

Elementary Level

Math

1. There are 30 rows of seats on each side of the aisle in the school auditorium. If there are 11 seats on the left and 11 seats on the right, how many seats are there in the auditorium?

- 30
- 60
- 333
- 633
- 660

Of course at Ivy Bridge, we will make sure the students can understand the math behind the question. $(30 \times 11) + (30 \times 11)$ But we will also point out to them that 30 is found in the question and therefore unlikely to be correct. We also will teach ballparking. In this problem, there are two forms of ballparking (Size and Digit) we can use. First, we know that if there were just 10 seats per row, there would be 300 on one side and 10×30 is simple. This type of thinking can easily get us to the correct answer. The other form of ballparking tells us that 30 times any whole number will have a 0 as the unit's digit. Based on that, we could eliminate 333 and 633. Only 660 is reasonable.

Synonyms

Semblance:

- A) Freeze
- B) Harm
- C) Appear like
- D) Overly complex
- E) Special

What word does 'Semblance' seem like?

Perhaps you thought it resembled the word 'seem', which means to appear like.

Analogies

5. Gorgeous is to hideous as

- poodle is to dog
- baker is to cake
- course is to coarse
- pretty is to beautiful
- wonderful is to horrible

If we know both of these words, then we should have no problem realizing the answer is E because they are opposites. However, if didn't know both words, we could still have eliminated C for two reasons. The first reason is that they have no relation. However, if we didn't know one or both of those words, at Ivy Bridge we could still eliminate it because the chance of two words in the English language sounding the same and having a defining relationship is so miniscule that we can be sure the test makers would not put them as an answer pairing.

Reading Comprehension:

Read the passage carefully and then answer the questions about it. For each question, decide on the basis of the passage which one of the choices best answers the question.

A hiker's foot dangling from a boat sets the crocodile in motion. When saltwater crocodiles sense food, it can start a "feeding frenzy." Crocs race in from all directions. They go wild, attacking all within reach, including humans. They have been known to jump out of the water and attack humans or dogs on land.

Crocodiles are highly territorial, especially females with babies. It is not wise to approach baby croquettes. They may look cute and harmless, but they are not.

Smaller freshwater crocodiles might attack if bothered. A camper poked what he thought was a sleeping crocodile with a stick. Suddenly the croc turned and bit off his leg.

7. This passage is primarily about

- hiking safety rules
- the dangers of fishing
- why crocodiles attack
- dangers of baby crocodiles
- different kinds of crocodiles

8. In line two, "frenzy" most closely means

- race
- time
- calm
- furor
- mental illness

The first type of question is called vocabulary in context. Most often, the word is an advanced word the student doesn't know, or it is a word that seems familiar, but the definition being tested is not the primary definition. In this case, for grade 3 or 4 students, 'frenzy' might be beyond their vocabulary. They should immediately eliminate 'race' as it is a trick answer that is related and even stated shortly after. Calm and mental illness are opposite and entirely unrelated. We also know that we need something that is describing the feeding. Time is not a descriptive word. Furor, if the student knows the word, fits perfectly. But at Ivy Bridge, we make sure the student has other tools available in the event they cannot do the problem as the test maker intended.

Writing Sample:

Look at the picture and tell a story about what happened. Make sure your story includes a beginning, a middle, and an end.

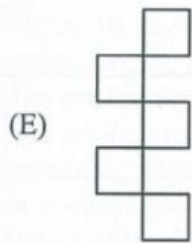
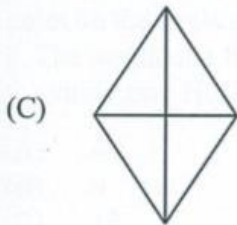
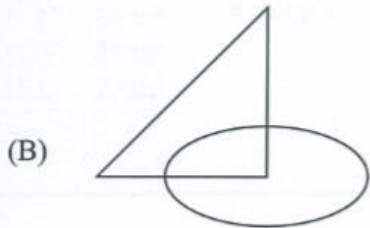
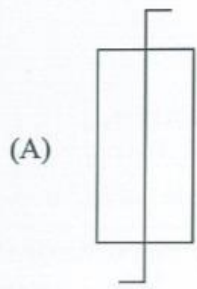


The essay, which is counted separate from the score, does not match the difficulty of the other sections. Ivy Bridge will make sure the students understand what the graders will look for: structure and some creativity, both of which are easily teachable.

