TEAS 7 STUDY GUIDE

160 Key Concepts

Test of Essential Academic Skills

- Reading: Key Ideas, Craft & Structure, Integration of Knowledge
- Mathematics: Numbers, Algebra, Measurement & Data
- Science: A&P, Biology, Chemistry, Scientific Reasoning
- English: Grammar, Punctuation, Sentence Structure, Vocabulary
- Human Body Systems: All 8 Systems in Detail
- Medical Terminology: 60 Must-Know Prefixes, Roots & Suffixes
- Test Strategy: Time Management + Elimination Techniques
- 4-Week & 8-Week Study Plans

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How to Use This Guide

The TEAS 7 tests your readiness for nursing school across four domains: Reading, Mathematics, Science, and English & Language Usage. This guide covers 160 high-yield concepts, organized by section, with active recall explanations and TEAS-specific tips.

1. Start with Science

Science is the most heavily weighted section and the one most pre-nursing students find challenging. Begin here. Focus on Human Body Systems (Section 5) and Medical Terminology (Section 6) first -- they form the foundation.

2. Master the Math

TEAS math is straightforward -- algebra, measurement, and data. No calculus. Know the formulas in Section 2 cold. Use the on-screen calculator exactly as you'll use it on test day.

3. Reading + English Together

These sections test similar skills (comprehension, grammar, vocabulary). Study them together. The Reading section tests your ability to extract information; English tests your ability to use language correctly.

4. Use the Study Planner

Choose the 4-week or 8-week plan in Section 8 based on your timeline. Stick to the daily schedule. The TEAS rewards consistent preparation over cramming.

5. Practice Tests Weekly

Take one full-length practice test at the end of each week. Track scores in the Study Planner. Identify weak areas and adjust your focus for the following week.

6. Review Terminology Daily

The 60 medical terminology roots in Section 6 should become second nature. Review them for 10 minutes every day. These prefixes/suffixes unlock thousands of medical terms.

SECTION 1: READING

Key Ideas & Details, Craft & Structure, Integration of Knowledge & Ideas. The TEAS Reading section has 45 questions in 55 minutes. Focus on extracting main ideas quickly and identifying the author's purpose.

1 Main Idea Identification

Explanation: The main idea is the central point the author wants to communicate. It is usually found in the first or last sentence of a paragraph, but can also be implied throughout. Distinguish between the TOPIC (what it's about) and the MAIN IDEA (what the author says about the topic).

TEAS Tip: *After reading each paragraph, ask: 'What is the ONE thing the author wants me to know?' If you can answer in one sentence, you've found the main idea. The TEAS usually puts the main idea in the first sentence.*

Example: Passage about hand washing in hospitals. Topic = hand washing. Main idea = 'Proper hand hygiene protocols significantly reduce hospital-acquired infection rates.' The main idea makes a claim about the topic.

2 Supporting Details

Explanation: Supporting details are facts, examples, statistics, and explanations that back up the main idea. They answer: who, what, where, when, why, and how. On the TEAS, detail questions ask you to locate specific information in the passage.

TEAS Tip: *For detail questions, scan the passage for KEYWORDS from the question. Don't re-read the entire passage. The answer is usually in the same sentence or the sentence immediately before/after the keyword.*

Example: Q: 'According to the passage, which factor most increases infection risk?' Scan for 'infection risk' or 'factor.' The answer will be in the text, not inferred.

3 Inferences & Conclusions

Explanation: An inference is a logical conclusion based on evidence in the text. It goes beyond what is directly stated but is fully supported by the passage. A conclusion is the end result of reasoning from the evidence provided.

TEAS Tip: *The TEAS tests your ability to draw reasonable conclusions, not wild guesses. The correct inference MUST be supported by passage evidence. If you can't point to the sentence(s) that support it, it's not the right answer.*

Example: Passage: 'Nurse Chen documented a 40% reduction in falls after implementing hourly rounding.' Valid inference: 'Hourly rounding was effective at reducing falls on Nurse Chen's unit.' Invalid: 'Hourly rounding prevents all patient falls.'

4 Author's Purpose

Explanation: Every passage is written for a reason: to inform, persuade, entertain, or describe. Inform = present facts objectively. Persuade = convince the reader of a position. Entertain = amuse or engage. Describe = paint a detailed picture.

TEAS Tip: *The TEAS primarily uses informative and persuasive passages. Look at the VERBS: an informative passage uses 'is,' 'are,' 'has.' A persuasive passage uses 'should,' 'must,' 'need to.' The author's purpose question is almost always about the ENTIRE passage.*

Example: Passage about the benefits of electronic health records that ends with 'Hospitals should adopt EHR systems immediately.' This is persuasive. The word 'should' is the tell.

