Highly Qualified Examination for Paraprofessionals: Preparation Resource for Candidates

Overview:

The Highly Qualified was developed as a result of the No Child Left Behind Act of 2001 (NCLB) and is now a requirement of the Pennsylvania Department of Education's requirements for paraprofessionals under the Every Student Succeeds Act of 2015 (ESSA). The exam is designed to ensure that our paraprofessionals are equipped to assist students with various aspects of academic work.

There are several positions within the District which require the Highly Qualified Exam: Supportive Service Assistant, Special Education Assistant, Bus Attendant. Additional positions that require the Highly Qualified exam but are not currently open include: Climate Support Specialist, and Bright Futures Classroom Assistant.

The Highly Qualified consists of 80 questions and topics include the following:

- Reading comprehension
- Vocabulary
- Text analysis
- Grammar and spelling
- Basic math (calculators provided)
- Adding and subtracting fractions
- Algebra, graph reading, and measurements
- Logical reasoning
- Application of skills to assist in a classroom setting

NOTE: The "Highly Qualified" classification means you have taken and passed the Highly Qualified exam, OR already possess a minimum of 60 college credits or an Associate's Degree or higher from an accredited academic College or University. Please note, most technical and vocational degrees are unacceptable and subject to verification. If you have the required college credits, you are exempt from taking the exam. The Office of Talent will provide next steps at the time of the exam invitation.

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Exam Contents

Below is an overview of the types of questions covered on the Highly Qualified Exam. This study guide contains several questions relevant to each topic covered on the exam.

- I. Reading Comprehension (12 questions)
- II. Basic Math (14 questions)
 - A. Calculator computations (10 questions)
 - B. Equations with fractions (4 questions)
- III. High Level Math (19 questions)
 - A. Graphs, geometry, algebra, percentages, word problems, probability
- IV. Mechanics (35 questions)
 - A. Grammar and spelling (13 questions)
 - B. Vocabulary (19 questions)
 - C. Alphabetizing (3 questions)

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Practice Questions

- 1. Change ¼ to decimal form.
 - a. 0.875
 - b. 0.0875
 - c. 1.142
 - d. 0.1142
- 2. Find a fraction equivalent to 0.21
 - a. $^{2}/_{10}$
 - b. $^{2}/_{100}$
 - c. $^{21}I_{10}$
 - d. $^{21}/_{100}$
- 3. 8² equals:
 - a. 16
 - b. 64
 - c. 82
 - d. 98
- 4. ADD: % + 6/₁₅
 - a. 1 ½
 - b. 1 %
 - c. 1 %
 - d. 1 %
- 5. SUBTRACT: \(\frac{1}{6} \) from \(\frac{5}{18} \)
 - a. %
 - b. ¹/₉
 - c. $^{1}/_{18}$
 - d. $^{7}/_{18}$
- 6. ADD: 95.643, 2.46 and 87.32
 - a. 104.621
 - b. 104.521
 - c. 185.423
 - d. 207.563

- 7. MULTIPLY: $2^{3}/_{7} \times 4^{1/_{3}}$
 - a. 10.49
 - b. 10.25
 - c. 10.52
 - d. 10.74
- 8. DIVIDE: $3^{3}/_{7}$ by $1^{3}/_{14}$
 - a. 0.282
 - b. 0.228
 - c. 2.28
 - d. 2.82
- 9. DIVIDE: 7 1/2 by 5
 - a. 0.586
 - b. 1.5
 - c. 35.5
 - d. 37.5
- 10. What percent of 75 is 90?
 - a. 8.3%
 - b. 12%
 - c. 83.3%
 - d. 120%
- 11. Jamal went on a diet and lost 10% of his weight. If he now weighs 126 pounds, what was Jamal's original weight?
 - a. 114 pounds
 - b. 136 pounds
 - c. 140 pounds
 - d. 145 pounds
 - 12. If x = -2, y = 4 and z = -3, evaluate x yz.
 - a. 8
 - b. 9
 - c. 10
 - d. 12
 - 13. In the number 3,458,245, three is in which place?
 - a. Tens
 - b. Hundreds
 - c. Thousands
 - d. Millions

