

HEALTH KNOWLEDGE BOWL



PURPOSE

To test the knowledge of a team of contestants preparing for employment in the health occupations field and to recognize outstanding students for excellence and professionalism.

First, refer to General Regulations, Page 9.

CLOTHING REQUIREMENT

For men: Official blazer, jacket or sweater; black dress slacks; white dress shirt; plain black tie with no pattern or SkillsUSA black tie; black socks and black shoes.

For women: Official blazer, jacket or sweater; black dress slacks or knee-length skirt with businesslike white, collarless blouse or white blouse with small, plain collar that may not extend onto the lapels of the blazer; black sheer or skin-tone seamless hose and black dress shoes.

These regulations refer to clothing items that are pictured and described at:

www.skillsusastore.org. If you have questions about clothing or other logo items, call 800-401-1560 or 703-956-3723.

Note: Contestants must wear their official contest clothing to the contest orientation meeting.

ELIGIBILITY

Open to a team of four SkillsUSA members enrolled in a program with a health career as the occupational objective.

EQUIPMENT AND MATERIALS

1. Supplied by the technical committee:
 - a. A number of sample questions are available for purchase as “contest singles” at: www.skillsusa.org/store/singles.html. These questions and answers are designed to give you examples of the types of questions that

will be developed for the actual contest, not as a study guide.

2. Supplied by the team:
 - a. 60 sheets of 8½"x11" white blank paper
 - b. 8½"x11" blank colored paper for use as scrap paper
 - c. Pens, pencils and black marking pens (four to six of each)
 - d. All competitors must create a one-page résumé and submit a hard copy to the technical committee chair at orientation. Failure to do so will result in a 10-point penalty.
 - e. One basic or scientific calculator. No graphing calculators are allowed. Cell phones or media players may not be used as calculators.

Note: Your contest may also require a hard copy of your résumé as part of the actual contest. Check the Contest Guidelines and/or the updates page on the SkillsUSA website: www.skillsusa.org/compete/updates.shtml

Note: No notes or reference materials of any kind will be permitted in the contest room.

Observer Rule

There will be no spectators allowed in the contest room.

SCOPE OF THE CONTEST

Core standards from the National Health Care Core Skill Standards Project make up the categories from which questions are developed for the Health Knowledge Bowl contest.

Knowledge Performance

A written knowledge test will be administered during the contestant briefing. This test will be completed as a team. The score from the written test will not be announced but will be added to the final total score. Content for the written exam is based upon the standards identified by the National Health Care Core Skill Standards Project.

Skill Performance

Teams will demonstrate communication skills, teamwork, problem-solving and time-management skills by determining and presenting the answer to each question

presented during the quiz bowl portion of the contest.

Contest Guidelines

1. General

- a. A state may enter one high school team and one college/postsecondary team comprised of four registered members each. The team may perform with three members without penalty in the event a member fails to show up or is forced to withdraw within five days of the competition.
- b. The contest will be four quarters consisting of 16 questions per quarter.
- c. A break will be announced at the end of the second quarter. At no time will a contestant be allowed to talk with an advisor or spectator during the contest.
- d. Contestants will discard all paper before leaving the contest area.
- e. Mobile devices, cell phones, recording devices, or other items deemed hazardous to the integrity of the contest are grounds for disqualification.

2. Scoring

- a. Each team will begin each quarter with 0 points.
- b. A team may choose to answer the question or not answer the question.
- c. If the team does not answer the question (signified by remaining seated) it will neither gain nor lose points.
- d. If a team chooses to answer and is correct, it will be awarded 1 point. If a team chooses to answer and is incorrect, 1 point will be deducted.
- e. The judges will make the scores visible to all teams before the start of each quarter.
- f. Contestants may use calculators to assist with medical math questions.
- g. Score discrepancies must be addressed by the team captain prior to the next question.
- h. A written test will be administered during the contestant briefing. This test will be completed as a team. The score from the written test will not be announced but will be added to the final total score.

- i. The winning team is that team which has accumulated the highest total points (total score plus written test score, less clothing penalties).
- j. In the event of a tie, the tie will be broken as follows:
 1. First tiebreaker: The team with the highest written test score.
 2. Second tiebreaker: The compiled score of team members on the Professional Development Program (PDP) test.

