



CSET: Multiple Subjects Ultimate Guide

240 Tutoring, Inc ©

240 Tutoring, Inc ©

CSET, California Subject Examinations for Teachers, and the CSET logo are trademarks in the U.S. and/or other countries of the Commission on Teacher Credentialing and Pearson Education, Inc. or its affiliate(s). This product is not endorsed or approved by CTC or Pearson.

Preparing to take the CSET: Multiple Subjects exam?

Awesome!

We will answer every question you have and tell you exactly what you need to study to pass the Multiple Subjects exam.

Table of Contents

Quick Facts

Subtest I

- Reading, Language, and Literature Overview and Questions
- History and Social Science Overview and Questions

Subtest II: Science & Mathematics

- Science Overview and Questions
- Mathematics Overview and Questions

Subtest III: Physical Education & Human Development & Visual and Performing Arts

- Physical Education Overview and Questions
- Human Development Overview and Questions
- Visual and Performing Arts Overview and Questions

CRQ General Tips

Quick Facts

Overview:

The CSET: Multiple Subjects exam is for individuals wanting to become certified elementary education teachers in California. It assesses your knowledge of English, mathematics, social science, science, visual and performing arts, health, and physical education spanning grades 1 through 6.

Format:

The CSET: Multiple Subjects exam is computer-based and consists of three subtests.

Subtest	Subject	# of Multiple Choice Questions	# of CRQ Questions
Subtest 1:	Reading, Language, & Lit	26	2
	History & Social Science	26	2
Subtest 2:	Mathematics	26	2
	Science	26	2
Subtest 3:	Physical Education	13	1
	Human Development	13	1
	Visual and Performing	13	1

You can take each individual subtest or all three at the same time. If each test is taken separately, three hours is allotted for Subtests I and II and two hours and 15 minutes is allotted for Subtest III. If all three subtests are taken together, five hours is allotted.

Cost:

If each subtest is taken separately the fee is \$99 per subtest. If all three are taken at the same time the fee is \$247.

Scoring:

Each subtest is scored separately. The scores are converted into a scaled score with a range of 100 to 300. Passing requires a score of 220 or higher on each subtest.

Quick Facts

Pass rate:

According to the Annual Report on Passing Rates of Commission-Approved Examinations, in 2020-21 6,558 CSET Multiple Subjects exams were attempted. Out of those 6,558 exams 73% of people passed.

Study time:

There are many different subject areas covered in this exam. It is a good idea to start studying one to three months before the exam. Waiting until the last minute to study is not advised.

What test takers wish they'd known:

- There are computer-based testing tutorials that will be helpful to review before showing up for the exam: http://www.ctcexams.nesinc.com/PageView.aspx?f=HTML_FRAG/GENRB_CBTTutorials.html
- The exam allows you to handwrite or draw responses and scan them at your workstation.
- An on-screen calculator is available for Subtest II.

Information was obtained from the CTC and NES website: <http://www.ctcexams.nesinc.com/Home.aspx>

Subtest I:

Overview & Reading, Language, and Literature

Overview

Subtest I has 52 multiple-choice questions and 4 constructed-response questions.

The first subtest is broken into two domains:

- Reading, Language, and Literature
- History and Social Science

Let's talk about each one.

Reading, Language, and Literature

The Reading, Language, and Literature domain contains 26 multiple-choice questions and 2 constructed-response questions. This domain accounts for 50% of Subtest I.

Let's explore some specific topics within this domain.

Fundamental Components of Human Language

There are five main branches of the study of language (linguistics):

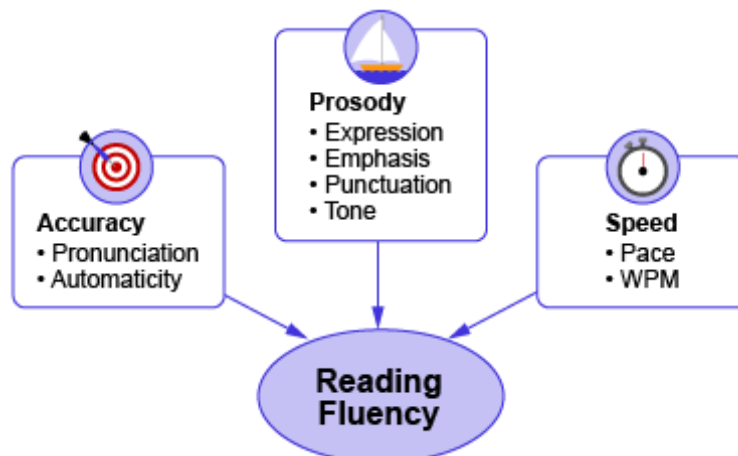
- **Phonology** is the study of sounds and how they are produced. It focuses on how the mouth, tongue, and lips work together to produce each of the sounds. For example, the /p/ sound is an unvoiced sound. It is produced by bringing your lips together and creates the sound when your mouth opens.
- **Morphology** is the study of how words are formed, including the relationship of words and morphemes. A morpheme is the smallest meaningful unit in a word. Prefixes (*re-*, *un-*) and suffixes (*-ly*, *-ful*) are morphemes. For example, look at the words *retie* and *untie*. *Retie* means "tie again" and *untie* means "to free from a constraint" or "to untangle a knot." The prefix changes the meaning of the base word *tie*.
- **Syntax** focuses on word order and subject-verb agreement.
Incorrect: She will come to my soccer game yesterday.
Correct: She came to my soccer game yesterday.
- **Semantics** focuses on the meaning of words and using them correctly in context. For example, the word "ran" has multiple meanings:
I ran for president.
I ran to the gas station.
I ran the dishwasher.

- **Pragmatics** focuses on the unspoken meaning of words and how they are perceived based on tone, context, and presentation. For example, if you told someone to “crack a window,” that might be misconstrued and you might end up angrily looking at a broken window. That statement can be better understood in context. If you were talking about how you were hot and it would help if they would “crack a window,” then the other person would know to open the window and let some air in instead of breaking it.

Measuring Reading Fluency

Fluency is the ability to independently read a text aloud and has three main components: accuracy, speed (rate), and prosody. Sometimes automaticity is included in measuring fluency as well. Teachers measure fluency by administering running records on students. They assign a student a text at their expected level to read aloud and then assess each of the main components to determine the student’s fluency level. Let’s look at what each of those components are:

- **Accuracy** is measuring the errors, or mistakes, in a student’s reading. Fluent readers are going to make very few errors. To be a truly fluent reader, students must accurately pronounce words with **automaticity**, which is the ability to read words effortlessly.
- **Speed** is the rate at which a reader reads. You can determine this by setting a timer and timing how long the reader takes to read the text. You can use measurements of accuracy and speed to determine a student’s words per minute.
- **Prosody** is the reader’s ability to use expression as they read. A fluent reader is able to follow the rhythm of the text; for example, pausing at commas, stopping at punctuation, and putting emphasis on words when needed.



Types of Sentences

There are four types of sentence structures:

- **Simple sentences** contain a subject and a verb and express a complete thought.
Example: The dog ran down the street.
- **Compound sentences** have two independent clauses joined by a coordinating conjunction.
Example: The dog ran down the street, and he chased away the cat.
- **Complex sentences** have one independent clause and one dependent clause joined by a subordinating conjunction.
Example: The dog ran down the street because he was chasing the cat.
- **Compound-complex sentences** have two independent clauses and one dependent clause.
Example: The dog broke through the fence because he was chasing the cat, and the dog's owner ran after them both.

