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Downloadable Test Prep Guide

ACT Exam Updates What You Need to Know About the ACT

If your ACT was canceled or postponed, know you are in good company. Thousands of students face the same dilemma as exam dates continue to shift to meet the needs of our current environment.

What if the June ACT is canceled?

Currently, the next ACT exam is scheduled for **June 13th**, followed by one on **July 18th**. What if the summer ACTs are canceled, too? With everything changing so rapidly, it's certainly possible there will be further delays. Stay up-to-date on this evolving situation at <u>PrincetonReview.com</u>. The one thing we do know for sure, though, is that it will be important to keep your ACT skills sharp and in practice, so that when your test date does come around, you'll be ready.

This packet contains sample questions and answers to help you succeed. As testing dates are confirmed, your next step will be to create a study plan that best fits your learning habits. Schedule 30 minutes every day to practice. Check your answers, analyze your progress, and determine what you need to change about your approach.

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ACT Practice Test Questions

We've selected passages from the English, Reading, and Science subtests, plus a representative sampling of Mathematics questions, to help give you a feel for the actual exam. Use these practice questions to help you study for the ACT exam.

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Princeton Review® Questions and answers are pulled from ACT Premium Prep.



Section 1: English

Passage I

André Bazin's Nouvelle Vague

André Bazin died on November 11, 1958 after over 15 years of pioneering work in film criticism. His magazine, *Cahiers du Cinéma* (Cinema Notebooks), had been issued regularly since its founding in 1951, and it had become the premier journal in French for the serious discussion of films. Bazin, working and living in Paris, had become one of the <u>cities</u> premier intellectuals. Despite all of the achievements of Bazin's lifetime, the true fruit of his labor did not begin to become truly apparent until the year following Bazin's death. It

was in 1959 in Paris that the *nouvelle vague* (new wave)

in French cinema $\underline{exploded}_{3}$ onto the international film scene.

Bazin published his first piece of film criticism in 1943 and pioneered a new way of writing about $\underline{\text{film}}$, he championed the idea that cinema was the "seventh art,"

every bit as deserving as the more respected arts of: architecture, poetry, dance, music, painting, and sculpture. Many before Bazin's time thought of the cinema as a simple extension of another art form:

1. A. NO CHANGE

- **B.** citys
- C. cities'
- **D.** city's
- 2. F. NO CHANGE
 - **G.** in 1959 in Paris,
 - **H.** in 1959, in Paris
 - **J.** in, 1959 in Paris,
- **3.** Which of the following alternatives to the underlined portion is LEAST acceptable?
 - A. emerged
 - B. released
 - C. erupted
 - **D.** burst
- 4. F. NO CHANGE
 - G. film. He
 - **H.** film he
 - J. film. Although he
- 5. A. NO CHANGE
 - **B.** of, architecture,
 - C. of architecture,
 - **D.** of, architecture





theatre. In fact, in many early writings about film, it is not uncommon to hear the authors speak of film. Bazin, though, sought to show that the cinema had every bit as much creative vitality and craftsmanship as any of the other six arts. From this fundamental belief came what was possibly Bazin's greatest contribution to film

criticism: *auteur* theory.

Auteur is the French word for *author*, and the suggestion contained in both the word and Bazin's theory is that every film is "authored" by a single mind just as a novel or poem is the work of a single author. For Bazin, and the increasingly influential group of critics working with him at the *Cahiers du Cinéma*, the author of any film is its director, and to discern a director's true style,

perspective, or <u>his sense of voice</u>, the critic has merely to watch a group of the director's films with an eye to similarities between them. Accordingly, Bazin and the *Cahiers* group were truly the first to discuss films and the practice of cinema in general as the masterwork of directors, rather than screenwriters or actors. With *auteur* theory, <u>nonetheless</u>, Bazin created a new way of looking **6.** The writer is considering adding the following phrase to the end of the preceding sentence (deleting the period after the word *film*):

as a second-class substitute for the "legitimate theatre."

Should the writer make this addition there?

- **F.** Yes, because it clarifies the sentence to show more specifically how critics talked about film.
- **G.** Yes, because it helps the reader to understand more clearly the subjects of Bazin's writing.
- **H.** No, because it fails to maintain this paragraph's focus on the *Cahiers du Cinéma*.
- **J.** No, because it speaks disparagingly about the practice of filmmaking.
- **7.** At this point the writer is considering adding the following true statement:

Bazin's work is available in a text commonly read in Film Studies classes, the collection *What Is Cinema?*

Should the writer make this addition here?

- **A.** Yes, because it maintains the essay's focus on an important figure in French film criticism.
- **B.** Yes, because it gives a good sense of the type of reading students can expect in Film Studies classes.
- **C.** No, because it interrupts the discussion of a specific theory of Bazin's.
- **D.** No, because other information in the essay suggests that this statement is untrue.
- 8. F. NO CHANGE
 - G. the director's voice,
 - H. his voice,
 - J. voice,
- 9. A. NO CHANGE
 - B. meanwhile,
 - C. still,
 - **D.** DELETE the underlined portion.





at films, and his early works on such influential directors as Orson Welles, Vittorio de Sica, and Jean Renoir remain, to this day, pioneering works of film criticism that are studied and emulated by film critics today. \Box

Bazin's greatest achievement was the strong impression he left on a young generation of French filmmakers and critics who came on to the international scene <u>all over the world just a year after Bazin's death. In 1959</u>, 12

two films changed the landscape of international filmmaking: François Truffaut's *The 400 Blows* and Jean-Luc Godard's *Breathless*. In each film, the director has taken Bazin's emphasis on *auteur* filmmaking to heart, and in every frame, the viewer is reminded of the director's presence by the overwhelming stylistic personality of shots and scenes. Throughout the 1960s and 1970s, independent and avant-garde filmmakers in places as disparate as France, the United States, Italy, and Japan were beginning to exercise the new cinematic freedom that Bazin had