5 Text Structure Patterns

Explanation: Passages follow common structures: (1) Chronological/Sequence -- events in time order. (2) Cause & Effect -- why something happened and its results. (3) Compare & Contrast -- similarities and differences. (4) Problem & Solution -- issue presented and resolved. (5) Description -- characteristics and features.

TEAS Tip: *Identifying the text structure helps you predict where information will be located. In a cause-effect passage, causes are in the first half, effects in the second. In a compare-contrast, similarities and differences alternate.*

Example: Passage starts with 'Before the 1950s, nurses recorded everything by hand. However, the introduction of computers changed documentation completely...' This is chronological with a turning point.

6 Topic Sentences

Explanation: The topic sentence states the main idea of a paragraph. It is typically the first sentence but can appear anywhere. Some paragraphs have an implied topic sentence (you must infer it).

TEAS Tip: *When a question asks 'Which sentence best states the main idea of paragraph 2?', look for the most GENERAL sentence in that paragraph. The topic sentence is broader than the supporting details that follow.*

Example: Paragraph 2: 'Patient education is one of the most important nursing interventions. Studies show educated patients have better outcomes. They comply more with medication regimens and follow-up appointments.' Sentence 1 is the topic sentence. The rest are supporting details.

7 Summary Writing

Explanation: A summary captures the main idea and key supporting points in condensed form. It excludes minor details, examples, and the summarizer's own opinion. A good summary is shorter than the original and covers only the essential content.

TEAS Tip: *When asked to choose the best summary, eliminate answers that: (1) include minor details, (2) add information not in the passage, (3) are too vague to convey the main idea. The correct summary is specific enough to identify the passage but concise enough to fit in 2-3 sentences.*

Example: Passage: 300 words about the history of nursing education. Good summary: 'Nursing education evolved from hospital-based apprenticeships in the 19th century to university degree programs today, driven by advances in medical knowledge and professionalization.'

8 Fact vs. Opinion

Explanation: A fact can be proven true or false with evidence. An opinion expresses a belief, feeling, or judgment and cannot be objectively proven. The TEAS tests your ability to distinguish between the two.

TEAS Tip: *Look for opinion markers: 'should,' 'best,' 'worst,' 'I believe,' 'in my view,' 'it seems.' Facts include: numbers, dates, research findings, direct observations. A statement can contain both fact and opinion -- the TEAS will ask about specific sentences.*

Example: Fact: 'Hand sanitizer reduces bacterial counts by 99.9%.' Opinion: 'Hand sanitizer is the best way to prevent infection.' The first can be tested; the second is a judgment.

9 Context Clues

Explanation: When you encounter an unfamiliar word, use the surrounding text to determine its meaning. Types: (1) Definition -- the word is defined in the sentence. (2) Synonym -- a similar word appears nearby. (3) Antonym -- an opposite word appears. (4) Example -- examples illustrate the meaning. (5) Inference -- general context suggests meaning.

TEAS Tip: *Don't skip unfamiliar words -- the TEAS will test them. Read the sentence before and after for clues. Try substituting each answer choice into the sentence; only one will make sense.*

Example: 'The doctor noted the patient's diaphoresis, evidenced by the visible perspiration on his forehead and neck.' Context clue: 'visible perspiration' = sweating. So diaphoresis = excessive sweating.

10 Sequence of Events

Explanation: Many TEAS passages describe a process or timeline. Questions ask what happened first, last, or between two events. Identifying signal words helps: 'first,' 'next,' 'then,' 'after,' 'before,' 'finally,' 'subsequently,' 'meanwhile.'

TEAS Tip: *When sequencing questions are tricky, create a quick numbered timeline on your scratch paper. Write 3-5 key events in order. Refer to your timeline, not the passage, when answering.*

Example: Passage about wound healing: 'First, hemostasis occurs. Next, inflammation begins. Then, new tissue forms. Finally, the wound remodels over months.' Timeline: 1. Hemostasis -> 2. Inflammation -> 3. New tissue -> 4. Remodeling.

11 Tone & Mood

Explanation: Tone = the author's attitude toward the subject (objective, concerned, optimistic, critical). Mood = the feeling the reader gets (anxious, hopeful, inspired). The TEAS asks about tone more often than mood.

TEAS Tip: *Identify tone by looking at WORD CHOICE. 'The patient passed away peacefully' (respectful, neutral). 'The patient succumbed' (dramatic). 'The patient died' (neutral, clinical). Adjectives and adverbs are the strongest tone indicators.*

Example: Passage: 'Alarmingly, antibiotic resistance is spreading faster than previously thought, threatening to undo decades of medical progress.' Tone = alarmed/concerned. Words: 'alarmingly,' 'threatening.'