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- 14. A teacher who has worked for the District of forty years is retiring. The paraprofessionals and teachers at her school, numbering 45 in all, are giving her a watch that costs \$146.05. If five teachers contribute \$6.00 each, how much money must each remaining assistant or teacher donate in order to cover the cost of the retirement gift?
 - a. \$2.61
 - b. \$2.71
 - c. \$2.81
 - d. \$2.91
- 15. A Classroom Assistant saves \$15.45 per week. How many weeks must that Assistant save before he/she will be able to buy a savings certificate costing \$87.70?
 - a. 4
 - b. 5
 - c. 6
 - d. 7

In questions 16 through 19 you will be given a reading selection and questions to answer based on the selection. Be sure to answer each of these questions only on the basis of information contained in the reading selection.

Louis Untermeyer, in his introduction to a book of Frost's poems, wrote that the character as well as the career of Robert Frost gives the lie to the usual misconceptions of the poet. Frost has been no less the ordinary man for being an extraordinary creator. The creator, the artist, the extraordinary man, is merely the ordinary man intensified; a person whose life is sometimes lifted to a high pitch of feeling and who has the gift of making others share his excitement.

There are curious contradictions in the life of Robert Frost. Though his ancestry was based in New England, he was born in California. The most American of poets, he was first recognized in England and not in the U.S. Not believing in competitions he never entered them, yet he won the Pulitzer Prize four times. The "rough conversational tones" of his blank verse are remarkable for their lyrical music. Though he has chosen one part of the country on which to focus his poetry, no poetry so regional has ever been so universal.

- 16. According to the passage, a distinctive quality of Frost's poetry is its:
 - a. Obvious symbolism
 - b. Unusual rhymes and rhythms
 - c. Spirituality
 - d. Association with one section of the country

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- 17. According to the passage, Robert Frost could be considered "the most American of poets" for all of the following reasons EXCEPT that:
 - a. He focused his poetry on a specific region of America
 - b. His verses are often patriotic
 - c. His background is American
 - d. His poetry often sounds like everyday American speech
 - 18. The author of the passage apparently believes that Robert Frost's life was:
 - a. Typical of a poet's life
 - b. Extraordinary
 - c. Rather ordinary
 - d. No different from that of the farmers of Vermont
 - 19. The passage suggests that a successful poet must:
 - a. Invent new forms and styles of expression
 - b. Be misunderstood by society
 - c. Endow ordinary matters with excitement
 - d. Avoid acting like an ordinary man
- 20. Billie Holiday became on of the greatest jazz singers of all <u>time</u> even though she did not have any formal training.

In the above sentence, the underlined word is being used as:

- a. A noun
- b. A verb
- c. An adjective
- d. An adverb
- 21. Alexander is <u>learning</u> how to use transition words.

In the above sentence, the underlined word is being used as:

- a. A noun
- b. A verb
- c. An adjective
- d. An adverb

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22. The role of a <u>paraprofessional</u> is to enhance the classroom learning experience for all students.

In the above sentence, the underlined word is being used as:

- a. A noun
- b. A verb
- c. An adjective
- d. An adverb
- 23. Studies have shown that people who <u>routinely</u> include diet and exercise in their lifestyle live longer than those who don't.

In the above sentence, the underlined word is being used as:

- a. A noun
- b. A verb
- c. An adjective
- d. An adverb

DIRECTIONS: In each of the questions x through x, select the word, which means most nearly the same as the word that is underlined.