10. F. NO CHANGE

- G. works, on
- H. works: on
- J. works-on
- **11.** Which of the following sentences, if added here, would effectively conclude this paragraph and introduce the topic of the next?
 - **A.** Bazin himself never made any films, but he always preferred the Italian Neorealist style.
 - **B.** While Bazin's magazine was the place to read about classic films, Henri Langlois's *Cinematheque* was the place to see them.
 - C. Despite these great written achievements in the *Cahiers du Cinéma*, Bazin's true and lasting influence lay elsewhere.
 - **D.** Many film critics working in the later part of the twentieth century, such as Christian Metz and Gilles Deleuze, are clearly indebted to Bazin.
- 12. F. NO CHANGE
 - **G.** in all parts of the world
 - **H.** in every nation and country
 - J. DELETE the underlined portion.
- **13.** Which choice would most effectively guide readers to understand the great importance of the two films discussed?
 - A. NO CHANGE
 - **B.** came out around the same time:
 - **C.** joined the long list of films shot primarily in Paris:
 - **D.** were created by directors who knew Bazin personally:





charted for them. <u>At that time</u>, whenever a national film industry completely reinvents itself, it is carried along by a group of *auteur* directors who refer to their films as part of a *new wave*. Now there are legions of filmmakers, Mohsen Makhmalbaf and Abbas Kiarostami in Iran or Alfonso Cuaron and Guillermo del Toro in Mexico, for example, whose inspiration can in some way be traced back to Bazin and his humble work as editor of the *Cahiers du Cinéma* in France way back in the 1950s.

14. F. NO CHANGE

- G. Back then,
- H. Even now,
- **J.** In the end,

Question 15 asks about the preceding passage as a whole.

- **15.** Suppose the author intended to write an essay that illustrates how the writings of one film critic have had an influence beyond the realm of film criticism. Would this essay successfully fulfill that goal?
 - **A.** Yes, because the essay describes Bazin's influence on the six arts of architecture, poetry, dance, music, painting, and sculpture.
 - **B.** Yes, because the essay describes Bazin's influence on both film criticism and filmmaking.
 - **C.** No, because the essay discusses *auteur* theory and French films in general.
 - **D.** No, because the essay states that Bazin's greatest achievements were as a filmmaker.





Section 2: Mathematics

DO YOUR FIGURING HERE.

- 2. What is the value of x when $\frac{4x}{5} + 7 = 6$?
 - $\frac{5}{4}$ F. **G.** $-\frac{4}{5}$ **H.** −1 **J.** $-\frac{5}{4}$ **K.** −5
- 8. Susie has three T-shirts: one red, one blue, and one black. She also has three pairs of shorts: one red, one blue, and one black. How many different combinations are there for Susie to wear exactly one T-shirt and one pair of shorts?
 - F. 3
 - **G.** 6
 - **H.** 8
 - J. 9 K. 27
- 17. At Fatima's Fruits, a bag of eight grapefruits costs \$4.40. At Ernie's Edibles, a bag of three grapefruits costs \$1.86. How much cheaper, per grapefruit, is the cost at Fatima's Fruits than at Ernie's Edibles?
 - **A.** \$0.07
 - **B.** \$0.35
 - **C.** \$0.59
 - **D.** \$1.17
 - **E.** \$2.54





DO YOUR FIGURING HERE.

- **20.** Point *C* (1,2) and point *D* (7,-10) lie in the standard coordinate plane. What are the coordinates of the midpoint of \overline{CD} ?
 - **F.** (1, 8)
 - **G.** (3,-6)
 - **H.** (4,-4) **J.** (4,-6)
 - **K.** (7,-4)
- **26.** In a data set of 5 points, the mean, median, and mode are each equal to 8. Which of the following could be the data set?
 - F. {5, 7, 8, 8, 12}
 G. {7, 7, 8, 8, 12}
 H. {7, 8, 8, 8, 12}
 J. {7, 8, 8, 10, 12}
 K. {7, 8, 8, 12, 12}
- **32.** Pierre competes in a triathlon, along a course as shown in the figure below. He begins swimming at starting point *S* and swims straight across the lake, gets on his bicycle at station *A*, bikes to station *B*, and then runs to finishing line *F*. The judges use a stopwatch to record his elapsed times of t_A , t_B , and t_F hours from point *S* to points *A*, *B*, and *F*, respectively. If the distance, in miles, between points *S* and *A* along the racecourse is denoted by *SA*, then what is Pierre's average speed for this race, in miles per hour?



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DO YOUR FIGURING HERE.

42. An artist wants to cover the entire outside of a rectangular box with mosaic tiles. The dimensions of the box shown below are given in centimeters. If each tile is exactly one square centimeter, and the artist lays the tiles with no space between them, how many tiles will he need?

F.	75	9	
G.	96		3
H.	108		4
J.	126		4
K.	150		

44. Given the figure below, what is the area of the trapezoid, in square inches?







DO YOUR FIGURING HERE.

53. A heart-shaped ornament is made from a square and two semicircles, each of whose diameter is a side of the square. The ornament is shown in the standard (x,y) coordinate plane below, where 1 coordinate unit represents 1 inch. The coordinates of six points on the border of the ornament are given. What is the perimeter, in inches, of the ornament?



56. *RST* is a right triangle with side lengths of *r*, *s*, and *t*, as shown below. What is the value of $\cos^2 S + \cos^2 R$?

F. 1

- G. $\sqrt{2}$
- **H.** $\sqrt{3}$

J.
$$\frac{\sqrt{2}}{2}$$

K. $\frac{1+\sqrt{2}}{3}$





Section 3: Reading

Passage III

HUMANITIES: This passage is adapted from the entry "How Songs Make Meaning" from the volume *How to Listen to Music Like a Conductor* (© 2007 by Air Guitar Press).

I used to have to feel pain in order to write songs.

Normally, this inspiration took the form of wanting or losing a girl. My heartsickness would reach a state of such unwieldy gloom that words and melodies would 5 coalesce and fall like raindrops to relieve the stress of carrying such a heavy cloud of misery. I think many of

- us mainly write songs for relief. It's unhealthy to keep swallowing unspoken words. Keep them on the tip of your tongue and they'll fester like bacteria. Stash them 10 all in a song and you suddenly have an emotional stor-
- age unit, which un-clutters your inner world.

The first "songs" we ever write are just exaggerated expressions of our stream of consciousness. We create theme songs while jostling with action figures,

- 15 concoct mocking serenades to annoy our siblings, or narrate our inner lives to a random tune. We have all been yelled at by a frustrated audience of our friends, acquaintances, and family members to cease our incessant noise making. While many learn to keep their
- 20 songs to themselves as they master the rules of polite etiquette, songwriters apparently never learn. Instead, we begin to turn our songs into something people will be happy to hear.