A Three-Part Model for Measuring Text Complexity

Text complexity is the reading level of a text. There are three main components to determining text complexity. Each of these components are equally important.

- **Qualitative measures** focus on the structure and grammar of the text.
- **Quantitative measures** include the word count, word usage, and other features of the text that can be measured.
- **Reader and task considerations** involve evaluating the reader's understanding and background knowledge to determine whether a text is too difficult.

All three of the elements (qualitative, quantitative, and reader/task) should be considered when determining text complexity and appropriateness.

And that's just some very basic information about the Reading, Language, and Literature domain.

Now, let's look at a few practice questions.

Reading Practice Questions

Consider the following passage to answer questions 1-3

1) Whenever travellers penetrate into remote regions where human hunters are unknown, they find the wild things half tame, little afraid of man, and inclined to stare curiously from a distance of a few paces. It takes a long time and much restraint to win back their confidence. This is ideal, a paradise for the naturalist and the camera hunter.

(2) In the early days of the West, when game abounded and when fifty yards was the extreme deadly range of the hunter's weapons, wild creatures were comparatively tame. The advent of the rifle and of the lawless skin hunter soon turned all big game into fugitives of excessive shyness and wariness. One glimpse of a man half a mile off, or a whiff of him on the breeze, was enough to make a Mountain Ram or a Wolf run for miles, though formerly these creatures would have gazed serenely from a point but a hundred yards removed.

(3) The establishment of the Yellowstone Park in 1872 was the beginning of a new era of protection for wildlife; and, by slow degrees, a different attitude in these animals toward us. In this Reservation, and nowhere else at present in the northwest, the wild things are not only abundant, but they have resumed their traditional Garden-of-Eden attitude toward man.

Question 1

Which of the following statements best expresses the central idea of the passage?

- A. Yellowstone National Park should be a model for other parks.
- B. Animals learn to fear humans, but the fear can be reversed over time.
- C. Hunting is bad for animal populations.
- D. It is better to have tame animals.

Correct Answer: B. All paragraphs in the passage relate to this idea. Animals were not afraid of humans until they became more of a threat with the advent of the rifle. Then, when protected from hunting in Yellowstone, the animals eventually became more comfortable with the presence of humans.

Question 2

In the first sentence, the author most likely uses the phrase "penetrate into remote regions" to convey:

- A. blame toward hunters and travelers.
- B. regret for the inevitable.
- C. impatience for change.
- D. frustration with the destruction of natural habitats.

Correct Answer: A. The word “penetrate” has an aggressive connotation and “remote” demonstrates how far a person must travel to find these animals. The author chooses these words to present the travelers and hunters as invaders of the animals’ homes.

Question 3

Which of the following changes would best improve the logical organization of the first paragraph in the passage?

- A. removing the third and fourth sentences
- B. moving sentence one to follow sentence two
- C. moving sentence three to the end of the paragraph
- D. moving the last sentence to follow sentence one

Correct Answer: D. The last sentence would be best following the first sentence since it relates to the conditions described in that sentence.

Question 4

Which is the first phonological awareness skill that students will most likely be able to develop?

- A. taking away the initial phoneme in “ball” to make “all”
- B. showing awareness that the word “ball” sounds like “fall” and “tall”
- C. replacing the “b” sound in “ball” with a “t” sound to make “tall”
- D. breaking down the word “ball” into three separate phonemes

Correct Answer: B. This is a basic phonological awareness skill. Comparing similar sounding words is simpler than manipulating phonemes in words.

Question 5

Since very young children (from birth to four years old) learn oral language through family and friends, the early childhood teacher should first establish a common language among all the students. This can be achieved through which TWO of these strategies?

- A. labeling items throughout the room
- B. creating a “word wall” comprised of words the students supply from prior experience
- C. pointing to words while reading picture books
- D. prioritizing state curriculum words

Correct Answer: A and C

- A. This is an excellent strategy to use with early childhood students in order to help establish a common language among all students. Labeling items allows all students to refer to all items with the same language.
- C. This gives all students the same context clues for language.

Subtest I:

Overview & History and Social Science

Overview

The History and Social Science domain contains 26 multiple-choice questions and 2 constructed-response questions. This domain accounts for 50% of Subtest I.

Let's explore some specific topics within this domain.