- 24. A person who <u>interjects</u> is usually:
 - a. Rude
 - b. Speaking
 - c. Interrupting
 - d. Pointing
- 25. Something that is <u>distinctive</u> is usually:
 - a. Difficult
 - b. Unique
 - c. Standard
 - d. Vital
- 26. To proof means to:
 - a. Recognize
 - b. Picture
 - c. Redo
 - d. Edit

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27. A consequence is a:

- a. Result
- b. Meaning
- c. Belief
- d. Solution

28. To emphasize means to:

- a. Stress
- b. Understand
- c. Demand
- d. Develop

29. To isolate means to:

- a. Verify
- b. Instigate
- c. Segregate
- d. Determine

30. Which of the following words CANNOT be substituted for debate?

- a. Dispute
- b. Discuss
- c. Unveil
- d. Argue

31. Which of the following is a sentence fragment?

- a. He had intended to finish his third novel by now.
- b. We never thought that the information could be so helpful.
- c. Creativity is a gift that should be nurtured.
- d. Since growing new plants was not an option at that time.

32. Which of the following is a sentence fragment?

- a. He will probably need to find a new insurance company.
- b. Having been caught in heavy traffic on the expressway.
- c. She is prepared for all of her assignments.
- d. I will do it when I get a chance.

33. Which of the following is **NOT** a reference book?

- a. Thesaurus
- b. Fiction
- c. Encyclopedia

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d. Dictionary

DIRECTIONS: The following questions 34 through 37 refer to a list of the students in a classroom where a paraprofessional is aiding the teacher.

DeWees, Marla Friedman, Fred Bauder, Devon Hall, Tara

Lidstone, Sharika Cenna, Michael King, James Waters, Jason Jones, John Aldrich, Max Johnson, Sheila Buford, Jamilla Szymanski, Donna Coyle, James Yoder, Lacey Quayle, Jonathan King, Morris Rodriguez, Carmen Brown, Tamika Melendez, Jocette

- 34. In an alphabetized pile of tests, which name would appear first?
 - a. King, James
 - b. Jones, John
 - c. Johnson, Sheila
 - d. Lidstone, Sharika
- 35. The teacher has asked the assistant to collect the tests from the students and alphabetize them. The name on the last test in the pile would be:
 - a. Waters, Jason
 - b. Yoder, Lacey
 - c. Szymanski, Donna
 - d. Quayle, Jonathan

In questions 36 and 37, find the word that is spelled **incorrectly**.

- 36. a. Novelist
 - b. Nutrient
 - c. Sabatage
 - d. Unsaturated
- 37. a. Barriar
 - b. Ceremony
 - c. Galop
 - d. Hereditary

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Key:

1. A

Explanation: This problem can be done by simply dividing 7 by 8 on a calculator. The decimal form is 0.875.

2. D

Explanation: The decimal 0.21 has digits in the tenths and hundredths place, so the fraction form would be $^{21}/_{100}$.

3. B

Explanation: To find the numerical value for exponents, multiply the base (in this case, 8) by itself. The number of times the base is multiplied by the itself should be equivalent to the exponent (in this case, 2). Therefore, the equation here is 8 x 8, which equals 64.

4. A

Explanation: To add fractions with different denominators, we must first find a common denominator, which in this case is 15. The equation is then changed from $\% + {}^6/_{15}$ to ${}^{12}/_{15} + {}^6/_{15}$. We can then add the fractions easily for a result of ${}^{18}/_{15}$. To simplify, we get 1 ${}^3/_{15}$, which is equal to 1 %.

5. B

Explanation: To add fractions with different denominators, we must first find a common denominator, which in this case is 18. The equation is then changed from ${}^{5}/_{18}$ - ${}^{1}/_{6}$ to ${}^{5}/_{18}$ - ${}^{3}/_{18}$.

We can now subtract these fractions easily for a solution of $^2/_{18}$, which can be simplified to $^1/_{9}$.

6. C

Explanation: To solve this problem, simply line up all of the decimal numbers to be added making sure that each digit is in the appropriate place with respect to the decimal point (i.e. all of the digits in the ones, tens, hundreds etc. are aligned when adding).