3. Marking Answers

- a. The answer will be written on a sheet of paper. It must be written legibly and large enough to be seen by the floor judge.
- b. Any team member may write the answer. He/she must complete writing the answer and then stand before time is called. No team member may stand before the writer has completed the answer.
- c. If a team member is not standing prior to the end of the allotted time, the team will forfeit its chance to answer the question.
- d. The question will be read once and visually displayed. The team will have 30 seconds after the question has been read to determine and write the answer. A five-second warning will be given before time is up. A team member must be standing with the answer before time is called.
- e. Teams may discuss answers among themselves. Contestants are cautioned to whisper to each other so as to not be overheard by other teams.
- f. Answers must be spelled correctly; spelling errors will be counted as an incorrect response.
- g. The team member will display the answer when directed to do so by the judge. The reader will announce the correct answer. The floor judge will check the team answer. If correct, the scorer will add 1 point to the team's total quarter score. If incorrect, the scorer will subtract 1 point from the team's total quarter score.

4. Judging

- a. The judging team will make all decisions regarding score, correct answers and rule violations. The decision of the judging team will be final and will be announced by the contest chair. Disqualification may result upon repeated rule violations.
- b. A team that wishes to challenge a score or an answer must address the issue with the floor judge before the next question begins. This is signified by the captain standing and raising his or her hand prior to the next question's category being announced.
- c. It is the responsibility of all team members and advisors to know the rules of the contest.
- d. Resource books used to develop the contest questions will be provided for the judges' reference if needed.

Standards and Competencies

Core standards from the National Health Care Core Skill Standards comprise the categories from which the questions will be developed for the Health Knowledge Bowl contest.

BOWL 1.0 — Answer questions from the academic foundations outlined by the National Health Care Core Skill Standards (NHCCSS) Project

- 1.1 Apply knowledge of human structure and function, diseases and disorders, growth and development, vital signs, nutrition and therapeutic diets, medical terminology and abbreviations, mathematical computations and English language arts to answer questions

BOWL 2.0 — Recall the knowledge of oral and written communication skills to answer questions

- 2.1 Identify the elements of communication skills to answer questions
- 2.2 Demonstrate effective written communication skills
- 2.3 Identify concepts of active listening
- 2.4 Identify concepts of verbal and nonverbal communication
- 2.5 Demonstrate knowledge of interviewing skills
- 2.6 Identify barriers to communication

BOWL 3.0 — Use knowledge gained from reading the "Health" section of *USA Today* concerning current events affecting health care to answer questions regarding systems theory and health care delivery systems

- 3.1 Describe systems theory and its components
- 3.2 Predict where and how factors such as cost, managed care, technology, an aging population, patient access to care, alternative therapies and lifestyle/behavior changes may affect various health care delivery system models
- 3.3 Compare and contrast elements of the different health care delivery systems
- 3.4 Explain the results of the health care delivery system
- 3.5 Discuss the evolution of the health care delivery system

BOWL 4.0 — Employ knowledge of key employability skills as they relate to the health care industry

- 4.1 List and explain key employability skills using examples such as dynamics of change, personal qualities, problem-solving and critical-thinking skills.
- 4.2 Identify elements of successful interpersonal communications such as communication strategies, listening behaviors, written communication and nomenclature.
- 4.3 Recall stages and elements of personal growth and development.
- 4.4 Explain the career decision-making process as it applies to health care

BOWL 5.0 — Know the legal responsibilities, limitations and the implications of employee actions within the health care delivery setting

- 5.1 Compare and contrast behaviors and practices that could result in malpractice, liability and negligence
- 5.2 Identify concepts of legal practice such as Patient's Bill of Rights, informed consent, scope of practice and standards of workplace safety (Occupational Safety and Health Administration/OSHA and Centers for Disease Control/CDC)
- 5.3 Explain the importance of maintaining client confidentiality
- 5.4 Describe legal requirements for documentation