History and Social Science

Ancient China

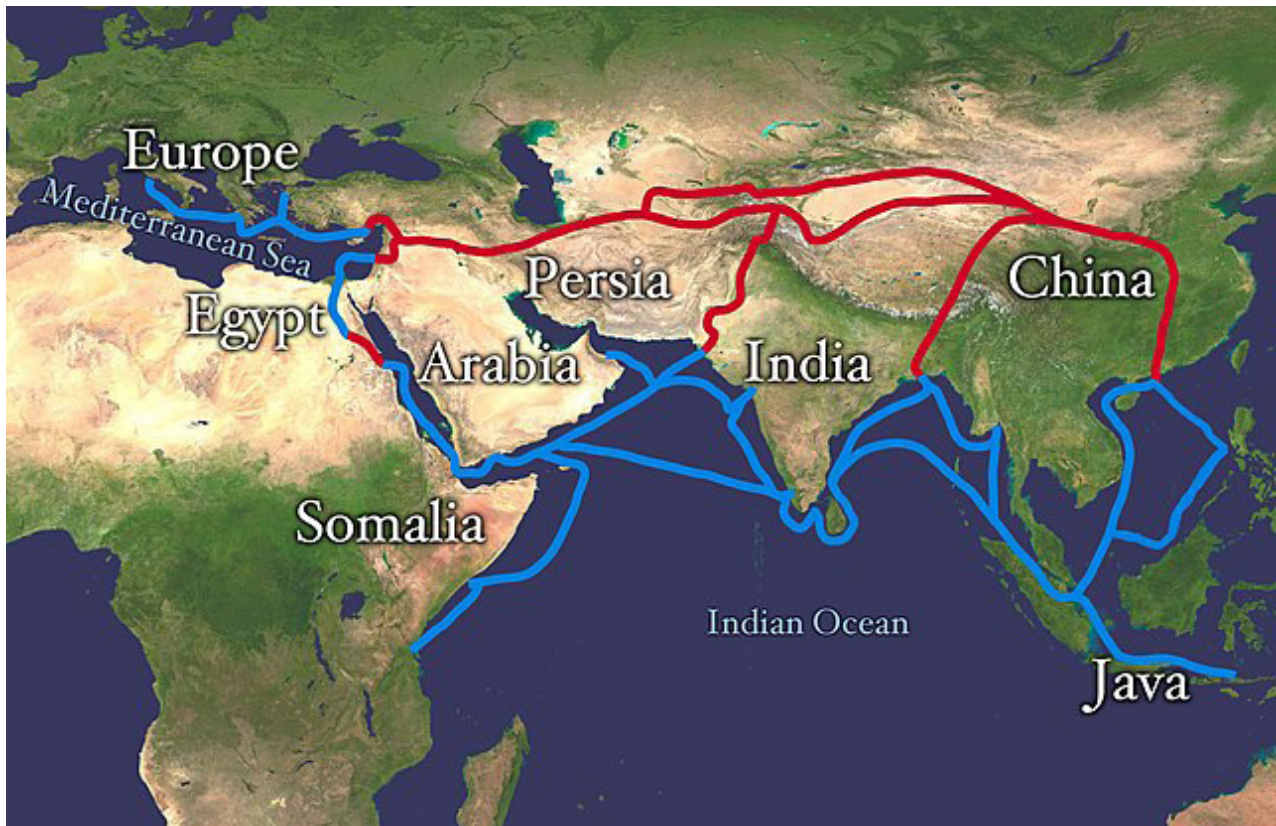


The physical geography of Ancient China, which was surrounded by large deserts, mountains, and the Pacific ocean, allowed for the independent development of its civilization. The Chinese were mostly isolated from other civilizations, except for the Mongols, who lived in the desert to the north and conducted raids into China. The Great Wall of China was built as protection from the Mongols and other invading forces from the north. The natural world was important to the Chinese, and their art and literature is filled with references to the mountains that surrounded them (which they believed to be sacred) and the rivers that were often the source of their livelihood. Let's look at some of Ancient China's contributions to the world:

- paper
- silk
- wheelbarrow
- seismograph
- suspension bridge
- deep drilling
- porcelain
- compass
- fireworks

The Silk Road

The Silk Road was the route used to transport goods between the West and the East. A German geographer named Ferdinand Von Richthofen came up with the name "Silk Road." The route was used to transport and trade items such as silk, porcelain, paper, weapons, armor, and fruit. As a result, travelers along this route also spread their cultures throughout Asia, the Middle East, and southern Europe.



Key Names in the Revolution and Early America

- **King George III** was the King of Great Britain during the American Revolutionary War.
- **Thomas Paine** wrote *Common Sense*, a political pamphlet advocating for people to fight for America's freedom and independence from Great Britain.
- **George Washington** was the first president of the United States and led the Continental Army against Great Britain, and is often referred to as the "father of our country."
- **Thomas Jefferson** was a delegate and the principal author of the Declaration of Independence. He was also the third president of the United States, and his administration was responsible for the Louisiana Purchase, which doubled the size of the country.
- **Benjamin Franklin** served on the Continental Congress and helped draft the Declaration of Independence. He was also a statesman who was responsible for the negotiations of the Treaty of Paris.
- **John Adams** was extremely influential in negotiating the Treaty of Paris, which ended the Revolutionary War. He was the second president of the United States.
- **Alexander Hamilton** was an officer in the Revolutionary War and was the first Secretary of the Treasury. He advocated for a strong federal government.

Consequences of the Mexican-American War for California

The Mexican-American War officially came to an end with the Treaty of Guadalupe Hidalgo. For roughly \$18 million, Mexico settled the border disputes with Texas and ceded most of its northern lands, including Alta California, to the United States. For the first time, the people of California had a stable government but it was still being led by a military government. This status was unfavorable to both the citizens of the state and the military, who were more used to occupied conquered territory than running a government.

Since the situation was not sustainable, Californios began organizing California with the hopes of ending military rule. Towns, cities, and counties were drawn up, a state government was elected and a Constitutional convention was called to formalize the rights and responsibilities of the people of California. Just as this new government was getting underway, Congress passed the Compromise of 1850, a provision of which admitted California to the Union as the 31st State. California entered the Union as a free state without a balancing slave state. This upset the balance of free states and slave states, accelerating the national divide that led to the Civil War.

And that's just some very basic information about the History and Social Science domain.

Now, let's look at a few practice questions.

History and Social Science Practice Questions

Question 1

In what way did the Silk Road play a role in ending the Dark Ages and hastening the Renaissance?

- A. It increased the exchange of both goods and ideas between regions.
- B. It significantly improved access to medical care.
- C. It brought about greater exposure to previously unknown civilizations.
- D. It enriched China's ruling class.

Correct Answer: A. The Silk Road both allowed for trade between China and Europe but also reopened trade between Europe and the Muslim empires, which had preserved the cultural heritage of the ancient world. The scientific and artistic advancements of ancient civilizations began to pour back into Europe, making the Renaissance possible.

Question 2

Which of the following was not an outcome of the Mexican-American War?

- A. California was admitted to the Union in 1850.
- B. Slavery was outlawed in California.
- C. The Bear Flag Republic established official borders within California.
- D. Immigration from the United States to California increased.

Correct Answer: C. The Bear Flag Republic allied itself with the United States and ceased to exist after the Mexican-American War.

Question 3

The Constitution of the United States addressed which of the following weaknesses in the Articles of Confederation?

- A. individual rights
- B. powers of the central government
- C. tax policy
- D. international diplomacy

Correct Answer: B. The Articles of Confederation instituted a weak central government beholden to the states, while the US Constitution established a strong central government with supremacy over the states.

Question 4

The geography of California impacted Native Americans in which of the following ways?

- A. Few tribes settled in California due to its harsh climate.
- B. Many large tribal groups arose in California due to the prominence of large grasslands and associated wild game, which provided an abundant food source.
- C. California tribes were limited in size and subsisted by hunting and gathering from their local environment.
- D. Most Native Americans in California had to travel long distances in search of food and shelter.

Correct Answer: C. California contains many microclimates and multiple small tribes arose within these various regions. While some pursued agriculture, most subsisted by hunting and gathering what was available to them.

Question 5

Which of the following factors best explains the power of the Catholic Church in the Middle Ages?

- A. Each bishop controlled their area based on its unique needs.
- B. Those who disapproved of Church doctrine were excommunicated.
- C. The Church levied heavy fines against those who fought against it.
- D. There were no governments to maintain law and order.

Correct Answer: B. The power of the Catholic Church during the Middle Ages (5th century to the 14th century) was derived from the power to excommunicate people from the Church. Excommunication meant the person was not a part of the Church, could not take communion, and was eternally damned to hell. The belief that the Church could dictate a person's eternal destiny was strong. Furthermore, being excommunicated would result in an ostracism, or expulsion, from society.

And that's some basic information about Subtest I.

Subtest II:

Overview and Science

Overview

Subtest II has 52 multiple-choice questions and 4 constructed-response questions.

The second subtest is broken into two domains:

- Science
- Mathematics

Let's talk about each one.

Science

The Science domain contains 26 multiple-choice questions and 2 constructed-response questions. This domain accounts for 50% of Subtest II.

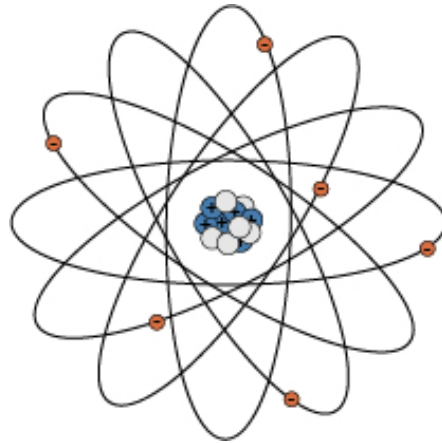
Let's explore some specific topics within this domain.