7. C

Explanation: Change each mixed number to an improper fraction by multiplying the denominator times the whole number and then add that product to the numerator (i.e. $7 \times 2 = 14$, 14 + 3 = 17 so the improper fraction becomes $^{17}/_{7}$. Once both fractions have been changed to improper fractions, multiply the fractions by multiplying the numerators and the denominators. Since the answers are written in decimal form, you must convert the improper fraction to a decimal number by dividing the numerator by the denominator.

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8. D

Explanation: Change each mixed number to an improper fraction (for more on this step see explanation for question 7). After changing each mixed number to an improper fraction, the fractions must be divided. In order to divide fractions, you will need to multiply the first fraction by the reciprocal of the second fraction. Since the answers are written in decimal form, you must convert the improper fraction to a decimal number by dividing the numerator by the denominator.

9. B

Explanation: This problem can be solved following the same steps as problem 8 or by changing the mixed number $7^{\frac{1}{2}}$ to a decimal first which becomes 7.5 and dividing 7.5 by 5.

10. D

Explanation: This problem can be solved through the use of an equation. The variable, X can represent the percent of 75 that we are looking for. Thus the equation will be $X \cdot 75 = 90$. You will then need to solve for x by isolating the variable using the inverse operation. Since X is being multiplied by 75, the inverse will be division. Dividing by 75 from both sides will result in x = 1.2. Since the final answer needs to be in percent form, the decimal number will need to be converted to a percent by moving the decimal point two places to the right.

11. C

Explanation: Knowing that Jamal lost 10% of his weight, his new weight must be 90% of his old weight. To calculate his old weight (using a variable *x* to represent the unknown weight) you can set up a proportion:

$$\frac{126}{x} = \frac{90}{100}$$

This represents that 126 lbs compared to his old weight is equal to 90 percent of his total old weight. To solve for x, cross-multiply and isolate the variable:

$$\begin{array}{c|cccc}
126 & = & 90 \\
x & & 100
\end{array}$$

$$12600 = 90x \\
\frac{\div 90 & \div 90}{140} \\
140 & = x$$

Explanation: To solve this problem you must first plug in the appropriate values for each variable into the equation. This will result in the equation -2 - (4)(-3). Once the variables have been replaced with the correct values, you will need to use order of operation rules to solve. You will notice that the values for Y & Z are directly next to each other which indicates that these variables will need to be multiplied. According to order of operation rules, computations in parenthesis must be done first followed by exponents, multiplication and division, addition and subtraction. Since there are no computations in parenthesis or exponents, multiplication will need to be performed first. Multiplying 4 times -3 results in a product of -12 (a negative number times a positive number equals a negative number). Replacing (4)(-3), the equation now reads -2 - (-12). Further following the order of operation rules, addition and subtraction are next. To solve from here, you will need to recall the rules for subtracting integers. Two consecutive negative integers result in a positive, thus the equation becomes -2 + 12. When a negative integer is added to a positive integer, you can subtract the two numbers and keep the sign of the larger number. 12 - 2= 10 and 12 is larger than 2 so the sign will be positive thus the answer is 10.

13. D

Explanation: The number 3,458,245 is the same as the number 3,458,245.00. If you line up the number on a place value table, you will see that the digit 3 falls in the millions place.

hundred millions	ten millions	millions	hundred thousands	ten thousands	thousands	hundreds	tens	units	decimal	tenths	hundredths	thousandths	ten thousandths
		3	4	5	8	2	4	5					

14. D

Explanation: If five teachers contributed \$6.00, they have already contributed \$30 to the total amount needed for the watch. Because the watch is \$146.05 and \$30 has already been collected, subtract \$30 from \$146.05 to get the remainder that needs to be collected, which is \$116.05. Because five teachers have already given money and there are 45 staff members in all, 40 people still need to contribute. To find how much each of those 40 staff members need to give, divide \$116.05 by 40, which is \$2.9125, rounded up to \$2.92 (each person has to give at *least* \$2.91).

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Explanation: To find out much the Assistant needs to save, divide \$87.70 by \$15.45, which is 5.67 or 5.67 weeks to save up for the certificate. Because the Assistant needs to save a little over 5 weeks, he/she will hit his/her target at six weeks.

