

California
Subject
Examinations for
Teachers®

TEST GUIDE

HEALTH SCIENCE SUBTEST III

Sample Questions and Responses and Scoring Information

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Sample Test Questions for CSET: Health Science Subtest III

Below is a set of multiple-choice questions and a constructed-response question that are similar to the questions you will see on Subtest III of CSET: Health Science. You are encouraged to respond to the questions without looking at the responses provided in the next section. Record your responses on a sheet of paper and compare them with the provided responses.

- 1. Ten-year-old Alicia's parents are unable to take care of her, and Alicia now lives with her mother's sister, her husband, and their daughter Carmen. Alicia's current family unit would best be described as:
 - A. a blended family.
 - B. a nuclear family.
 - C. a foster family.
 - D. an extended family.
- 2. Which of the following approaches to parenting is most likely to promote healthy family relationships between parents and adolescents?
 - A. Parental expectations are clearly stated and nonnegotiable.
 - B. Differences in parental standards of discipline are acknowledged.
 - C. Annoying behaviors are not criticized out of respect for others.
 - D. Discussions of differences of opinion are encouraged.

- 3. Two young adults have been dating for several months. Which of the following would best indicate the level of intimacy of their relationship?
 - A. the degree to which they honestly exchange their hopes and feelings
 - B. the level of physical attraction and passion in their relationship
 - C. the extent to which their relationship is exclusive to one another
 - D. the extent to which they have made plans for a future together
- 4. Active listening and paraphrasing the speaker are communication techniques that are especially useful for someone who is trying to:
 - A. be assertive.
 - B. resolve a conflict.
 - C. express frustration.
 - D. show empathy.

- 5. Which of the following changes occurs first in males during puberty?
 - A. deepening of the voice
 - B. increase in size of the testes
 - C. widening of the shoulders
 - D. appearance of facial hair
- 6. Which of the following is the most important reason for immunization against rubella?
 - A. An elderly adult who contracted rubella as a child is at risk for developing a painful and debilitating case of shingles.
 - B. An infant who contracts rubella is at risk of permanent paralysis that results from nervous and muscular degeneration in the arms and legs.
 - C. A person who contracts rubella is at risk for developing a case of meningitis or encephalitis that can lead to death.
 - D. A pregnant woman who contracts rubella during the first trimester is at risk of giving birth to a baby with severe birth defects.

- 7. A patient leaves a hospital with instructions for monitoring blood pressure and administering self-medication through injection. The patient does not feel capable of monitoring blood pressure or of administering an injection. Which of the following health-care workers most commonly provides this service for outpatients?
 - A. visiting nurse
 - B. social worker
 - C. physical therapist
 - D. home health aide
- 8. In an advertisement for an over-the-counter medication, which of the following would be the best indicator of the product's efficacy?
 - A. The product is endorsed by a well-known celebrity.
 - B. The product is distributed by a large pharmaceutical company.
 - C. The product has been marketed for its specified use for over ten years.
 - D. The product has been approved by the Food and Drug Administration.

- 9. A community rehabilitation center would be of most benefit to:
 - A. a person who wants to consult a health-care professional about dietary needs.
 - B. a person who was injured in a car accident and has been unable to return to work.
 - C. a person whose child needs an immunization in order to attend school.
 - D. a person who has developed an infectious disease and has no health insurance.
- 10. Tay-Sachs disease is a genetic disease that is most prevalent in which of the following populations?
 - A. Southeast Asians
 - B. white North Americans
 - C. European Jews
 - D. Central and South Americans

- 11. Which of the following steps should a person take first in administering first aid to a person whose forearm is bleeding from a deep, two-inch-long cut?
 - A. Apply an antiseptic to the wound to prevent infection.
 - B. Press on a pressure point to slow blood flow through the artery.
 - C. Apply pressure to the wound, using a protective barrier.
 - D. Raise the arm over the person's head.
- 12. Which of the following is most important in the development of an effective school emergency preparedness plan?
 - A. The plan should focus on ensuring quick and efficient intervention by appropriate local, municipal, or state authorities.
 - B. Implementation of each of the plan's emergency procedures should require approval through a clearly specified chain of command.
 - C. The plan should specify appropriate short- and long-term responses by school personnel to anticipated emergencies.
 - D. The plan should designate one person in the school as having the authority to implement the plan in the event of an emergency.

- 13. Which of the following is a potential source of lead poisoning that is often found in older dwellings?
 - A. paint that was used on the walls and woodwork
 - B. frayed wiring and broken electrical switches
 - C. corroded linings of heating and cooling ductwork
 - D. insulation that was retroactively installed in the walls
- 14. Reducing high levels of nitrites and nitrates in drinking water can best be accomplished by controlling which of the following sources of pollution?
 - A. agricultural runoff from fields and feedlots
 - B. wastewater from heavy industry
 - C. treated wastewater from municipal sewage-treatment plants
 - D. septic systems of private homes

- 15. Which of the following U.S. government agencies is responsible for setting and enforcing standards related to workplace environments?
 - A. National Labor Relations Board
 - B. Occupational Safety and Health Administration
 - C. National Institutes of Health
 - D. Centers for Disease Control and Prevention

Constructed-Response Assignment Directions

For each constructed-response assignment in this section, you are to prepare a written response of approximately, but not limited to, 75–125 words on the assigned topic.