Physical vs. Chemical Changes

Matter can undergo physical changes and chemical changes. Physical changes are not a change in the chemical composition of the matter. Examples of this are changes of state (e.g., liquid to gas), shape, temperature, and texture. Taking a rough piece of wood and sanding it until it is smooth is an example of a physical change.

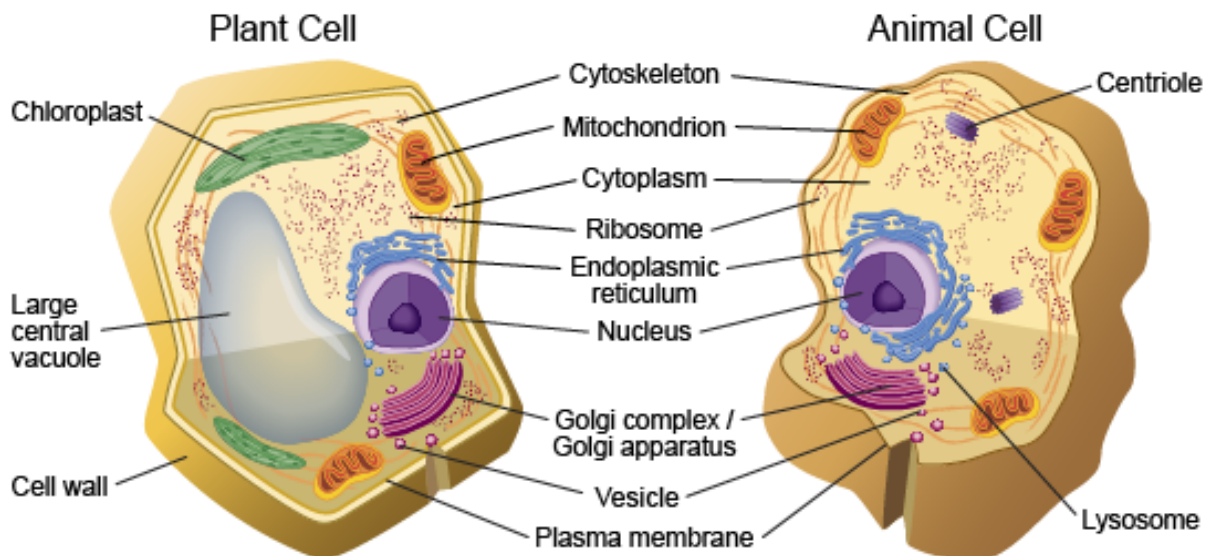
Chemical changes happen when chemical composition changes, meaning that chemical bonds are broken and reformed. Evidence of chemical changes is the formation of precipitates or bubbles, or changes in color or temperature. One example of a chemical change is a piece of metal rusting over time from reacting to oxygen in the air.

Parts of the Atom



Atoms can be broken down into three parts: protons, neutrons, and electrons. At the center of the atom is the nucleus, where most of the atom's mass is located. The nucleus contains tightly packed protons and neutrons. Protons have a positive charge and neutrons have no charge. Usually, atoms will have the same amount of protons and neutrons. Outside of the nucleus are electrons that are always in motion. Electrons have a negative charge. An atom will also have the same amount of protons and electrons, which gives the atom a neutral charge. The attraction between the positively charged protons and the negatively charged electrons causes the electrons to move in an orbit around the nucleus.

Plant and Animal Cells



Plant and animal cells both contain membrane-bound organelles such as the nucleus and mitochondria, but they also have some differences. Plant cells photosynthesize, so they contain chloroplasts, while animal cells do not. Both plant and animal cells contain vacuoles, but plant cells contain one large vacuole that helps the cell maintain its rigid shape, while animal cells contain multiple smaller vacuoles. Both plant cells and animal cells have a cell membrane, but plant cells also have a cell wall. The cell wall supports the plant cell's shape.

The membrane-bound structures found in cells are called organelles. Each organelle found inside a cell has a specific job. The nucleus contains the DNA for the cell. The mitochondria produce energy for the cell. Chloroplasts do photosynthesis. Lysosomes recycle substances inside the cell so the cell can reuse the raw material. The endoplasmic reticulum consists of rough endoplasmic reticulum and smooth endoplasmic reticulum. Rough endoplasmic reticulum is where proteins are produced. Smooth endoplasmic reticulum is where lipids and steroids are produced.

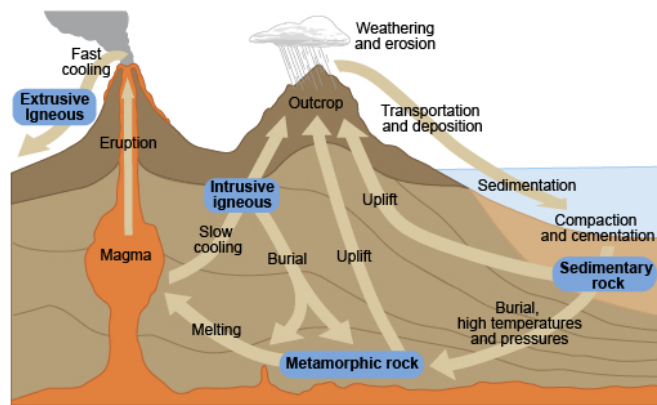
Types of Rocks and the Rock Cycle

A rock is one or more minerals cemented together. Rocks are categorized by how they are formed. The three types of rocks are igneous, sedimentary, and metamorphic. These three rock types change into each other over time. This is called the rock cycle.

Igneous rocks form when molten rock, called lava, cools and hardens. They can either be intrusive igneous (below Earth's surface) or extrusive igneous (above Earth's surface). Granite is an example of an intrusive igneous rock and pumice is an example of an extrusive igneous rock.

As sediments from weathering and erosion accumulate, particles begin to cement together. This is called **sedimentary rock**. Examples of sedimentary rock include sandstone and flint.

Over time, sedimentary rock can either be uplifted or buried. If it is buried, high temperature and pressure can turn the sedimentary rock into metamorphic rock. Examples of metamorphic rock are slate and marble. Metamorphic rock can either melt and then cool, which turns it into igneous rock, or uplift and erode, which turns it into sedimentary rock.



And that's just some very basic information about the Science domain.

Now, let's look at a few practice questions.

Science Practice Questions

Question 1

A frozen ice pop was left in the sun and melted. Which statement is true regarding the physical properties of the ice pop after it melted?

- A. The number of molecules had changed.
- B. It had experienced a phase change.
- C. Its chemical composition had changed.
- D. Its molecules were less energetic after it melted.

Correct Answer: B. The popsicle changed state from a solid to a liquid. A phase change is a physical property.

Question 2

A solution with a pH of 4 is:

- A. an acid.
- B. a base.
- C. neutral.
- D. positive.

Correct Answer: A. When the pH is less than 7, the solution is an acid.

Question 3

How do a population and a community differ?

- A. Populations are groups of animals, while communities are groups of plants.
- B. A community includes the non-living things in the area.
- C. A population is a group of only one species.
- D. They are the same thing.

Correct Answer: C. Multiple organisms of the same species form a population and multiple populations form a community.