Middle Level

Math

6. Of the following figures, which one CANNOT be drawn without lifting the pen or retracing?



24. If $\blacksquare x = x^3 + 2$, what is the value of $\blacksquare 2$?

- (A) 5
- (B) 7
- (C) 8
- (D) 10
- (E) 12

The math of this question is not too difficult, but many students panic when they see a symbol they are unfamiliar with. The black square is not a mathematical symbol and therefore the test maker must define it. In this case, it is defined as $x^3 + 2$ and $x=2$ which gives us answer choice D).

3. REMINISCE

- (A) systemize
- (B) recollect
- (C) prepare
- (D) advertise
- (E) restore

What word does this word remind you of? _____

When a student doesn't know a word in the synonyms section, there are very few tricks Ivy Bridge can provide. However, one way to get around a deficiency in vocabulary is to connect words. Ivy Bridge only recommends this strategy when the number of the question is low, because otherwise it can be a trap. The order of difficulty increases as the question number increases. Reminisce REMINDS me of remind, which is similar only to recollect.

39. Jest is to rest as

- (A) adore is to snore
- (B) joke is to relax
- (C) awake is to sleep
- (D) jumble is to bumble
- (E) tally is to rally

As we mentioned in the elementary section of analogies, it is fair to assume that two words that rhyme do not have a defining relationship. A defining relationship is what is important in the analogies section because this relationship is the only way that the test maker can defend their correct answer. A defining relationship is one in which one word can be used to define the other without conditions like 'sometimes'. For example, a dog is a type of mammal instead of a dog is a type of pet (there are some wild or stray dogs). So, in our example above, we notice that there is not a definitional connection between jest and rest. Therefore, the analogy must be vertical. Vertical analogies are rare, less than 10%. Ivy Bridge teaches that once a student recognizes a vertical analogy, pick the word they are most familiar with and find the word below it that has a definitional relationship. 'Rest and Sleep' (Sleep is a type of rest) and 'Rest and Relax' (Rest is the same as relax) are the two possibilities. If a student did not know jest, they would still have a 50-50 chance to answer correctly. Jest means to joke.

Reading Comprehension

"What will you have, dear Frog?" said she. "My dresses, my pearls and jewels, or the golden crown which I wear?"

Line 5 The Frog answered, "Dresses, or jewels, or golden crowns are not for me; but if you will love me, and let me be your companion and playfellow, and sit at your table, and eat from your little golden plate, and drink from your cup, and sleep in your little bed,—if you will promise me all these, then will I dive down and fetch up your golden ball."

10 "Oh, I will promise you all," said she, "if you will only get me my ball." But she thought to herself, "What is the silly Frog chattering about? Let him remain in the water with his equals; he cannot mix in society." But the Frog, as soon as he had received her promise, drew his head under the water and dived down. Presently he swam up again with the ball in his mouth, and threw it on the grass. The King's daughter was full of joy when she again saw her beautiful plaything; and, taking it up, she ran off immediately. "Stop! stop!" cried the Frog. "Take me with you. I cannot run as you can." But all his croaking was useless; although it was loud enough, the King's daughter did not hear it, but, hastening home, soon forgot the poor Frog, who was obliged
15 to leap back into the fountain.

6. In lines 1-2, the princess offered clothing and jewelry to the frog because
- (A) she felt bad that the frog had to live outside
 - (B) she wanted to trade her old things for a new toy
 - (C) she was a kind and generous princess
 - (D) she wanted the frog to retrieve her lost toy
 - (E) she wanted the frog to be her new friend
7. What best explains why the princess didn't stay to play with the frog?
- (A) She forgot about her promise to play with the frog.
 - (B) She probably meant to come back for the frog later.
 - (C) She didn't understand what the frog wanted.
 - (D) She had never intended to keep her promise to the frog.
 - (E) She had already told the frog that she wouldn't be his playmate
8. The princess's actions could best be described as
- (A) evil
 - (B) deceitful
 - (C) menacing
 - (D) unlikely
 - (E) virtuous
9. Based on the context of the passage, what is the most likely meaning of "hastening" (line 14)?
- (A) going quickly
 - (B) ignoring someone
 - (C) playing loudly
 - (D) sneaking quietly
 - (E) hopping joyfully

The passage itself is written in an older form of English, so we have to be a little more careful. Let's take a look at these one by one.