Music somehow makes people feel unashamed 25 about being completely expressive. In speech, someone melodramatically complaining about all the injustices of his world would probably be chastised for lacking self-control. However, in song, a proclamation of suffering is received as an almost heroic attempt to over-30 come adversity. Songs boldly broadcast a description

of someone's inner world. Why do people want to tune into someone else's emotional episodes?

There's a balance of two opposing forces that we enjoy in music. One force soothes, the other agitates. 35 As music plays, the actual frequencies of the individual notes are constantly lining up in different mathematical relations to each other. When they are proportional to each other, we hear chords, harmony, and unison. Songs
normally end on this sort of relationship because it conveys closure, completion, resolution. Other combinations create a sense of tension, discomfort, and anticipation. Successful songs win over listeners just as successful stories do. They normally introduce a protagonist and

45 take the listener along to experience some of his/her setbacks and triumphs. Even instrumental pieces often introduce a central melody and then explore its travels through different passages of the song's structure.

Young children often enjoy hearing soothing lul-50 labies as a way to be distracted from anxiety or coaxed into a peaceful slumber. They take great pleasure in singing agitating songs, such as the "nenny nenny boo boo" melody that can be customized into any taunt. Similarly, adults have classical, smooth jazz, and easy

55 listening styles of music when they want to be relaxed or distracted, and they have the more provocative extremes of punk, rap, and metal when they want to use music to express irreverence or rebellion.

We become much more selective in our musical 60 tastes as we age. As children, we passively accept and learn to love our parents' music just like we do their cooking. It's not that a parent necessarily cooks "better" than other parents, but through sheer familiarity a child will greatly prefer her parents' cooking to that of others.

- 65 Similarly, the cultural backdrop of a child's upbringing calibrates her listening tastes to a given set of rhythms, instruments, harmonic scales, and song structures. As adolescents, though, we begin to choose our own songs just as we would choose our friends. We identify with
- 70 artists based on their dress, their politics, their mood, and their popularity. We look to find personal meaning in lyrics and to latch onto songs that seem to broadcast our private thoughts. Despite not being the author of our favorite songs, we wear our songs like trinkets of
- 75 personal expression, telltale accessories that describe to others important parts of our psychology. When we develop a kinship with a song, we feel waves of euphoria as it plays, the feeling of our inner world radiating out.

As songwriters, we must aspire to this private 80 release in every song we write. However, sometimes we fear that if we express ourselves too specifically, we will deny listeners the opportunity to mold our song





into something they can claim as their own. We often replace specific details with general symbols, preserv-

85 ing for ourselves the original meaning of a lyric while infusing it with enough flexibility that someone else can derive a different significance.

The one thing we must be sure of as performers is that a song means *something* to us. Through observa-90 tion of other artists, we learn to mimic expressions of joy and anguish. It becomes easy for us to write and perform songs without any genuine attachment to their emotional content. Nevertheless, just as audiences can distinguish between good and bad acting, so too will

- 95 audience members feel a difference between a contrived and an authentic performance.
- **21.** When the writer refers to "the rules of polite etiquette" in (lines 20–21), he is most likely referring to rules that:
 - **A.** diminish the role of imagination in playing with action figures or other toys.
 - **B.** are taught to children when they are enrolled in behavior modification classes.
 - **C.** are too restrictive and demanding for songwriters to abide by.
 - **D.** limit certain personal behaviors that others might find irritating or discomforting.
- **22.** In the third paragraph (lines 12–23), the author says that a songwriter aspires to write songs people will be "happy to hear." It can reasonably be inferred that which of the following is NOT a characteristic of such songs?
 - **F.** Mimicking joy and anguish

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- **G.** Blending comfort and tension
- **H.** Fostering a kinship with the listener
- J. Allowing for different interpretations
- **23.** It can be reasonably inferred that the primary purpose of this passage is to:
 - **A.** explain to readers that expressing pain will enable them to be good songwriters.
 - **B.** convince aspiring songwriters to stop giving in to polite etiquette and instead write catchy songs.
 - **C.** discuss ideas concerning the goals and process of songwriting as well as the relationship to age and expectations of the audience.
 - **D.** outline one author's argument that songwriters are too often limited by the cultural backdrop of their musical upbringing.

- 24. When the author states a songwriter must aspire to "this private release" (lines 79–80), he is most directly referring to the idea that a songwriter must:
 - **F.** describe her experiences with very specific details.
 - **G.** outwardly project a genuine internal emotional state.
 - **H.** force listeners to develop a kinship with the song.
 - J. focus on the emotions of joy or anguish.
- **25.** The author states that, unlike children, adolescents approach songs with a goal of:
 - A. feeling a sense of belonging and familiarity.
 - **B.** discovering new trends in fashion and politics.
 - **C.** departing from the cultural backdrop of their upbringing.
 - **D.** deriving some personal meaning from those songs.
- **26.** The author states that our process of selecting songs can be compared to that of selecting all of the following EXCEPT:
 - F. our friends.
 - G. our parents' cooking.
 - **H.** our favorite authors.
 - J. personal trinkets.
- **27.** Which of the following best describes the way the first sentence functions in relation to the passage as a whole?
 - **A.** It introduces an idea that the author later explains is not true in the real world of songwriting.
 - **B.** It is a claim that facilitates the author's anecdotal introduction to the topic of songwriting.
 - **C.** It foreshadows the essay's contention that singing about one's problems is evidence of a lack of self-control.
 - **D.** It is a vague idea that is not reinforced or clarified by the details that follow in subsequent paragraphs.



- **28.** According to the passage, the divergent songwriting purposes of "soothes" and "agitates" (line 34) differ from one another in that:
 - **F.** soothing songs, unlike agitating ones, have a mellowing effect that is often enjoyable to adults but annoying to younger audiences.
 - **G.** soothing songs are associated with inducing sleep or reducing distress, while agitating songs can be used to convey ridicule.
 - **H.** agitating songs, unlike soothing songs, are often used by relatives to coax a child out of a state of slumber.
 - **J.** agitating songs distract us from the things that we passionately hate, while soothing songs are very gentle to our ears.
- **29.** According to the author's analogy, acting and performing music:
 - A. are completely different.
 - **B.** share at least one important characteristic.
 - **C.** are more convincing expressing anguish than joy.
 - **D.** are completely identical.