BOWL 6.0 — Understand accepted ethical practices

- 6.1 Describe morality and ethics and the relationship of each to health care outcomes
- 6.2 Explain the difference between ethical and legal issues impacting health care
- 6.3 Demonstrate the knowledge of ethical practice such as professionalism, interdisciplinary roles, incident reporting, abuse and Patient's Bill of Rights
- 6.4 Demonstrate knowledge of providing care to patients from diverse religious and ethnic backgrounds
- 6.5 Analyze legal and ethical aspects of confidentiality

BOWL 7.0 — Describe how to implement safety practices to prevent injury or illness

- 7.1 Explain standard precautions as described in the rules and regulations set forth by OSHA to control the spread of infection
- 7.2 Discuss the principles of body mechanics and ergonomics and how they relate to personal safety in the health care industry
- 7.3 Describe methods of environmental safety as they apply to the health care industry
- 7.4 Explain common safety hazards and methods of managing them
- 7.5 Explain common emergency procedures and protocols

BOWL 8.0 — Understand the roles and responsibilities of health care teams and how teamwork affects the ability to provide quality health care

- 8.1 Characterize the elements of effective teams
- 8.2 Contrast the elements of effective health care teams to those of ineffective teams
- 8.3 Explain the value of team member participation such as inclusiveness, collaboration, conflict resolution, commitment and team identity

BOWL 9.0 — Know the fundamentals of wellness and prevention of disease processes

- 9.1 Describe alternative and complimentary health practices
- 9.2 Describe the practices that promote the prevention of injury and diseases

Committee Identified Academic Skills

The technical committee has identified that the following academic skills are embedded in this contest.

Math Skills

- Use fractions to solve practical problems
- Use proportions and ratios to solve practical problems
- Solve practical problems involving percents
- Solve problems using proportions, formulas and functions

Science Skills

- Use knowledge of patterns of cellular organization (cells, tissues, organs, systems)
- Describe the basic needs of organisms
- Use knowledge of chemical properties (acidity, basicity, combustibility, reactivity)
- Describe and use the Periodic Table—symbols, atomic number, atomic mass, chemical families (groups) and periods
- Human anatomy
- Human physiology
- Human path psychology (disease)
- Human growth and development
- Nutritional concepts
- Vital signs concepts

Language Arts Skills

- Provide information in conversations and in group discussions
- Provide information in oral presentations
- Demonstrate the use of verbal communication skills: word choice, pitch, feeling, tone and voice
- Edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure and paragraphing

Connections to National Standards

State-level academic curriculum specialists identified the following connections to national academic standards.

Math Standards

- Numbers and operations
- Measurement
- Communication
- Connections
- Representation

Source: NCTM Principles and Standards for School Mathematics. To view high school standards, visit: standards.nctm.org/document/chapter7/index.htm. Select “Standards” from menu.

Science Standards

- Understands the principles of heredity and related concepts
- Understands the structure and function of cells and organisms
- Understands relationships among organisms and their physical environment
- Understands biological evolution and the diversity of life
- Understands the structure and properties of matter
- Understands the sources and properties of energy
- Understands the nature of scientific knowledge

Source: McREL compendium of national science standards. To view and search the compendium, visit: www.mcrel.org/standards-benchmarks.

Language Arts Standards

- Students read a wide range of print and nonprint texts to build an understanding of texts, of themselves and of the cultures of the United States and the world; to acquire new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment. Among these texts are fiction and nonfiction, classic and contemporary works
- Students apply a wide range of strategies to comprehend, interpret, evaluate and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies, and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, graphics)
- Students adjust their use of spoken, written and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes
- Students employ a wide range of strategies as they write and use different writing

process elements appropriately to communicate with different audiences for a variety of purposes

- Students apply knowledge of language structure, language conventions (e.g., spelling and punctuation), media techniques, figurative language and genre to create, critique and discuss print and nonprint texts
- Students conduct research on issues and interests by generating ideas and questions, and by posing problems. They gather, evaluate and synthesize data from a variety of sources (e.g., print and nonprint texts, artifacts, people) to communicate their discoveries in ways that suit their purpose and audience
- Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge
- Students participate as knowledgeable, reflective, creative and critical members of a variety of literacy communities
- Students use spoken, written and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion and the exchange of information)

Source: IRA/NCTE Standards for the English Language Arts. To view the standards, visit: www.ncte.org/standards.