Lines 1-2 by themselves do not provide the answer. Ivy Bridge teaches students to read a window of lines. In this case, it is not until line 6 that we can tell what the princess is bartering for. Without reading that far, the answers all SEEM ok, but are unprovable. The frog wants to be her friend, but we don't know at this point her intention other than trading things (that may not be old things) for a toy she already owns. "Fetch YOUR golden ball"

'Never' is extreme language; however, on very rare occasions, extreme language can be correct. At the same time her promise is out of her mouth she has decided to break it.

Speaking of extreme language, 'Evil' is quite extreme. Furthermore, it is possible to be evil without being deceitful. Her actions are not meant to provoke the frog either, as menacing would assume.

The last one is a typically vocabulary in context question. Make sure you have an idea in your own words before you look at the answers! [see elementary level reading for additional practice] She does

ignore him right after we see the word, but that is exactly what a trap answer will look like. She is hurrying home.

Writing Sample

Choose one of the two creative story starters given below and write a creative story in the space provided. Make sure you organize your ideas clearly and keep your writing interesting.

- 1.) With my bags packed, I headed out the door.
- 2.) The rain hadn't stopped for the past three days.

The writing sample is separate from the scoring. Students should use the relatively simple assignment to display their ability and uniqueness. Keep an ordered beginning-middle-end structure that makes sense and the minimum requirement is met. Any extra writing talent or facts about the test taker are what make an elite response.

I remembered my trip like it was yesterday. It wasn't like the other trips, the ones called vacations. This time I was going to help other people. With my bags packed, I head out the door.

We were in a poor part of the south of China. While the rooms where we stayed were not as nice as my other trips and we weren't allow to use our cellphones, I didn't mind because it was obviously better than where the people we were helping lived.

Every day we interacted, taught, and helped any way we could with improving their living conditions. One particular student and I bonded. We played games and his English improved a lot, and I even gave him an English name, David, which at first he had trouble to say. I also learned about how our lives were so different, but we still had a lot in common.

I was happy I had helped so much, but I was also happy to go home. I wanted to stay in touch with David and return one day to do more. I had a new appreciation for my other vacations and assisting people less fortunate and, with my bags packed, I headed out the door.

Upper Level

Math

What is the median of the first 4 non-negative even integers?

- A) 2
- B) 3
- C) 4
- D) 5
- E) 6

Sometimes the upper level math might appear easier than the middle level (see middle level math). In this case, there is a trick. Many students might forget that 0 is an even number that is not negative. The test maker has the trap answer of D) if the student knew what the other vocabulary words meant. B) is the correct answer.

Verbal

29. Nursery is to plants as
- (A) hospital is to people
 - (B) ocean is to fish
 - (C) sun is to planet
 - (D) school is to children
 - (E) apiary is to bees

This analogy appears to be a vertical type of analogy (see middle level for more information) because nursery and plants do not have any defining relationship. A nursery is a place for infants and plants are a category of living beings that derive energy from the sun. However, when we try to find a defining relationship vertically, we run into some problems. A nursery is a part of a hospital, but plants are not parts of people. None of the other ones even have a definitional sentence that could be made. In this case, Ivy Bridge instructs its students to realize that one of the words in the problem has a definition unknown to the student and that the problem is in fact a regular, horizontal analogy: there is a definitional relationship between nursery and plants. We cannot know what that relationship is, but we can still eliminate bad answers and make a good guess.

Hospitals are a place to heal injured people.

Ocean is a place where fish live.

Sun keeps planets in orbit

School is a place to educate children

Apiary??? Is to bees?

If we don't know apiary, we will keep it for now. Is there any word you know of in English that is a place for plants to heal? Or be in orbit or educated? Even without knowing the second or third definition of nursery, we can have a 50-50 guess. Between B and E, either guess is fine, depending on whether you think English has a specific word 'nursery' for a place where plants live. An apiary is a place where bees are grown and developed, which is what a nursery is for plants.