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- **30.** Based on the passage, the cultural backdrop of a child's upbringing is significant to her appreciation of music because it:
 - **F.** predisposes the child to prefer the musical ingredients customary in that culture's music.
 - **G.** gives the child a model of what to avoid in order to stand out as an original songwriter.
 - **H.** instructs the child concerning the proper structure and political content of songs.
 - **J.** will later be the primary basis through which the child is able to make friends.



Section 4: Science

Passage I

A study was conducted regarding the fossil shells of a particular species of turtle that lives off the coast of the Opulasian Peninsula. Scientists discovered a continuous record of fossilized shells in the seabed off the coast dating back 120,000 years. In addition to examining the fossilized turtle shells, the scientists also examined the shells of living turtles.

From each layer of seabed, the scientists randomly selected 100 complete, unbroken fossilized shells. Each shell was carefully prepared, measured, and photographed. A bit of each shell was then clipped off and sent to a laboratory for radiocarbon dating to determine the precise age of each shell.

Table 1							
% shells with the following scute pattern:							
Age of shells	M-m-M-M-m	M-M-m-m-M	M-m-M-m-M				
(years)							
120,000	46	44	10				
90,000	42	54	4				
87,000	30	67	3				
85,000	21	72	7				
80,000	20	66	14				
50,000	76	21	3				
27,000	100	0	0				
15,000	100	0	0				
8,000	100	0	0				
4,000	100	0	0				
1,000	68	28	4				
300	74	20	6				
0	86	2	12				
	% sl Age of shells (years) 120,000 90,000 87,000 85,000 85,000 50,000 27,000 15,000 15,000 8,000 4,000 1,000 300 0	Ta % sh-lls with the form Age of shells M-m-M-M-m (years) 120,000 46 90,000 42 46 90,000 42 46 90,000 42 46 90,000 42 46 90,000 42 46 90,000 42 46 90,000 21 40 80,000 20 50 50,000 76 27 27,000 100 100 15,000 100 4,000 1,000 68 300 300 74 0	Table 1 % shells with the following scute p Age of shells M-m-M-M-m M-M-m-m-M (years) 120,000 46 44 90,000 42 54 87,000 30 67 85,000 21 72 80,000 20 66 50,000 76 21 27,000 100 0 15,000 100 0 4,000 100 0 1,000 68 28 300 74 20 0 86 2				

Study 1

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All of the living turtles had a distinct band of hexagonal *scutes* (bony plates) running the length of their shells, from head to tail. The fossilized shells' scutes were not visible to the naked eye; however, upon application of a particular dye, a similar band of scutes from head to tail was observed in every shell.

Study 2

For each shell, the surface area of the shell and the height of the shell's *bridge* (the part of the shell linking the upper and lower plates) were recorded (see Figure 1).



Figure 1

For the shells of each age, the average of each measurement was calculated. The results are presented in Figure 2.







Figure 2

- 1. In a layer of seabed determined to be 250,000 years old, the scientists found fragments of twelve turtle shells, but no complete, intact shells. Which of the following is the most likely reason this layer of seabed was not included in the studies?
 - **A.** 250,000 years is too old to obtain an accurate radiocarbon date.
 - **B.** Shells that were 250,000 years old would have been irrelevant to the studies.
 - **C.** Accurate measurements of the dimensions of the shells could have been impossible to obtain.
 - **D.** The scientists would not have been able to accurately determine the color of the shells.
- 2. With regard to the descriptions given in Study 1, the shells with the M-M-m-m-M band of scutes probably most closely resembled which of the following?



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- **3.** In Study 2, the average shell surface area of fossilized turtle shells that were 80,000 years old was closest to:
 - **A.** 670 cm²
 - **B.** 680 cm^2
 - **C.** 690 cm^2
 - **D.** 700 cm^2

4. Suppose, in Study 1, the scientists had found another seabed layer with fossilized shells that were radiocarbon dated and found to be 86,000 years old. Based on the results of Study 1, the scute pattern percents for the group of shells would most likely have been closest to which of the following?

	M-m-M-M-m	M-M-m-m-M	M-m-M-m-M
F.	100%	0%	0%
G.	50%	25%	25%
H.	36%	61%	4%
J.	26%	69%	5%

- **5.** According to the results of Study 2, how do the average shell surface area and the average bridge height of living turtles of the Opulasian Peninsula compare to those of the turtles of the Opulasian Peninsula from 120,000 years ago? For the living turtles:
 - **A.** both the average shell surface area and the average bridge height are larger.
 - **B.** both the average shell surface area and the average bridge height are smaller.
 - **C.** the average shell surface area is larger, and the average bridge height is smaller.
 - **D.** the average shell surface area is smaller, and the average bridge height is larger.



- **6.** Which of the following statements best describes how Study 1 differed from Study 2 ?
 - **F.** In Study 1, the scientists examined 2 characteristics regarding the shape and size of turtle shells; but in Study 2, the scientists examined the frequency of occurrence of different patterns of scutes on turtle shells.
 - **G.** In Study 1, the scientists examined the frequency of occurrence of different patterns of scutes on turtle shells; but in Study 2, the scientists examined the environment in which turtles live.
 - **H.** In Study 1, the scientists examined the frequency of occurrence of different patterns of scutes on turtle shells; but in Study 2, the scientists examined 2 characteristics regarding the shape and size of turtle shells.
 - **J.** In Study 1, the scientists examined 2 characteristics regarding the shape and size of turtle shells; but in Study 2, the scientists examined the environment in which turtles live.

- 7. From 100,000 years ago to 80,000 years ago, the average shell surface area:
 - A. increased only.
 - **B.** increased, then decreased.
 - **C.** remained constant, then decreased.
 - **D.** varied with no general trend.





ACT Practice Test Answers

Check your answers to the practice questions and use the results to help guide your studying.