Read each assignment carefully before you begin to write. Think about how you will organize what you plan to write.

Your responses will be evaluated based on the following criteria.

PURPOSE: the extent to which the response addresses the constructed-response assignment's charge in relation to relevant CSET subject matter requirements

SUBJECT MATTER KNOWLEDGE: the application of accurate subject matter knowledge as described in the relevant CSET subject matter requirements

SUPPORT: the appropriateness and quality of the supporting evidence in relation to relevant CSET subject matter requirements

The assignments are intended to assess subject matter knowledge and skills, not writing ability. Your responses, however, must be communicated clearly enough to permit a valid judgment of your knowledge and skills. Your responses should be written for an audience of educators in the field.

Your responses should be your original work, written in your own words, and not copied or paraphrased from some other work. You may not use any reference materials during the testing session. Remember to review your work and make any changes you think will improve your responses.

16. Use the information below to complete the exercise that follows.

The following dialogue takes place when Joelle, a 15-year-old high school student, and her mother are eating dinner.

Mother: Joelle, is your academic schedule for spring term the same as it was for the fall?

Joelle: Almost. I've decided to drop piano lessons.

Mother: What? You've got to be kidding. You can't do that!

Joelle: Last week when we were talking about this you said I was old enough to make more of

my own decisions! So I have. I'm tired of the piano and I'm not very good at it anyway.

I'm joining the theater club instead. . . .

Mother: Your options didn't include quitting piano!

Joelle: Ms. Jones the theater club coach says I have real aptitude and should develop it. She said

I'd be almost guaranteed to get a couple of good parts this spring if I audition for them.

Mother: Everyone in my family has musical talent. I can't imagine telling my family that my

daughter can't even play the piano. What an embarrassment!

Joelle: Some good your "talent" has done you. You're just a housewife! I should have known

this would happen. Last month you told me I could decide for myself whether I wanted to go to cousin Nancy's wedding, and then when I didn't go you said I didn't respect my

family!

Mother: No way are you going to spend time with theater people! I know what they're like. I can

see I was wrong about you being ready to make your own decisions. It would be a big

mistake for you to quit piano and I'm not going to allow it to happen!

Using your knowledge of interpersonal and/or family relationships, analyze the situation presented above. Write a response in which you:

• identify three negative elements that characterize the relationship between Joelle and her mother, providing supporting evidence for each element you identify; and

• describe a different approach the mother might take to resolve the conflict with her daughter.

Annotated Responses to Sample Multiple-Choice Questions for CSET: Health Science Subtest III

Family Life and Interpersonal Relationships

- 1. **Correct Response: D.** (SMR Code: 7.1) An extended family refers to any family in which parents and/or children are also living with other relatives, such as grandparents, aunts, uncles, and cousins. Since Alicia is living with her aunt, uncle, and cousin, her family unit is an extended family.
- 2. **Correct Response: D.** (SMR Code: 7.1) The prime development tasks facing adolescents are to become independent of their families and to develop strong identities and values. Adolescents can be expected to develop different opinions from their parents, and a healthy family relationship is maintained by respectfully and openly discussing these differences.
- 3. **Correct Response: A.** (SMR Code: 7.2) Intimacy in relationships demands trust, honesty, sharing, and acceptance on the part of both partners, as well as physical attraction. The ability to share one's deepest feelings and hopes, even if different from one's partner's, indicates a high level of intimacy.
- 4. **Correct Response: B.** (SMR Code: 7.2) Active listening and paraphrasing involve listening with one's whole attention to a speaker and then rephrasing the message back to the speaker to ensure that the message has been correctly heard. This kind of communication is particularly helpful in conflict situations where misunderstandings are likely to occur.
- 5. **Correct Response: B.** (SMR Code: 7.3) In males, the testes begin to increase in size at the first onset of puberty, on average around ages 10–12. Other male sex characteristics such as facial hair, deepening of the voice, and widening of the shoulders usually happen several years later.
- 6. **Correct Response: D.** (SMR Code: 7.3) Rubella, also known as German measles, can cause severe birth defects, including congenital heart defects, in the fetuses of pregnant women who contract the disease. Therefore, women considering pregnancy should ensure that they have been vaccinated prior to conceiving.

Consumer and Community Health

- 7. **Correct Response: A.** (SMR Code: 8.1) Nurses are responsible for providing a range of medical services, including giving injections. A person at home who is unable to administer self-injections would thus contact an agency providing visiting nurses to perform the injection.
- 8. **Correct Response: D.** (SMR Code: 8.1) The U.S. Food and Drug Administration is the national agency responsible for monitoring the safety, proper labeling, and efficacy of both prescription and non-prescription medications. Approval by the Food and Drug Administration guarantees that a product has been tested to be effective for its stated purpose.
- 9. **Correct Response: B.** (SMR Code: 8.2) Community rehabilitation centers provide medical services and physical and occupational therapies for people with injuries or conditions that prevent them from functioning effectively. A person who cannot work because of injuries from a car accident might well benefit from a range of these services.