61. UNCOUTH
- (A) impolite
 - (B) concerned
 - (C) delicate
 - (D) mindless
 - (E) dirty

Sometimes there is no substitute for knowing the word. In this case, if the student doesn't know the word, the correct strategy is to quickly know that and then stop wasting time and SKIP the question. There is a penalty for a wrong answer. Learning vocabulary is crucial for raising the verbal score (and it helps with reading also).

Reading

The living come with grassy tread
To read the gravestones on the hill;
The graveyard draws the living still,
But never anymore the dead.

5 The verses in it say and say:
"The ones who living come today
To read the stones and go away
Tomorrow dead will come to stay."
So sure of death the marbles rhyme,

10 Yet can't help marking all the time
How no one dead will seem to come.
What is it men are shrinking from?
It would be easy to be clever
And tell the stones: Men hate to die

15 And have stopped dying now forever.
I think they would believe the lie.

— Robert Frost
In a Disused Grave Yard

16. In the poem, what question do the grave stones have for the speaker?
- (A) Why do living people come to visit the grave yard?
 - (B) How many people have been buried at the grave yard?
 - (C) Why have the dead ceased to be buried at the grave yard?
 - (D) When will the speaker join the dead at the grave yard?
 - (E) From where do the people who visit the grave yard come?
17. With which one of the following statements about the grave yard would the author be most likely to agree?
- (A) The stones mark graves of people whose names are unknown.
 - (B) The grave yard is no longer used to bury the dead.
 - (C) People have stopped visiting the grave at the grave yard.
 - (D) The grave stones are responsible for the lack of new graves.
 - (E) People have learned how to avoid dying.
18. "Tomorrow dead will come to stay" (line 8) suggests that
- (A) The visitors of the grave yard will eventually be buried there.
 - (B) The dead have not yet been buried but will be buried soon.
 - (C) Reading the stones at the grave yard can foretell one's death.
 - (D) The speaker of the poem worries that he will die shortly.
 - (E) There is an eternal conflict between the living and the dead.
19. Which is true of the grave stones in the grave yard?
- I. They believe new dead will arrive again.
 - II. They do not like visits by the living.
 - III. They might believe that men no longer die.
- (A) I only
 - (B) II only
 - (C) I and III only
 - (D) II and III only
 - (E) I, II, and III

Poetry is frequently the most difficult passage for many students. Poetry, unlike academic articles, is intentionally not straightforward. And the language and message is usually more opaque than prose fiction in order to provide the artistic quality that makes poetry appealing.

Nonetheless, the strategy is the same.

In the first problem, we already see the figurative nature of this type of writing: stones cannot ask questions. In this case, the stones ask what men are shrinking from? Of course, the test makers will not directly copy the line from the passage. So the student will have to understand that living people still come but that dead people no longer arrive to be buried.

The other answers are typical trap answers. A) Is mentioned in the passage but is not what the stones are asking. The other wrong answers are all unrelated to the passage.

The next question is easy if we understood and correctly answered the previous one. It is worth noting a rare type of trap answer. E) is an example of 'too literal' in which the answer is stated in the passage, but it is clear that the author did not mean the statement to be taken as fact; often it is sarcasm or satire. B) is the correct answer.

In the first two problems, there is extra information outside of the text that could have helped us. In the bottom right corner, we can see the author's name and the title. The title provides a major clue as to what is going on in the poem.

The next question has similar types of bad answers as the first question and a similar correct answer: the message from the passage written in different words. Since this is a poem, the words the test makers use are actually simpler than in the passage. A) is the correct answer as tomorrow refers to the future of the visitors and dead will come refers to the state they will be in to permanently stay at the graveyard. Answer choice E) is a common type of trap answer in which the test maker provides a true statement that does not answer the question or is unrelated to the passage.

The last question is a great format for process of elimination. Roman numeral II has no evidence to support it, as there is no suggestion of like or dislike in the entire poem other than 'men hate to die'. This elimination leaves us with a 50-50 chance to get it right. The stones have a rhyme they believe about people coming to the graveyard dead. The stones also might believe the long absence of new corpses is because man has become immortal. C) is the correct answer.

Writing

Ⓐ I was minding my own business when I noticed...

Ⓑ The penny on the street was so shiny.

The upper level writing is very similar to the middle level and is scored separate. The story needs to have good structure and should be seen as an opportunity for the test taker to show his or her talents and characteristics.