Question 4

Cattle egrets are birds that live near cattle. As the cattle graze, insects in the ground are stirred up to the surface. When the insects are stirred to the surface, the birds eat the insects. The cattle are unaffected by the birds or the insects. This relationship between the cattle egrets and the cattle can best be described as:

- A. mutualism.
- B. commensalism.
- C. parasitism.
- D. predation.

Correct Answer: B. Commensalism is a relationship between two organisms where one organism receives benefits from the relationship (cattle egrets) and the other organism is unharmed or unaffected (cattle).

Question 5

What period of time can be measured by roughly one revolution of the moon around the Earth?

- A. one year
- B. one day
- C. one month
- D. one decade

Correct Answer: C. A month is roughly the time it takes for the moon to revolve around the Earth.

Subtest II:

Mathematics

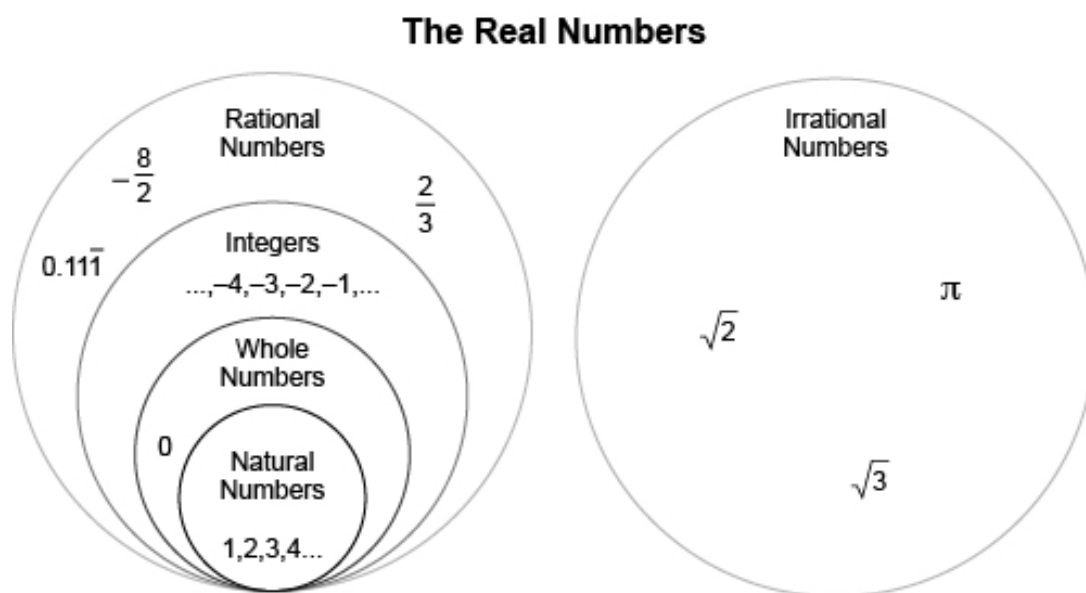
Overview

The Mathematics domain contains 26 multiple-choice questions and 2 constructed-response questions. This domain accounts for 50% of Subtest II.

Let's explore some specific topics within this domain.

Mathematics

Structure of Number Systems



Real numbers are all numbers that exist. These are broken down into 2 groups: rational and irrational numbers. Rational numbers can be represented as a fraction, while irrational numbers cannot. Irrational numbers include never-ending decimals such as pi (π) and imaginary numbers (i).

Rational numbers are then defined into smaller categories. All fractions are referred to as rational numbers. The next smaller category is integers, which includes all whole numbers, both positive and negative. As the numbers are further narrowed down, the next group is whole numbers. This includes zero and all positive whole numbers. The final and smallest group is natural numbers, which includes all positive whole numbers except zero.

Multiplying Polynomials

Polynomials are math expressions with more than one term, such as $2x + 4$ or $5y^2 - 4y + 6$. Two polynomials can be easily multiplied together using either the area method or the FOIL method. These methods give the same result; the difference is the manner in which they are organized. The area method uses a grid in which each term is listed above or next to the grid and then multiplied together. For example, $(3x + 7)(x - 5)$ can be set up on a grid and multiplied. The number at the top of the column is multiplied by the number on the left side. The result is listed inside and then the like terms are combined.

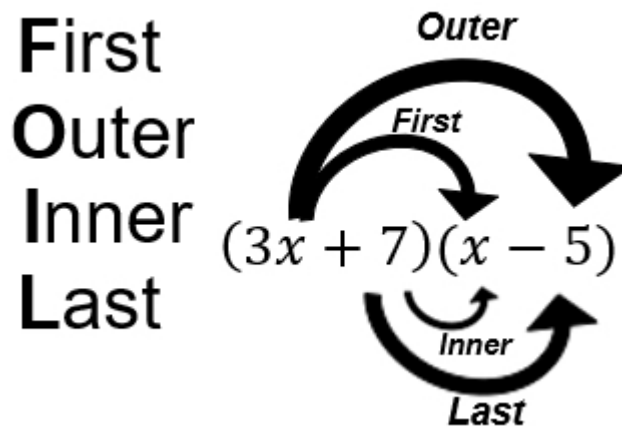
Grid:

	$3x$	7
x	$3x^2$	$7x$
-5	$-15x$	-35

Resulting terms: $3x^2 + 7x - 15x - 35$

Combine like terms: $3x^2 - 8x - 35$

The other method, FOIL, stands for First, Outer, Inner, Last. The terms are multiplied and then the like terms are combined.



The first terms to multiply are $3x$ and x , which equals $3x^2$. The outer terms are $3x$ and -5 , which equals $-15x$. The inner terms are $+7$ and x , which equals $7x$. The last terms are $+7$ and -5 , which equals -35 . The resulting terms are $3x^2 + 7x - 15x - 35$. When like terms are combined, the answer is $3x^2 - 8x - 35$.

Pythagorean Theorem

The Pythagorean theorem is useful for determining the length of the sides or hypotenuse of a right triangle. If two of the three lengths are known, the theorem can be used to find the third side. The theorem states $a^2 + b^2 = c^2$, where a and b are the legs that form the right triangle and c is the hypotenuse.

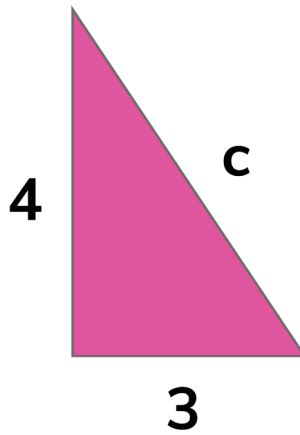
If given a right triangle with leg measurements of 3 and 4, then the hypotenuse can be determined using the formula $a^2 + b^2 = c^2$.

The numbers are plugged into the formula: $3^2 + 4^2 = c^2$.

Then simplify: $9 + 16 = c^2$, therefore $c^2 = 25$.