16. D

Explanation: This question asks the reader to point to a distinctive quality of Robert Frost's poetry, according to the passage. While the passage describes the many contradictions of Robert Frost as a poet and an artist, the only two sentences that refer directly to his poems are: "The 'rough conversational tones' of his blank verse are remarkable for their lyrical music" and "Though he has chosen one part of the country on which to focus his poetry, no poetry so regional has ever been so universal." The first sentence is not captured by any of the options--in fact, option **B**, "Unusual rhymes and rhythms," is the opposite of the blank verse described in the passage. Therefore, option **D**, "Association with one section of the country," is the best response.

17. B

Explanation: The only thing that the passage specifically did not state was that B) his verses are patriotic; the passage specifically mentions that Frosts' work focused his poetry on a specific region of America (Though he has chosen one part of the country on which to focus his poetry), that his background is American (Though his ancestry was based in New England, he was born in California), and that his poetry sounds like "rough conversational tones".

There are curious contradictions in the life of Robert Frost. Though his ancestry was based in New England, he was born in California. The most American of poets, he was first recognized in England and not in the U.S. Not believing in competitions he never entered them, yet he won the Pulitzer Prize four times. The "rough conversational tones" of his blank verse are remarkable for their lyrical music. Though he has chosen one part of the country on which to focus his poetry, no poetry so regional has ever been so universal.

18. B

Explanation: In looking at the answers, A, C, and D all say essentially the same thing; that Frost's life was typical, ordinary, no different (these are all synonyms of one another). The only answer that is different is B. The author's tone and messaging indicates that s/he believes the author's life was extraordinary through phrases such as "no poetry so regional has ever been so universal" and "yet he won the Pulitzer Prize four times".

Explanation: Language from the passage seems to indicate that Frost is a successful poet, so something he did must have made him successful. The last line in the first paragraph is the key to figuring out this question's answer; "The creator, the artist, the extraordinary man, is merely the ordinary man intensified; a person whose life is sometimes lifted to a high pitch of feeling and who has the gift of making others share his excitement." This line means that Frost was an ordinary man who made things exciting and shared that gift with others. The answer that directly correlates with the spirit of that line is (C).

20. A

Explanation: In the sentence, "time" is being used as a noun. It references a 'thing', being the greatest singer of all 'time'.

21. B

Explanation: Learning is the verb in the sentence, expressing action being done by the noun (the person, place, or thing that the sentence is about). In this case, Alexander (our noun) is doing the action of learning new words.

22. A

Explanation: *Paraprofessional* is a noun, because it is a person, place or thing (in this case, a person). In sentences the noun acts as the subject of the sentence. For this question, we're learning what the role of the noun, the paraprofessional, is in a classroom.

23. D

Explanation: Routinely is an adverb, which provides greater description to parts of the sentence (in this case, telling you how frequently diet and exercise should be included in a diet). While not always true, adverbs also often end in -ly.

24. C

Explanation: If you interject, you are saying something that disrupts something else. Similarly, *interrupting* is when you'd have something to say and add it to the conversation without being asked to contribute. While some might say that either of those actions are rude, and while both involving speaking, interrupting matches the closest to interjecting.

25. B

Explanation: When something is distinctive is will stand out from the other things around it, making it different. Often used together, something that is *unique* is one of a kind and special because it is not like other things. Of the examples, standard would be the least likely match, as it represents something uniform and average.

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26. D

Explanation: The answer to this questions is choice (D), edit. The word 'proof can be used as a noun or a verb. When used as a verb, proof means to edit something. If one were to say they needed to proofread their work, they mean they need to edit their work. The word edit can easily replace proofread in the example sentence. When you are deciding on the meaning of a word that can be used as a noun or verb, be sure to look at the context of the sentence when possible for clues about which meaning is being used.

27. A

Explanation: The answer to this question is choice (A), result. We often think of a consequence as being a punishment for a misbehavior, though consider it the result of an action or behavior of someone or something.