12 Graphic & Visual Information

Explanation: The TEAS includes charts, graphs, tables, diagrams, and maps. Questions ask you to interpret data, identify trends, and draw conclusions from visuals. Read the TITLE, LABELS, and LEGEND before answering.

TEAS Tip: *Start with the question, then find the relevant part of the graphic. Don't study the entire chart first -- you'll waste time. The title tells you what it's about; axis labels tell you what's being measured.*

Example: Bar graph titled 'Infection Rates by Unit (2024).' X-axis: hospital units. Y-axis: infections per 1,000 patient days. Q: 'Which unit had the highest infection rate?' Scan the bars, find the tallest, read the label.

13 Author's Argument

Explanation: An argument consists of a CLAIM (what the author wants you to believe) supported by EVIDENCE (facts, data, examples) and REASONING (how the evidence supports the claim). The TEAS asks you to evaluate whether the evidence adequately supports the claim.

TEAS Tip: *Identify: (1) What is the author trying to prove? (2) What evidence is offered? (3) Is there a gap between evidence and claim? If the evidence is anecdotal but the claim is universal, the argument is weak.*

Example: Claim: 'All nurses should meditate daily.' Evidence: 'One study of 30 nurses showed reduced stress after 8 weeks of meditation.' The evidence is promising but insufficient to support 'all nurses' -- the sample is small and the claim is broad.

14 Vocabulary in Healthcare Context

Explanation: The TEAS reading section includes healthcare-related passages with domain-specific vocabulary. You don't need prior medical knowledge, but you DO need to understand words from context.

TEAS Tip: *Common healthcare vocabulary tested: acute, chronic, prognosis, diagnosis, etiology, prevalence, incidence, morbidity, mortality, efficacy, contraindication, prophylaxis. Know these -- they appear in science passages too.*

Example: 'The study examined the efficacy of the new vaccine.' Efficacy = effectiveness -- how well it works. Use context: 'The vaccine showed 95% efficacy, meaning 95% of recipients were protected.'

15 Compare & Contrast Passages

Explanation: These passages present similarities (comparisons) and differences (contrasts) between two subjects. Signal words: 'similarly,' 'likewise,' 'in the same way' (compare). 'However,' 'on the other hand,' 'in contrast,' 'whereas' (contrast).

TEAS Tip: *Create a quick T-chart on scratch paper. Left column: Subject A. Right column: Subject B. List 2-3 key points for each as you read. Questions almost always test the differences, and your chart prevents confusion.*

Example: Passage comparing Type 1 and Type 2 diabetes. Left (T1): autoimmune, childhood onset, insulin-dependent. Right (T2): insulin resistance, adult onset, managed with diet/exercise/oral meds. Differences are clear from the chart.

16 Persuasive Techniques

Explanation: Authors use rhetorical strategies to persuade: (1) Ethos -- appeal to credibility/authority ('Dr. Smith, a Harvard researcher...'). (2) Pathos -- appeal to emotion ('Imagine your loved one suffering...'). (3) Logos -- appeal to logic and evidence ('Studies show a 40% reduction...').

TEAS Tip: *When asked about the author's persuasive approach, identify which appeal dominates. Scientific/medical passages typically use logos. Opinion pieces may use pathos. Professional recommendations use ethos.*

Example: 'According to the CDC, hand washing prevents 30% of diarrhea-related illnesses.' This is logos (statistics + credible source). 'Think of the patients who suffer needlessly from preventable infections.' This is pathos (emotional appeal).

17 Primary vs. Secondary Sources

Explanation: Primary sources are original, firsthand accounts: research studies, diaries, interviews, original data. Secondary sources interpret or analyze primary sources: textbooks, review articles, summaries. The TEAS may ask you to classify sources.

TEAS Tip: *Primary source keywords: 'we conducted,' 'participants reported,' 'data was collected.' Secondary source keywords: 'researchers found,' 'according to a study,' 'it has been shown.' Primary = the researchers themselves. Secondary = someone reporting on the research.*

Example: Primary: 'We surveyed 500 nurses and found that 68% report burnout.' Secondary: 'A recent survey of 500 nurses revealed high rates of burnout in the profession.'

18 Following Directions

Explanation: Some TEAS reading questions present a set of instructions or steps. You must determine the correct order or identify what would happen if a step was skipped. Read procedural passages carefully -- every step matters.