To solve for c, find the square root of 25: $\sqrt{25}=5$

$c = 5$



Measures of Central Tendency

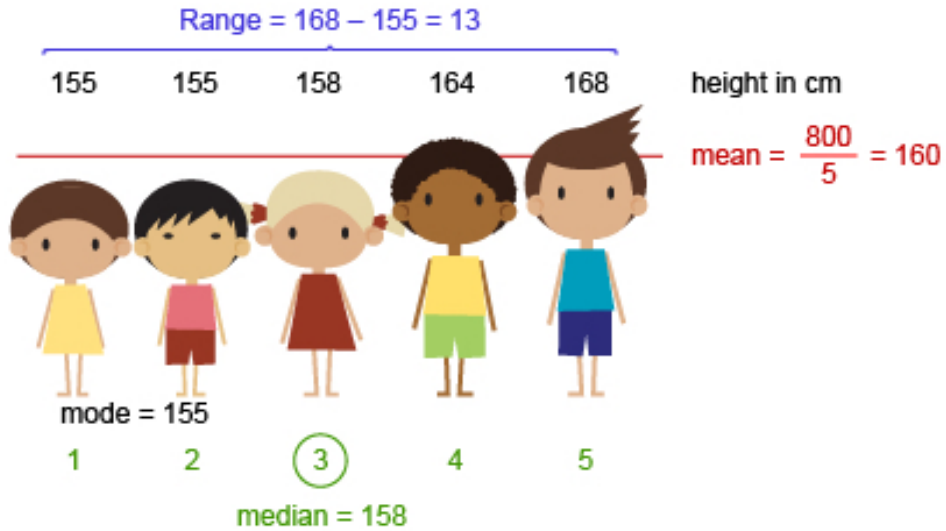
Measures of central tendency can provide information about a set of data. There are four aspects of central tendency: mean, median, mode, and range.

The **mean** is the average of the values in the data set. All of the values are added together and the total is divided by the number of data points. In the picture example below, each height is added together ($155 + 155 + 158 + 164 + 168 = 800$) and the total, 800, is divided by 5, as there are five pieces of data. The mean, or average, of this set is 160.

The **median** is the middle number when the values are sorted in numerical order. If there are two numbers in the middle because there is an even number of data points, then the median is the mean of the two center numbers. In this example, 158 is in the middle, so it is the median.

The **mode** is the value that appears the most often in the data set. If there are no repeating numbers, then there is no mode. In this example, 155 appears twice, and no other number does, so the mode is 155.

The **range** is the difference between the largest and smallest number. This shows how far apart the two extremes of the data are and helps to determine whether there is an outlier. In this example, the largest number is 168 and the smallest is 155. The difference in these numbers is 13, meaning the range is 13.



And that's just some very basic information about the Mathematics domain.

Now, let's look at a few practice questions.

Mathematics Practice Questions

Question 1

When Joshua moved into a new apartment, his monthly rent decreased from 35% of his budget to 30% of his budget. If his budget is \$3,200 a month, how much will he save annually?

- A. \$1,920
- B. \$160
- C. \$960
- D. \$1,120

Correct Answer: A. Joshua will save 5% of \$3200 each month, which is \$160. To determine the annual savings, multiply by 12.

Question 2

Put the following fractions in order from least to greatest:

$$\frac{1}{2}, \frac{3}{4}, \frac{5}{7}, \frac{3}{16}$$

- A. $\frac{3}{16}, \frac{1}{2}, \frac{5}{7}, \frac{3}{4}$
- B. $\frac{1}{2}, \frac{3}{4}, \frac{3}{16}, \frac{5}{7}$
- C. $\frac{1}{2}, \frac{3}{16}, \frac{3}{4}, \frac{5}{7}$
- D. $\frac{3}{16}, \frac{5}{7}, \frac{1}{2}, \frac{3}{4}$

Correct Answer: A. The easiest way to order these is to convert them to decimals and round to the hundredths place:

$$\begin{aligned}\frac{1}{2} &= 0.5 \\ \frac{3}{4} &= 0.75 \\ \frac{5}{7} &= 0.71 \\ \frac{3}{16} &= 0.19\end{aligned}$$

Then order the decimals and pair with their fraction equivalents.

Question 3

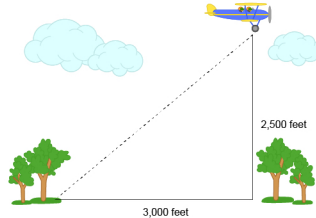
On a certain map, $\frac{1}{4}$ inch represents an actual distance of 3 miles. If a river on the map is $2\frac{1}{3}$ inches long, what is the actual distance of the river?

- A. 24 miles
- B. 21 miles
- C. 25 miles
- D. 28 miles

Correct Answer: D. If $\frac{1}{4}$ inch equals 3 miles, then $\frac{1}{12}$ inch equals 1 mile. $2\frac{1}{3} \div \frac{1}{12} = 28$

Question 4

An airplane takes off over a flat area. When it is 2,500 feet above the earth, it has covered 3,000 feet on the ground. How many feet (approximately) has it flown through the air??



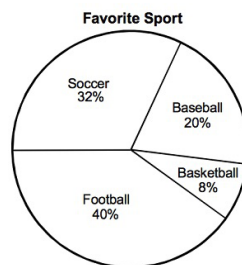
- A. 3,905 feet
- B. 5,500 feet
- C. 74 feet
- D. 2,750 feet

Correct Answer: A. The path of the airplane makes a right triangle, so use the Pythagorean theorem to solve:

$$\begin{aligned} a^2 + b^2 &= c^2 \\ 3,000^2 + 2,500^2 &= c^2 \\ 9,000,000 + 6,250,000 &= 15,250,000 \\ \sqrt{15,250,000} &= 3,905 \text{ feet} \end{aligned}$$

Question 5

The circle graph shows the results of a survey of 150 students. How many students chose basketball as their favorite sport?



- A. 8
- B. 12
- C. 16
- D. 20

Correct Answer: B. 8% of students chose basketball as their favorite sport. To find how many students 8% represents, simply multiply 8% by 150. In decimal form, 8% is represented by .08 (100% is represented as 1). $150 * .08 = 12$.

And that's some basic information about Subtest II.

Subtest III:

Overview & Physical Education

Overview

Subtest III has 39 multiple-choice questions and 3 constructed-response questions.

The third subtest is broken into three domains:

- Physical Education
- Human Development
- Visual and Performing Arts

Let's talk about each one.

Physical Education

The PE domain contains 13 multiple-choice questions and 1 constructed-response question. This domain accounts for 33% of Subtest III.

Let's explore some specific topics within this domain.

Movement Concepts

The main categories of perceptual-motor development:

- Body awareness is a person's ability to understand how they are able to move their body. A good way to know if students have body awareness is to play Simon Says.
- Directional awareness is awareness of the direction your body or an object is moving. Examples: up, down, right, left, front, back
- Spatial awareness is an awareness of oneself and other objects in space. It is also your ability to know how far away or how close objects are to you.
- Temporal awareness is the ability to judge movement and time. Individuals with fully developed temporal awareness have strong eye-hand and eye-foot coordination.

Cooperation Development

Developmental appropriateness of cooperation for children looks different depending on their age.

- At age 3-4, children begin to learn how to share a common idea or goal together.
- Examples: sharing a toy, building a tower of blocks together
- At age 5-6, children begin to learn the benefits of cooperation. They realize that they can complete a task more quickly if they work together.

- At around age 8, children continue to enjoy working with their peers but the aspect of competition comes into play. Competitiveness continues on throughout adulthood and it is important to teach children how to engage in healthy competition, either with another person or themselves.

