 Science: BIO.1, BIO.5	Health Professions Events o Biomedical Laboratory Science
Describe the effects of biotechnology on preventive health care.	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: VUS.13, VUS.14, WG.17, WHII.14 Science: BIO.1, BIO.5	Health Professions Events o Biomedical Laboratory Science
Describe the role biotechnology plays in medical forensics.	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: VUS.13, VUS.14, WG.17, WHII.14 Science: BIO.1, BIO.5	Health Professions Events o Biomedical Laboratory Science
Examining Professionalism in the Healthcare Industry		
Identify professional agencies and organizations in the healthcare field and the roles of each.	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: GOVT.9, VUS.13, VUS.14	Health Professions Events o Pharmacy Science Teamwork Events o HOSA Bowl
Examine the legal issues related to the health and medical science profession.	English: 9.5, 9.8, 10.5, 10.8, 11.5, 11.8, 12.5, 12.8 History and Social Science: VUS.14, WHII.14	Health Science Events o Knowledge Test: Medical Law and Ethics
Explain confidentiality and its connection to HIPAA.	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: VUS.13, VUS.14	Health Science Events o Knowledge Test: Medical Law and Ethics Teamwork Events o HOSA Bowl

Task	SOL Correlations	HOSA Correlations
Analyze the role of public health in providing health care.	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: VUS.14, WG.17, WHIL.14	
Exploring Healthcare Careers and Employability Skills		
Conduct a self-assessment to determine career interests in the healthcare field.		
Describe the major career fields in health and medical sciences.	English: 9.5, 10.5, 11.5, 12.5 History and Social Science: VUS.14, WG.17, WHIL.14	Leadership Events o Medical Photography Teamwork Events o Health Career Display
Research selected healthcare career(s).	English: 9.8, 10.8, 11.8, 12.8 History and Social Science: VUS.8, WHIL.8	Health Professions Events o Clinical Specialty Leadership Events o Medical Photography Teamwork Events o Health Career Display
Explain the importance of ongoing professional development and methods of attaining ongoing training in the healthcare industry.	English: 9.5, 10.5, 11.5, 12.5	
Describing the Opioid Crisis		
Describe the history and current state of	English: 12.5	Health Science Events o Medical Spelling o Medical Terminology

Task	SOL Correlations	HOSA Correlations
the opioid crisis in the United States.		Teamwork Events <ul style="list-style-type: none"> o Creative Problem Solving o Public Service Announcement
Describe the history and current state of the opioid crisis in Virginia.	English: 12.5, 12.8	Health Science Events <ul style="list-style-type: none"> o Medical Spelling o Medical Terminology Teamwork Events <ul style="list-style-type: none"> o Creative Problem Solving o Public Service Announcement
Define the pharmacological components and common uses of opioids.	English: 12.3, 12.8	Health Science Events <ul style="list-style-type: none"> o Medical Spelling o Medical Terminology o Knowledge Test: Pharmacology Health Professions Events <ul style="list-style-type: none"> o Clinical Nursing
Examining Key Factors of Drug Addiction		
Examine the science of addiction.	English: 12.5	
Explain prevention and early intervention strategies.	English: 12.5, 12.8	
Identify addiction and its behavioral elements, as defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5).	English: 12.5	Health Science Events <ul style="list-style-type: none"> o Knowledge Test: Behavioral Health <ul style="list-style-type: none"> o Knowledge Test: Medical Law and Ethics Health Professions Events <ul style="list-style-type: none"> o Clinical Nursing

Task	SOL Correlations	HOSA Correlations
Describe the treatment models of addiction therapy.	English: 12.5	Health Science Events o Knowledge Test: Behavioral Health o Knowledge Test: Medical Law and Ethics Health Professions Events o Clinical Nursing
Describe the medication management antidote used to prevent fatal opioid overdoses.	English: 12.5, 12.8	Health Science Events o Medical Spelling o Medical Terminology o Knowledge Test: Pharmacology
Understanding Pain Management Protocols		
Explain the science of physiological and mental pain.	English: 12.3, 12.5	Health Science Events o Knowledge Test: Nutrition o Knowledge Test: Transcultural Health Care Teamwork Events o Community Awareness o Creative Problem Solving o HOSA Bowl
Describe the diagnostic tools used in developing pain management plans.	English: 12.5	Health Science Events o Knowledge Test: Nutrition o Knowledge Test: Transcultural Health Care Teamwork Events o Community Awareness o Creative Problem Solving o HOSA Bowl

Task	SOL Correlations	HOSA Correlations
Describe pain treatment options available to various populations of patients.	English: 12.5, 12.8	Health Science Events o Knowledge Test: Nutrition o Knowledge Test: Transcultural Health Care Teamwork Events o Community Awareness o Creative Problem Solving o HOSA Bowl
Describe the effects of opioid dependency on the human body systems.	English: 12.5	Health Science Events o Medical Spelling o Medical Terminology Teamwork Events o HOSA Bowl
Explain the mechanism and physical effects of opioids on the human body.	English: 12.5	Health Science Events o Medical Spelling o Medical Terminology Teamwork Events o HOSA Bowl
Explain the use of opioids in practice settings, the role of opioids in pain management, and risk factors associated with the use of the medication.	English: 12.5	Health Science Events o Medical Spelling o Medical Terminology o Knowledge Test: Pharmacology Teamwork Events o Creative Problem Solving o HOSA Bowl
Describe the withdrawal and tapering side effects of opioid use.	English: 12.5	Health Science Events o Knowledge Test: Pharmacology Health Professions Events o Clinical Nursing

Task	SOL Correlations	HOSA Correlations
Describe storage and disposal options for opioids.	English: 12.5, 12.8	Health Science Events o Knowledge Test: Pharmacology Health Professions Events o Clinical Nursing
Explain community resources for education about opioid use.	English: 12.5	Health Science Events o Knowledge Test: Pharmacology Health Professions Events o Clinical Nursing
Working with Patients and Caregivers		
Describe key communication topics involving opioids for patients.	English: 12.5	Health Science Events o Medical Spelling o Medical Terminology Health Professions Events o Clinical Nursing
Describe communication topics for caregivers and family members.	English: 12.5	Health Science Events o Medical Spelling o Medical Terminology Health Professions Events o Clinical Nursing