ANSWERS AND EXPLANATIONS

Section 1: English

- D Apostrophes change in the answer choices, so this question tests apostrophe usage. A noun with an apostrophe shows possession. One of the...premier intellectuals belongs to the city, so an apostrophe is needed; eliminate (A) and (B). The difference between (C) and (D) is the singular versus plural possessive. The city referred to is Paris, which is singular, so the singular possessive is needed in this sentence. Eliminate (C) because cities' is plural. The correct answer is (D).
- 2. F Commas change in the answer choices, so this question tests comma usage. The phrase 1959 in Paris is necessary to the sentence, so it should not be set off by commas; eliminate (J). The sentence contains only one idea, so there is no need to include a comma after either 1959 or Paris, as neither place separates distinct ideas. Eliminate (G) and (H). The correct answer is (F).
- 3. B Note the question! When a question asks which answer would be *LEAST* acceptable, eliminate answers that are acceptable. Vocabulary changes in the answer choices, so this question tests which words give the clearest meaning. *Emerged, erupted,* and *burst* all mean something similar to *exploded,* as the sentence is written, so they are all acceptable. Eliminate (A), (C), and (D). The verb *released* requires an object; the new wave could have "released something," but it can't *released.* Choice (B) is not acceptable. The correct answer is (B).
- 4. G Punctuation changes in the answer choices, so this question tests how to connect ideas with the appropriate punctuation. The first part of the sentence, *Bazin published his first piece of film criticism in 1943 and pioneered a new way of writing about film*, is an independent clause. The second part of the sentence, *he championed the idea that cinema was the "seventh art," every bit as deserving as the more respected arts of architecture, poetry, dance, music, painting, and sculp-ture*, is also an independent clause. Two independent clauses must be separated by some type of punctuation other than a comma, so eliminate (F) and (H). Choice (G) appropriately uses a period to separate two independent clauses. Adding the word *although* to the beginning of the second part of the sentence makes it into a dependent clause. A period can only be used between two independent clauses, so eliminate (J). The correct answer is (G).





- 5. C Punctuation changes in the answer choices, so this question tests how to connect ideas with the appropriate punctuation. The first part of the sentence, *He championed the idea that cinema was the "seventh art," every bit as deserving as the more respected arts of,* is not an independent clause. A colon can only be used after an independent clause, so eliminate (A). There is no need to use a comma after *of,* so eliminate (B) and (D). Choice (C) appropriately uses a comma after *architecture* because it is the first item in a list. The correct answer is (C).
- 6. F Note the question! The question asks whether a phrase should be added to the end of the sentence, so it tests consistency. A phrase should be added only if it is consistent with the focus of the sentence. The sentence discusses how *the authors speak of film* in *early writings about film*. The new phrase gives more detail about the way in which *the authors speak of film*, so it should be added; eliminate (H) and (J). Choice (F) accurately describes the phrase. The phrase does not mention *the subjects of Bazin's writings*, so eliminate (G). The correct answer is (F).
- 7. C Note the question! The question asks whether a sentence should be added to the end of the paragraph, so it tests consistency. A sentence should be added only if it is consistent with the focus of the paragraph. The paragraph discusses the important ideas in Bazin's *film criticism*. The new sentence names the book in which Bazin's writings are published. The name of the book is not relevant to what the important ideas in the writings are, so the sentence should not be added. Eliminate (A) and (B). Choice (C) accurately states that the new sentence *interrupts the discussion of a specific theory of Bazin's*. There is no indication that *this statement is untrue*, so eliminate (D). The correct answer is (C).
- 8. J The length of the phrase surrounding *voice* changes in the answer choices, so this question tests concision. *Voice* is the last item in a list of things that belong to a director: *style, perspective, or voice.* The phrase *a director's true* at the beginning of the list refers to all three items, so there is no need to repeat *his* or *the director's.* Eliminate (F), (G), and (H). Choice (J) is concise and makes the meaning of the sentence clear. The correct answer is (J).
- 9. D Transitions change in the answer choices, so this question tests consistency of ideas. There is also the option to DELETE; consider this choice carefully as it's often the correct answer. A transition must be consistent with the relationship between the ideas it connects. The previous sentence states that Bazin and others were *the first* to do something, and this sentence states that *Bazin created a new way of looking at films*. There is no contrast between these ideas, so eliminate (A), (B), and (C) because they all contain contrasting transitions. No transition is necessary. Choice (D) is concise and makes the meaning of the sentence clear. The correct answer is (D).





- 10. J Punctuation changes in the answer choices, so this question tests how to connect ideas with the appropriate punctuation. When there is a dash in the answer choices, look at the non-underlined portion of the sentence to see whether there is another dash in the sentence. There is a dash in the non-underlined portion, after *Jean Renoir*. The phrase on such influential directors as Orson Welles, Vittorio de Sica, and Jean Renoir contains a list of names that is not necessary to the main meaning of the sentence. It should therefore be set off from the sentence by either commas or dashes both before and after the phrase. Since the non-underlined dash cannot be changed, the beginning punctuation must also be a dash. Eliminate (F), (G), and (H). The correct answer is (J).
- 11. **C** Note the question! The question asks which answer *would effectively conclude this paragraph and introduce the topic of the next*, so it tests consistency. A transition must be consistent with the relationship between the ideas it connects. This paragraph states that Bazin's early writings are *pioneering works of film criticism that are studied and emulated by film critics today*. The following paragraph says that *Bazin's greatest achievement was the strong impression he left on a young generation of French filmmakers and critics*. Neither paragraph discussions *the Italian Neorealist style*, so eliminate (A). Neither paragraph mentions *Henri Langlois's Cinematheque* either, so eliminate (B). Choice (C) mentions both Bazin's *great written achievements* and his *true and lasting influence*, so it is consistent with both paragraphs. Choice (D) mentions some *film critics* who were influenced by Bazin, which is consistent with this paragraph but not with the next one. Eliminate (D). The correct answer is (C).
- 12. J The length of the phrase changes in the answer choices, so this question tests concision. There is also the option to DELETE; consider this choice carefully as it's often the correct answer. The underlined portion describes *the international scene. International* means *all over the world* or *in every nation and country*, so there is no need to repeat that idea. Eliminate (F), (G), and (H). Choice (J) is concise and makes the meaning of the sentence clear. The correct answer is (J).
- 13. A Note the question! The question asks for the answer that would most effectively guide readers to understand the great importance of the two films discussed, so it tests consistency. Eliminate answers that are inconsistent with the purpose stated in the question. The phrase changed the landscape of international filmmaking indicates that the films were of great importance, so keep (A). When the films came out has nothing to do with their importance, so eliminate (B). Where the films were shot also is unrelated to their importance, so eliminate (C). Whether the directors knew Bazin personally similarly has nothing to do with the films' importance; eliminate (D). The correct answer is (A).