And that's just some very basic information about the PE domain.

Now, let's look at a few practice questions.

Physical Ed Practice Questions

Question 1

According to current research, which of the following best promotes student participation in lifelong physical activity?

- A. learning how to play a popular sport
- B. playing on a team that regularly wins
- C. acquiring the skills needed to participate in a variety of physical activities
- D. developing proper exercise form, such as a proper push-up technique or a proper squatting technique

Correct Answer: C. This is the best answer because research indicates that when students acquire basic skills to participate in a variety of activities, they are more likely to participate in physical activity and feel confident in their abilities.

Question 2

A fifth-grader's family is beginning a fitness program that includes bicycling. To begin, the student and the father ride their bikes two times a week for thirty minutes. According to the FITT criteria for fitness training, which of the following is an accurate application of the principle of time?

- A. gradually increasing the sessions five minutes every two weeks
- B. gradually increasing the number of sessions each week
- C. gradually increasing the distance of each session
- D. gradually reducing the amount of time of each session

Correct Answer: A. FITT (frequency, intensity, time, and type) approach would suggest gradually increasing the time of the physical activity to build endurance.

Question 3

A physical education teacher is planning activities for his class, which includes three students with disabilities. To best implement the planned activities with the fewest amount of restrictions, which of the following should be the primary goal of the teacher?

- A. grouping the three students on their own team or activity
- B. asking the three students to referee and help coach the activity
- C. creating activities that allow each student to engage their own individual strengths
- D. having the three students spend time after class practicing the activity

Correct Answer: C. Physical education teachers should gear activities and skill development to best help all students in mainstream instruction. It is the goal of the teacher to design activities that allow each student to be successful in skill development and participation.

Question 4

Mr. Hawks, an elementary physical education teacher, designs an activity in which he divides the class into three rows. He places one row on the north wall of the gym, the second row on the south wall of the gym, and the third row in the middle of the gym. He instructs the students on the north and south walls to roll balls back and forth and instructs the students in the middle to avoid being hit by a ball and avoid touching other students. This activity is most effective in developing the third-row students':

- A. spatial awareness.
- B. balance.
- C. fine motor skills.
- D. hand-eye coordination.

Correct Answer: A. This is the best answer choice. The students in the middle must be aware of their location, the location of all the balls, and the location of the other students. This requires them to have awareness of the space around them.

Question 5

Which of the following is the best example of a non-locomotor activity?

- A. having students jump on incrementally higher boxes until they can no longer jump high enough onto the next box
- B. having students stand back to back and practice passing a basketball between each other by rotating their hips while remaining in place
- C. having students run an obstacle course that incorporates skipping, running, and jumping
- D. timing students in a quarter-mile footrace

Correct Answer: B. A non-locomotor activity consists of moving body parts while remaining in the same place. Non-locomotor activities include stretching, twisting, turning, bending, etc. This is the only activity in which students stay in the same spot throughout the activity.

Subtest III:

Human Development

Overview

The Human Development domain contains 13 multiple-choice questions and 1 constructed-response question. This domain accounts for 33% of Subtest III.

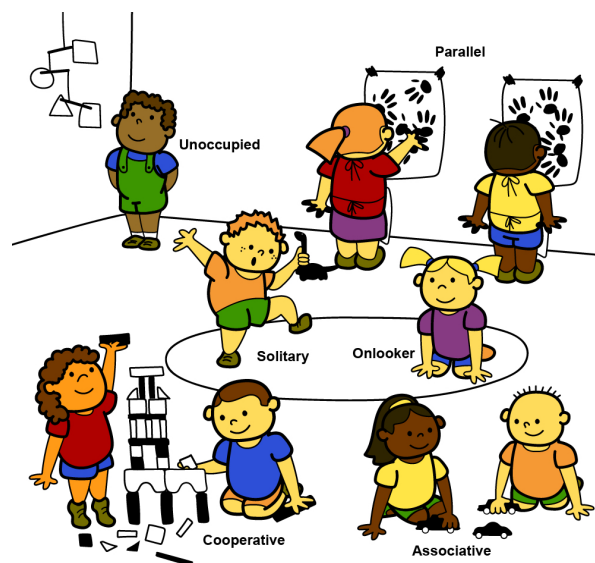
Let's explore some specific topics within this domain.

Human Development

Characteristics of Play

Play is very important to the development of children, and while each child progresses at their own pace and in their own way, there are common themes.

- Unoccupied play (0-3 months): observing without playing
- Solitary (3 months-2.5 years): playing alone with little interest in others
- Onlooker (2.5-3.5 years): observing and showing interest without joining
- Parallel (3.5-4 years): playing the same thing with similar materials with minimal interaction
- Associative (4-4.5 years): playing the same thing with similar materials and conversation, but different goals or objectives
- Cooperative (4.5 years and up): playing together with established goals or rules



Concept of Multiple Intelligences

Howard Gardner's theory of multiple intelligences introduced the notion that humans can be intelligent in a variety of ways beyond traditional conceptions of thought and intellect. He proposed that humans could be gifted in eight different areas of intelligence. Some argue that these categories represent personality traits and abilities, but many educators see the value of identifying intelligences in each student.

- **Visual-spatial:** Individuals are good at visualizing things such as maps, charts, and directions.
- **Linguistic-verbal:** Individuals are good with words, both written and spoken. This generally makes memorization easy, along with writing stories and learning languages.
- **Logical-mathematical:** Individuals are good at recognizing patterns and analyzing problems.
- **Bodily-kinesthetic:** Individuals are good with understanding their body's movement and coordination, as in athletes and dancers.
- **Musical:** Individuals have an innate sense of rhythm and easily pick up on musical instruments or tasks.
- **Interpersonal:** Individuals are good at understanding and interacting with others and have strong verbal and non-verbal communication skills.
- **Intrapersonal:** Individuals are good at self-reflection and understanding the source of their emotions. They are strong in subjects such as philosophy and writing.
- **Naturalistic:** Individuals are highly attuned to nature and the outdoors and notice even slight changes in the environment.

And that's just some very basic information about the Human Development domain.

Now, let's look at a few practice questions.

Human Development Practice Questions

Question 1

Ms. Pontian is concerned about Julio because his fine motor skills seem to be lacking compared to the other students in her class. He struggles with using scissors and holds a pencil with an odd grip. What should be her first step in addressing this issue?

- A. discussing the concerns with Julio's parent
- B. consulting with the special education teacher
- C. asking the PE teacher to evaluate Julio's fine motor skills
- D. requesting an evaluation by the occupational therapist for the school district

Correct Answer: A. This is the first step to take, as the parent must give permission prior to an evaluation.

Question 2

Which of the following would not negatively impact a student's physical development?

- A. emotional abuse
- B. physical abuse
- C. exposure to drugs
- D. lack of sleep

Correct Answer: A. While emotional abuse is not acceptable, it generally does not affect a child's physical development.

Question 3

Which of the following would be a developmentally appropriate activity for typical students?

- A. sixth-grade students writing independent research papers on a broad topic
- B. first-grade students using manipulatives to understand addition and subtraction
- C. fifth-grade students raising caterpillars to butterflies to understand life cycles
- D. second-grade students using manipulatives to learn 2D shapes

Correct Answer: B. This is developmentally appropriate and students of various levels can be given questions with more or less difficulty.