- 10. **Correct Response: C.** (SMR Code: 8.2) Genetic diseases like Tay-Sachs are carried by certain members within family groups and tend to remain within those family groups. Tay-Sachs disease had its origins in Jewish families from eastern Europe and as a result is most common in the descendants of those families.
- 11. **Correct Response: C.** (SMR Code: 8.3) Direct pressure is an effective way to control bleeding. A person who administers first aid to someone bleeding from a serious wound is likely to come into contact with that person's blood and may be exposed to blood-borne disease unless barriers, such as latex gloves, are used.
- 12. **Correct Response: C.** (SMR Code: 8.3) Effective emergency preparedness plans should include provisions that specify the response by all people in the school, from the principal to the students. All school personnel need to understand their response both to the actual emergency and to any anticipated long-term recovery after the emergency.

Environmental Health

- 13. **Correct Response: A.** (SMR Code: 9.1) Prior to 1978, house paints routinely included lead in the paint formula. Lead poisoning can occur in people who are exposed to this lead in paint peeling from walls and woodwork in older houses.
- 14. **Correct Response: A.** (SMR Code: 9.1) Fertilizers used in agriculture and waste products from dairy, poultry, and other animal industries contain high levels of nitrites and nitrates. To prevent these chemicals from entering drinking water supplies, rain and flood runoff from agricultural and feedlot areas should be controlled.
- 15. **Correct Response: B.** (SMR Code: 9.1) The Occupational Safety and Health Administration (OSHA) is the national agency responsible for ensuring safe and healthy working conditions. OSHA monitors the workplace to ensure that air and other environmental conditions are clean and sanitary and that effective practices exist to protect the short- and long-term health and safety of employees.

Example of a Strong Response to the Sample Constructed-Response Question for CSET: Health Science Subtest III

Family Life and Interpersonal Relationships

Question #16 (Score Point 3 Response)

Both Joelle and her mother are rude and disrespectful. The mother overreacts to Joelle's decision to drop piano and belittles her interest and ability in acting. Joelle demeans her mother's status as a housewife.

The mother is controlling and authoritarian. She does not listen to Joelle or discuss her decisions, but immediately cracks down.

The mother is inconsistent and arbitrary. She says Joelle is old enough to make her own decisions, but when she does, she overrules them.

The mother could listen respectfully to Joelle's reasons for wanting to drop piano lessons and affirm her decision. She could focus on what is best for Joelle, instead of being so concerned about possible embarrassment. She could be more positive and less disparaging.

Scoring Information for CSET: Health Science Subtest III

Responses to the multiple-choice questions are scored electronically. Scores are based on the number of questions answered correctly. There is no penalty for guessing.

There is one constructed-response question in Subtest III of CSET: Health Science. The constructed-response question is designed so that a response can be completed within a short amount of time—approximately 10–15 minutes. Responses to the constructed-response questions are scored by qualified California educators using focused holistic scoring. Scorers will judge the overall effectiveness of your response while focusing on the performance characteristics that have been identified as important for this subtest (see below). Each response will be assigned a score based on an approved scoring scale (see page 11).

Your performance on the subtest will be evaluated against a standard determined by the Commission on Teacher Credentialing based on professional judgments and recommendations of California educators.

Performance Characteristics for CSET: Health Science Subtest III

The following performance characteristics will guide the scoring of responses to the constructed-response question on CSET: Health Science Subtest III.

PURPOSE	The extent to which the response addresses the constructed-response assignment's charge in relation to relevant CSET subject matter requirements.
SUBJECT MATTER KNOWLEDGE	The application of accurate subject matter knowledge as described in the relevant CSET subject matter requirements.
SUPPORT	The appropriateness and quality of the supporting evidence in relation to relevant CSET subject matter requirements.

Scoring Scale for CSET: Health Science Subtest III

Scores will be assigned to each response to the constructed-response question on CSET: Health Science Subtest III according to the following scoring scale.

SCORE POINT	SCORE POINT DESCRIPTION	
3	The "3" response reflects a command of the relevant knowledge and skills as defined in the subject matter requirements for CSET: Health Science.	
	The purpose of the assignment is fully achieved.	
	There is an accurate application of relevant subject matter knowledge.	
	There is appropriate and specific relevant supporting evidence.	
2	The "2" response reflects a general command of the relevant knowledge and skills as defined in the subject matter requirements for CSET: Health Science.	
	The purpose of the assignment is largely achieved.	
	There is a largely accurate application of relevant subject matter knowledge.	
	There is acceptable relevant supporting evidence.	
1	The "1" response reflects a limited or no command of the relevant knowledge and skills as defined in the subject matter requirements for CSET: Health Science.	
	The purpose of the assignment is only partially or not achieved.	
	There is limited or no application of relevant subject matter knowledge.	
	There is little or no relevant supporting evidence.	
U	The "U" (Unscorable) is assigned to a response that is unrelated to the assignment, illegible, primarily in a language other than English, or does not contain a sufficient amount of original work to score.	
В	The "B" (Blank) is assigned to a response that is blank.	