- 14. H Transitions change in the answer choices, so this question tests consistency of ideas. A transition must be consistent with the relationship between the ideas it connects. The sentence before the transition discusses *filmmakers* who *were beginning to exercise the new cinematic free- dom* at a particular time, *throughout the 1960s and 1970s*. The sentence beginning with the transition switches to the present tense; it discusses what happens when *a national film industry completely reinvents itself*. Neither *At that time* nor *Back then* makes the correct transition from *the 1960s and 1970s* to the present, so eliminate (F) and (G). Choice (H) appropriately introduces the present. There is no indication that the present is *the end* of filmmaking, so eliminate (J). The correct answer is (H).
- 15. B Note the question! The question asks whether the essay *illustrates how the writings of one film critic have had an influence beyond the realm of film criticism*, so it tests consistency. Determine whether the essay is consistent with this idea. The essay discusses the writings of Bazin and his influence on both film critics and directors, so it is consistent with this idea. Eliminate (C) and (D). The passage does not discuss *Bazin's influence on the six arts*, so eliminate (A). Choice (B) accurately describes the passage. The correct answer is (B).

Section 2: Mathematics

2. J The question asks for the value of x, so isolate the variable. First subtract 7 from both sides to

get $\frac{4x}{5} = -1$. Next, multiply both sides by 5 to get 4x = -5. Finally, divide both sides by 4 to get $x = -\frac{5}{4}$. Choice (F) neglects the negative sign. Choice (G) is the reciprocal of the correct

answer. Choices (H) and (K) are partial answers. The correct answer is (J).

- 8. J The question asks for the number of combinations of two things. Susie has 3 options for her T-shirt and 3 options for her pair of shorts. Susie can combine any of the T-shirts with any of the pairs of shorts, so there are 3 × 3, or 9, combinations. Choices (F) and (G) do not account for all possible combinations. Choice (H) is 2³ rather than 3². The correct answer is (J).
- 17. A The question asks for the difference in the prices of grapefruits at the two stores. Work through the problem one step at a time. Find the cost per grapefruit at each store by dividing the cost of each bag by the number of grapefruits in each bag. The cost per grapefruit at Fatima's is \$4.40 ÷ 8 = \$0.55, while the cost per grapefruit at Ernie's is \$1.86 ÷ 3 = \$0.62. Find the difference: \$0.62 \$0.55 = \$0.07. Choice (B) comes from multiplying \$0.07 by the difference in the number of grapefruits (8 3 = 5). Choice (C) comes from averaging \$0.55 and \$0.62. Choice (D) comes from adding \$0.55 and \$0.62. Choice (E) is the difference in costs of the two bags. The correct answer is (A).





- 20. **H** The question asks for the coordinates of the midpoint. To find the midpoint of a line, take the average of the *x*-coordinates $\left(\frac{x_1 + x_2}{2}\right)$ and the average of the *y*-coordinates $\left(\frac{y_1 + y_2}{2}\right)$ of the endpoints. The midpoint here is $\left(\frac{1+7}{2}, \frac{2+(-10)}{2}\right) = (4, -4)$. Choices (F), (G), and (K) incorrectly average the *x*-coordinates. Choice (J) incorrectly averages the *y*-coordinates. The correct answer is (H).
- 26. **F** The question asks for the data set that fits certain requirements—the mean (average), median (middle value), and mode (number that appears most often) all equal 8. Start with the easiest terms to calculate and use Process of Elimination. All five answer choices have a median of 8, but (G) and (K) can be eliminated because their modes are not 8. Calculate the mean of the remaining answer choices by adding the numbers and dividing by the number of terms. The mean of (F) is $\frac{5+7+8+8+12}{5} = \frac{40}{5} = 8$. The means of (H) and (J) are 8.6 and 9, respectively. The correct answer is (F).
- 32. **H** The question asks for Pierre's average speed, or rate, for the entire race. Use the formula *distance* = *rate* × *time*. The total number of miles he covers is the distance from starting point *S* to finish line *F*, which is *SF*. Eliminate (F), (G), and (J) because they don't include the entire length of the racecourse. The total elapsed time from point *S* to point *F* is t_F . Eliminate (K) because it doesn't use the elapsed time clocked at the end of the race. The correct answer is (H).
- 42. K The question asks for the number of tiles needed to cover the surface of the box. Work through the question one step at a time. The tiles must equal the surface area of the box, which is the sum of the areas of all 6 faces. There are three sets of faces: front/back, top/bottom, and the two sides. The sum of the areas of the faces is 2(4 × 9) + 2(3 × 9) + 2(3 × 4) = 72 + 54 + 24 = 150. Because each tile covers 1 cm², the artist must have 150 cm² ÷ 1 cm² = 150, (K). Choice (F) finds the area of only three faces, and (G) and (J) account for only two of the three pairs of faces. Choice (H) finds the volume of the box. The correct answer is (K).





- 44. **G** The question asks for the area of the trapezoid. To find the area of a trapezoid, multiply the height by the average of the bases. The bases are 6 and 14, so their average is $\frac{6+14}{2} = 10$. Therefore, the area of the trapezoid is (10)h = 10(3) = 30. Alternatively, break the trapezoid up into a rectangle and two right triangles, find the area of each of those shapes, and add them together. Choice (J) is the result of using the length of one of the slanted sides instead of the height. Choices (F) and (H) are the result of multiplying the height by the length of only one base. The correct answer is (G).
- 53. **B** The question asks for the perimeter of a figure. The perimeter is the distance around the shape's outline. There are two straight lines: from (0,0) to (0,4) and from (0,0) to (4,0), each with a length of 4. The straight lines total 8, eliminating (A), (D), and (E). The curved parts are two semicircles and two semicircles make one complete circle, so find the circumference of one circle with radius 2: $C = 2\pi r = 2\pi(2) = 4\pi$. The entire perimeter is thus 8 + 4 π . Choice (D) gives the area of the ornament. The correct answer is (B).
- 56. F The question asks for the value of an expression involving cosine. The definition of cosine is

$$\cos \theta = \frac{\text{adjacent}}{\text{hypotenuse}}$$
. In this triangle, $\cos S = \frac{r}{t}$ and $\cos R = \frac{s}{t}$. Therefore, $\cos^2 S + \cos^2 R = \frac{r^2}{t^2} + \frac{s^2}{t^2}$,
or $\frac{r^2 + s^2}{t^2}$. Since ΔRST is a right triangle, use the Pythagorean Theorem to determine that
 $r^2 + s^2 = t^2$. Substitute t^2 for $r^2 + s^2$ to find that $\cos^2 S + \cos^2 R = \frac{t^2}{t^2} = 1$. The correct answer
is (E)

is (F).