28. A

Explanation: The answer to this question is choice (A), stress. When something is *emphasized*, it is highlighted as important or needing additional attention or time. When the word stress is another word that can be used as a noun or verb. When used as a verb, stress means to highlight the importance or significance of something or someone. Consider the sentence: I emphasized how important it is to lock the front door at night yet you still did not listen, so now we have items that are missing. The word stressed can easily replace emphasized in this sentence to demonstrate the importance of locking the door so that items are secure and safe. . When you are deciding on the meaning of a word that can be used as a noun or verb, be sure to look at the context of the sentence when possible for clues about which meaning is being used.

29. C

Explanation: The answer to this questions is choice (C), segregate. When you isolate something or someone, it is removed or separated from other things or people to be alone. The word segregate, has a similar meaning in the sense that it means to separate something or someone from other things or people. Consider the sentence: The markers and the crayons were mixed in the box so she was instructed to isolate all the markers from the crayons. In this sentence the person was instructed to isolate (separate) the markers from the crayons. The word segregate can easily replace the word isolate in this sentence to show that this person is being asked to remove the markers from the crayons so that they are no longer mixed together.

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Explanation: The answer to this question is choice (C), unveil. The answer choices, dispute, discuss and argue are all related to the word *debate*, which means you could use them as replacement in a sentence for the word *debate*. The question asks which word CANNOT replace *debate* in a sentence. Consider the sentence: Last night we *debated* about whether dogs make better pets than cats. In this sentence, you could replace the word *debate* with the words dispute, discuss and argue. The word *unveil* however, means to take off or remove a sort of covering to show something for other to see and thus would **NOT** be a good replacement for the word *debate* in this, or other, sentences.

31. D

Explanation: Sentence fragments are groups of words that look like sentences, but aren't. When you analyze a group of words to determine if it's a sentence, you have to find three things: a subject, a verb, and a complete thought. If one of these three items is missing, a fragment results.¹

In this case, options A, B, and C are all *sentences*, because they contain a subject, a verb, and a complete thought. (option A, subject is 'he', verb is 'intended', and the complete thought is he wanted to finish his novel; option b, subject is 'we', verb is 'thought', and the thought is complete'. The only option that is missing one of these things t is option **D**. The subject is 'new plants', the verb is 'growing', but there is no complete thought given the word 'Since", which indicates, that because something isn't true, there is another truth.

32. B

Explanation: Like above, a sentence must have a subject, a verb, and be a complete thought, otherwise it is considered a sentence fragment. Options A, C, and D possess all three items; option B has a verb (caught), but no subject (who/what is caught in heavy traffic?) and no complete thought.

33. B

Explanation: This question is a straight knowledge question. A reference book is a <u>book</u> or <u>periodical</u> (or <u>its electronic equivalent</u>) to which one can refer for <u>information</u>². The information is intended to be found quickly when needed. In order to answer this question, you would need to know that options, A, C, and D are all names of reference books, but option B, Fiction, is a genre of books, not a specific reference book. Fiction books are also books created in the imagination of an author so could not be used for reference.

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¹ http://www.chompchomp.com/rules/fragrules.htm

² https://en.wikipedia.org/wiki/Reference_work

Explanation: When looking at the first letter of the last names presented, the letter "J" comes first before "K" and "L", which means that one of the two last names starting with "J" would come first. Both last names start "Jo", so look at the third letter; "H" comes in the alphabet before "O", which means "Johnson" would be the first name in alphabetical order.

35. B

Explanation: This question is essentially the reverse of the previous question. When looking at the first letter of the last names presented, "Y" is last in the alphabet, making "Yoder" the name that would come last in an alphabetical pile.

36. C

Explanation: Of the words offered in this question, the only one spelled incorrectly is C - *sabatage*, which should be spelled *sabotage*.

37. A

Explanation: Of the words offered in this question, the only one spelled incorrectly is A - *barriar*, which should be spelled *barrier*.

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