Question 4

A third-grade teacher wants to develop a positive attitude toward education in her classroom of diverse learners. Which of the following strategies would best achieve this goal?

- A. highlighting student work that meets high academic standards and using the work as an example to all students
- B. discussing the lasting benefits of education with students
- C. highlighting each student's academic progress and their increasing ability to learn new ideas and concepts
- D. providing students with data and tools to help them measure their learning experiences

Correct Answer: C. Highlighting each student's academic strengths is likely to build self-confidence and encourage their academic pursuit. If the student is made aware of areas of strength in their ability, they are likely to develop a positive attitude toward their strengths.

Question 5

Developmentally appropriate traits of five-year-old children include the ability to:

- A. express feelings, follow three-step commands, and copy basic shapes.
- B. help put on clothing, recall parts of a story, and say their name.
- C. tell time, identify and explain multiple meaning words, and understand puns.
- D. write paragraphs, socialize according to interests, and solve math problems with decimals.

Correct Answer: A. By age five, a child is typically able to express feelings, follow three-step commands, and copy basic shapes.

Subtest III:

Visual and Performing Arts

Overview

The Visual and Performing Arts domain contains 13 multiple-choice questions and 1 constructed-response question. This domain accounts for 33% of Subtest III.

Let's explore some specific topics within this domain.

Visual and Performing Arts

Elements of Dance

The four elements of dance:

- **Space** encompasses many different aspects. It is the relationship of your body to others and the area you have to move in (either in place or across the floor).
- **Time** can be measured many different ways. Examples: clock time (minutes, seconds), metered time (the rhythm or tempo), time in relationship with others (in unison, one after the other).
- **Levels** is a way of relating to space that categorizes positions and motions as low, medium, or high.
- **Force/energy** is a way of describing the intensity of the movements.
Examples: sharp, relaxed, flowing

Elements of Music

These are some elements of music:

- Pitch is how high or low a sound is perceived to be.
 - a. Intervals are differences in pitch.
 - b. Intonation is pitch accuracy.
 - Flat intonation means playing or singing below pitch.
 - Sharp intonation means playing or singing above pitch.
- Dynamics is how loudly or softly a performer should play or sing a passage.
- Rhythm is music's pattern in time; has three parts:
 - a. Beat is the pulse of the music.
 - b. Tempo is the speed of the music.
 - c. Meter is how the rhythm or beat is divided.
- Melody is the tune played by a series of notes.
- Form describes the structure of the piece and how it is arranged.
- Timbre describes the sound of an instrument. You can often change the tone of an instrument by using a different technique.

Visual and Performing Arts Practice Questions

Question 1

A fourth-grade teacher has students read about famous figures in American history and then takes the students to see a play about George Washington leading the Continental Army against the British. Taking the class to see the play will best accomplish which objective?

- A. enhancing the students' social studies lesson through a cultural theatrical event
- B. promoting students' ability to think critically about theater arts
- C. enhancing students' ability to compare and contrast primary and secondary sources
- D. promoting students' ability to analyze and judge the influence of theater on historical events

Correct Answer: A. Students are able to scaffold the information from the American history lesson with the theater performance.

Question 2

The content standard for Visual Art does not cover which of the following?

- A. Artistic Perception
- B. Creative Expression
- C. Historical and Cultural Context
- D. Foundations in Painting and Sculpture

Correct Answer: D. Creating works of art is valuable for any arts education; however, the content standards do not require all students create pieces in any particular media. The remaining standards include Aesthetic Valuing (students analyze, assess, and derive meaning from works of art, including their own, according to the elements of art, the principles of design, and aesthetic qualities) and Connections, Relationships, Applications (Students apply what they learn in the visual arts across subject areas. They develop competencies and creative skills in problem solving, communication, and management of time and resources that contribute to lifelong learning and career skills. They also learn about careers in and related to the visual arts.)

Question 3

Which of the following should students be able to do in order to begin improvising songs?

- A. sing in tune
- B. read music
- C. know the blues style
- D. notate from diction

Correct Answer: A. Students must be able to sing in tune before they can improvise tonally.

And that's some basic information about Subtest III.

Question 4

Use the following image to answer the question that follows.



A sixth-grade art teacher shows her students the above picture. She asks the students what technique is most prevalent in the painting. Which of the following would be an appropriate response by the students?

- A. The artist used negative space as the dominant feature of the painting.
- B. The artist used dark, overlapping lines to create contrast.
- C. The painting lacks color contrast and is incomplete.
- D. The artist failed to achieve a three-dimensional perspective.

Correct Answer: A. The artist uses the negative space to create a second image. The white space creates an outline of a vase; the black space creates an outline of two faces looking at each other.

Question 5

Ms. Thayer wants to do a lesson to explain the dance element shape. Which of the following is the best choice for a class activity?

- A. Have students mirror one another in pairs. Turn on music of different tempos and have one student in each pair be the leader as they move to the music.
- B. Give groups of students different shapes to move in through the performance space. Tape the floor so students have a guide.
- C. Have small groups create a short dance combination using either sharp or fluid movements.
- D. Assign small groups a particular section of the body to “lead” with or focus the movement on. This can be the head, hips, arms, etc.

Correct Answer: B. This is the best choice because it asks students to apply a shape they recognize to how they move about the space.

CRQ General Tips

Overview

There are 11 total constructed-response questions on the combined exam (all three subtests). These kinds of questions require the test-taker to produce or construct the answer and are considered an additional measure to better assess test-takers' subject knowledge. CRQ prompts will likely involve both critical thinking and problem-solving.

General Tips

- Before responding to a CRQ prompt, be sure to read (and re-read) the prompt carefully!
- Follow this basic writing process:
 - Restate the question simply and accurately as a complete statement and place it at the end of the introductory paragraph. This is your thesis statement.
 - The thesis statement is the most important part of any CRQ response! Create a well-formed thesis statement before writing your essay. Everything you say in your essay should back up your thesis.
 - Create an outline of the body paragraphs.
 - Continue filling/building out your paragraphs with details.
 - Write a closing paragraph that adequately summarizes each main point of the body paragraphs.
 - Read carefully through your essay.
 - Re-read your answer one more time.

And that's some basic information about constructed-response questions.

Thank you for choosing this ebook by 240 Tutoring!

We believe your time is valuable and know that you don't have extra time to waste on study resources that fail to help you meet your goal - passing your exam and moving forward in your teaching career.

This ebook provides a condensed overview of key information on your exam. If you think a high-level review is all you need, then you've got it!

But, if you need more comprehensive test preparation to feel confident before taking a potentially career-altering test, allow us to introduce 240 Tutoring's online study guides.

Our study guides are test-aligned, updated regularly, and designed to help you learn what you need to know so you can pass your exam.

With videos, study content, quizzes, flashcards and practice exams, you'll be able to prep for your test whichever way you learn best. And, the online format means you can study whenever it's convenient for you.

Best of all, each one of the 250+ study guides we offer is backed by a money-back guarantee. If you pass the practice test but fail your exam, we'll refund your study guide cost for up to two months.

240 Tutoring - where teachers go to study!