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Section 3: Reading

- 21. D The question asks which rules the writer is referring to with the phrase "the rules of polite etiquette." Read a window in the passage around the given lines. Lines 16–19 state, We have all been yelled at by a frustrated audience of our friends, acquaintances, and family members to cease our incessant noise making, and the next lines say that many learn to keep their songs to themselves as they master the rules of polite etiquette. The rules of polite etiquette are therefore rules that discourage people from behavior that others may find annoying. The passage doesn't say that people use less imagination when playing, so eliminate (A). There is no mention of behavior modification classes, so eliminate (B). Lines 22–23 indicate that songwriters never learn to keep their songs to themselves, but instead turn the songs into something people will be happy to hear. However, this does not imply that songwriters don't abide by the rules of polite etiquette, so eliminate (C). Keep (D), since it is supported by lines 16–21. The correct answer is (D).
- 22. F The question asks what is NOT a characteristic of the songs that a songwriter aspires to write, which people will be *happy to hear*. When a question asks which answer is **not** supported, eliminate answers that are supported. Use lead words from the answer choices to locate the relevant portions of the passage. Lines 88-96 state that songwriters learn to mimic expressions of joy and anguish and to write and perform songs without any genuine attachment to their emotional content. However, the author says that audiences can feel a difference between a contrived and an authentic performance. This implies that mimicking joy and anguish is not something that songwriters should aspire to, so keep (F). Lines 33-34 explain that There's a balance of two opposing forces that we enjoy in music. One force soothes, the other agitates. This indicates that people will be happy to hear songs that blend comfort and tension, so eliminate (G). Lines 76-78 state, When we develop a kinship with a song, we feel waves of euphoria as it plays. This indicates that people are happy to hear songs that foster a kinship with the listener, so eliminate (H). Lines 79-87, state that songwriters don't want to deny listeners the opportunity to mold our song into something they can claim as their own, so the songwriters make efforts to give a song enough flexibility that someone else can derive a different significance. This indicates that songwriters aspire to write songs that allow for different interpretations, so eliminate (J). The correct answer is (F).
- 23. **C** The question asks for the primary purpose of the passage. Because this is a general quetion, it should be done after all the specific questions. The author discusses music from the perspective of both the listener and the songwriter, including what songwriters try to accomplish when they write a song and the ways that people's taste in music develops as they age. Lines 43–46 suggest that *Successful songs…include both setbacks and triumphs*, and lines 67–78 explain that good songs allow the listener to *develop a kinship with a song*, and don't just include the songwriter's *private release*. Therefore, the author's purpose is not to *explain to readers that expressing pain will enable them to be good songwriters*, so eliminate (A). There is no mention of *catchy songs*.





in the passage, and the author does not try to *convince aspiring songwriters to stop giving in to polite etiquette*, so eliminate (B). Keep (C) because it captures the passage's focus on the *goals and process of songwriting* and on the audience's developing *expectations*. Lines 65–67 state that *the cultural backdrop of a child's upbringing calibrates her listening taste to a given set of rhythms, instruments, harmonic scales, and song structures*, but the author doesn't argue that *songwriters are too often limited by* this cultural backdrop, so eliminate (D). The correct answer is (C).

- 24. G The question asks what the author is referring to with the statement that a songwriter must aspire to "this private release." Read a window in the passage around the given line. Lines 76–78 state, When we develop a kinship with a song, we feel waves of euphoria as it plays, the feeling of our inner world radiating out. As songwriters, we must aspire to this private release in every song we write. Lines 80–87 explain that songwriters often replace specific details with general symbols in order to allow listeners the opportunity to mold our song into something they can claim as their own, so eliminate (F). Keep (G) since it conveys the idea of the inner world radiating out. The author doesn't advocate that songwriters force listeners to develop a kinship with their songs, so eliminate (H). Joy and anguish are mentioned as two expressions that songwriters can learn to mimic (lines 90–91); they are not emotions the author says songwriters must focus on, so eliminate (J). The correct answer is (G).
- 25. D The question asks for a goal with which adolescents approach songs that differs from that of children. Look for the words children and adolescents in the passage. Lines 60–67 discuss how children approach music, and lines 67–78 discuss how adolescents differ in their approach, saying, We look to find personal meaning in lyrics and to latch onto songs that seem to broadcast our private thoughts. The passage emphasizes familiarity as a quality that children prefer, so eliminate (A). The passage says that adolescents are trying to discover new trends, so eliminate (B). The passage indicates that the cultural backdrop of a child's upbringing calibrates her listening tastes, and that an adolescent's preferences are influenced by other things. However, it does not say that adolescents from their cultural backdrop, so eliminate (C). Keep (D) because it is supported by lines 71–73. The correct answer is (D).
- 26. H The question asks what selection process cannot be compared to our process of selecting songs. When a question asks which answer is not supported, eliminate answers that are supported. Look for references to selecting songs in the passage. Lines 59–78 discuss the ways we select songs as children and adolescents. Lines 68–69 say, we begin to choose our own songs just as we would choose our friends, so eliminate (F). Lines 60–62 say, we passively accept and learn to love our parents' music just like we do their cooking, so eliminate (G). The word author appears in line 73, but the phrase says, Despite not being the author of our favorite songs; this is not a comparison with choosing our favorite authors, so keep (H). Lines 74–76 say, we wear our songs





like trinkets of personal expression, telltale accessories that describe to others important parts of our psychology, so eliminate (J). The correct answer is (H).

- 27. B The question asks how the *first sentence functions in relation to the passage as a whole*. Because this is a general question, it should be done after all the specific questions. The passage as a whole discusses songwriting, and the first two paragraphs relate the author's personal experience as a songwriter. The first sentence states, *I used to have to feel pain in order to write songs*. This is an introduction to the author's personal story. In lines 91–93, the author says, *It becomes easy for us to write and perform songs without any genuine attachment to their emotional content*. This indicates that the requirement given in the first sentence changed for the author over time, but not that it is *not true in the real world of songwriting*, so eliminate (A). Keep (B) because it is supported by surrounding context of the passage. The passage does not contend that *singing about one's problems is evidence of a lack of self-control*, so eliminate (C). The second paragraph elaborates on the first sentence, so eliminate (D). The correct answer is (B).
- 28. **G** The question asks how the *divergent songwriting purposes of "soothes" and "agitates" differ from one another.* Read a window in the passage around the given line. Lines 49–53 state, Young children often enjoy hearing soothing lullabies as a way to be distracted from anxiety or coaxed into a peaceful slumber. They take great pleasure in singing agitating songs, such as the "nenny nenny boo boo" melody that can be customized into any taunt. There is no indication that soothing songs are *annoying to younger audiences,* so eliminate (F). Keep (G) because it is supported by lines 49–53. *Agitating songs* are not related to *slumber* in the passage, so eliminate (H). The passage says that *soothing* songs can distract children from anxiety; it does not say that *agitating songs distract us from the things that we passionately hate,* so eliminate (J). The correct answer is (G).
- 29. B The question asks what the author's analogy conveys about acting and performing music. Look for the words acting and performing in the passage. Lines 93–96 state that just as audiences can distinguish between good and bad acting, so too will audience members feel a difference between a contrived and an authentic performance. The author is highlighting a similarity between acting and performing, so eliminate (A) and keep (B). There is no contrast made between expressing anguish and joy; both are listed as expressions that performers learn to mimic, so eliminate (C). The author only mentions one shared aspect of acting and performing; there is not support for the statement that they are completely identical, so eliminate (D). The correct answer is (B).





30. F The question asks why the cultural backdrop of a child's upbringing is significant to her appreciation of music. Look for the words cultural backdrop of a child's upbringing in the passage. Lines 65–67 state that the cultural backdrop of a child's upbringing calibrates her listening tastes to a given set of rhythms, instruments, harmonic scales, and song structures. Keep (F) because it is a paraphrase of lines 65–67. This paragraph is not discussing what to avoid in order to stand out as an original songwriter, so eliminate (G). Political content is not mentioned in relationship to cultural backdrop, and there is no discussion of what is proper, only what is familiar; eliminate (H). The passage does not state that a child's cultural backdrop is a basis through which the child is able to make friends, so eliminate (J). The correct answer is (F).

Section 4: Science

- 1. C The question asks why the 250,000-year-old layer of seabed was not included in the studies. To determine why a *layer of seabed* was included, look for those key words in the passage. Paragraph 2 states that *from each layer of seabed, the scientists randomly selected 100 complete, unbroken fossilized shells.* Nothing is mentioned in the passage about how far back radiocarbon dating is accurate, so (A) is incorrect. There is nothing to suggest that the scientists are interested only in a certain time period, so (B) can be eliminated. Choice (C) states that *accurate measurements could have been impossible to obtain* and one reason is that only *fragments of twelve turtle shells but no complete, intact shells were found,* so keep it. The scientists are not trying to *determine the color of the shells,* so eliminate (D). The correct answer is (C).
- 2. G The question asks which picture most accurately depicts the shells with the M-M-m-m-M band of scutes, according to the descriptions in Study 1. Look at the description of Study 1. It states that all of the living turtles had a distinct band of hexagonal scutes (boney plates) running the length of their shells and that scutes extending greater than ¼s of the length of the shell were labeled major (M), where the scutes extending less than or equal to ¼s of the length of the shell were labeled minor (m). This means that the uppercase M represents the large hexagonal scutes and the lowercase m represents the small hexagonal scutes. Look for the answer that shows two large hexagons, followed by two small hexagons, followed by one large hexagon, as described by the pattern given in the question stem. Eliminate (F), (H), and (J). The correct answer is (G).
- 3. A The question asks what *the average shell surface area* was for *turtle shells that were 80,000 years old,* according to Study 2. Look at the third graph in Figure 2 of Study 2. The *age of shells* is located on the *x*-axis. Find 80,000 years old and draw a line up to the graph line. Next, draw a horizontal line to the *y*-axis. The average shell surface area is about 670 cm². The correct answer is (A).





- 4. J The question asks what the scute pattern percents would be for each group of shells if in Study 1 scientists had found another seabed layer with fossilized shells that were radiocarbon dated and found to be 86,000 years old. Look at Table 1 in Study 1 which shows the percents of shells with each of the three different scute patterns. Look at the left-most column and draw a line straight across the graph where the data for the 86,000-year-old shells would belong, between 85,000- and 87,000-year-old shells. Notice that the line falls between 21 and 30 percent of shells with the M-m-M-M pattern. Eliminate (F), (G), and (H) because the percent with that pattern is greater than 30. Keep (J) because the percentage is 26, which is in range. Since there is no distinct trend in that first column, check to make sure that the percentages from the other columns are also appropriate. In the column M-m-m-M, 69% falls between 67% and 72%; in the column M-m-M-m-M, 5% falls between 3% and 7%. The correct answer is (J).
- 5. D The question asks to compare the average shell surface area and the average bridge height from currently living turtles to turtles who lived 120,000 years ago. Since the question asks about Study 2, refer to Figure 2 to find the answer. Start with the average shell surface area in the bottom graph. At the point for 120,000 years ago, the average shell surface area was about 650 cm². Currently, at 0 years ago, the average shell surface area is closer to 640 cm². Therefore, average shell surface area has decreased. Use this information to eliminate (A) and (C). Now examine average bridge height in the upper graph. At the point for 120,000 years ago, the average bridge height is about 2.1 cm. Currently, at 0 years ago, the average bridge height is about 2.5 cm. Therefore, average bridge height has increased. Eliminate (B). The correct answer is (D).
- 6. H The question asks about the differences between Study 1 and Study 2. Read through the answers and look for false statements to help eliminate incorrect choices. Choices (G) and (J) claim that *the environment in which turtles live* was examined in Study 2. This is false, as environments were not examined in either of the studies. Eliminate (G) and (J). Notice that the remaining choices are opposites and that one of them must therefore be correct. Refer back to the tables and figures for each study to help find the answer. Study 1 examined the *different patterns of scutes on turtle shells*, while Study 2 examined *2 characteristics regarding the shape and size of turtle shells*. The only answer choice that matches this information is (H). The correct answer is (H).
- 7. B The question asks about average shell surface area, so refer to the bottom graph of Figure 2. For this question, compare the trend in average shell surface area between 100,000 years ago and 80,000 years ago. At 100,000 years ago, the average shell surface area was approximately 675 cm². From this point, it continues to increase sharply until about 90,000 years ago when it abruptly begins to decrease. By 80,000 years ago, the average shell surface area was approximately 670 cm². Since average shell surface area first *increased* and then *decreased*, the correct answer is (B).







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