TEAS Tip: *Number the steps mentally as you read. If asked 'What should you do after step 3?', you should know without re-reading. Procedure passages are the most common place for sequence questions.*

Example: Instructions for taking a blood pressure reading: (1) Position cuff on bare upper arm. (2) Inflate cuff to 180 mmHg. (3) Slowly release valve. (4) Note systolic at first sound. (5) Note diastolic when sound disappears.

19 Theme vs. Topic

Explanation: Topic = what the passage is about (one word or short phrase). Theme = the underlying message or universal idea the passage explores. Themes are broader and more abstract than topics.

TEAS Tip: *The TEAS rarely asks about theme directly, but understanding theme helps with main idea and purpose questions. A passage about 'hand washing' (topic) might explore the theme of 'personal responsibility in public health.'*

Example: Topic: vaccine hesitancy. Theme: the tension between individual choice and community welfare. Main idea: 'Addressing vaccine hesitancy requires understanding both personal concerns and public health imperatives.'

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20 Bias Detection

Explanation: Bias is a preference or prejudice that prevents objective judgment. An author may favor one perspective or omit relevant counter-evidence. The TEAS asks you to recognize when a passage is biased rather than neutral.

TEAS Tip: *Signs of bias: (1) Loaded language ('terrible,' 'wonderful,' 'obviously'). (2) One-sided presentation (only pros, no cons). (3) Selective use of evidence. (4) Overgeneralization. A biased passage can still be correct about facts but incomplete.*

Example: Passage: 'The new hospital policy is a disaster. It has caused nothing but problems for nurses and patients alike.' Bias signals: 'disaster,' 'nothing but problems.' The author has clearly taken a side without presenting any counter-evidence.

SECTION 2: MATHEMATICS

Numbers & Algebra, Measurement & Data. 38 questions in 57 minutes. You CAN use a calculator (on-screen). Focus on word problems, ratios, and conversions -- the most heavily tested areas.

21 Order of Operations (PEMDAS)

Explanation: Parentheses, Exponents, Multiplication/Division (left to right), Addition/Subtraction (left to right). This is the universal rule for evaluating expressions. Multiplication and division have EQUAL priority -- work left to right.

TEAS Tip: *The most common TEAS math error: doing addition before subtraction (or vice versa) when they appear left to right. 10 - 3 + 2 = 9, NOT 5. Work LEFT to RIGHT for operations of equal priority.*

Example: Evaluate: 3 + 6 * (5 + 4) / 3 - 7. Step 1: Parentheses (5+4=9). Step 2: Mult/Div left to right: 6*9=54, then 54/3=18. Step 3: Add/Sub left to right: 3+18=21, then 21-7=14.

22 Fractions: Add & Subtract

Explanation: To add or subtract fractions, find a common denominator (LCD). Convert each fraction to an equivalent fraction with the LCD. Add/subtract the numerators; keep the denominator. Simplify the result.

TEAS Tip: *The TEAS calculator can handle fractions, but you need to know the manual method for questions where the calculator isn't helpful. The LCD is the least common multiple of the denominators.*

Example: 1/3 + 1/4. LCD of 3 and 4 = 12. 1/3 = 4/12. 1/4 = 3/12. Sum = 7/12. No simplification needed.

23 Fractions: Multiply & Divide

Explanation: Multiply: multiply numerators, multiply denominators. Simplify. Divide: multiply by the reciprocal (flip the second fraction and multiply). Remember: 'Keep, Change, Flip' for division.

TEAS Tip: *Division is the fraction operation most students mess up. Always flip the SECOND fraction, not the first. 2/3 / 3/4 = 2/3 * 4/3 = 8/9. The first fraction stays the same.*

Example: Multiply: 2/5 * 3/4 = (2*3)/(5*4) = 6/20 = 3/10. Divide: 2/5 / 3/4 = 2/5 * 4/3 = 8/15.

24 Decimals & Percents

Explanation: To convert fraction to decimal: divide numerator by denominator. To convert decimal to percent: multiply by 100 (move decimal 2 places right). To convert percent to decimal: divide by 100 (move decimal 2 places left).

TEAS Tip: *TEAS percent questions are usually word problems. 'What is 15% of 80?' Translate: 'what' = x, 'is' = =, 'of' = multiply. x = 0.15 * 80 = 12. Memorize common fraction-decimal-percent equivalents (1/4=0.25=25%).*

Example: Convert 3/8 to percent: 3/8 = 0.375, 0.375 * 100 = 37.5%. Common equivalents: 1/2=50%, 1/3=33.3%, 1/4=25%, 1/5=20%, 1/8=12.5%, 1/10=10%.

25 Ratios & Proportions

Explanation: A ratio compares two quantities (a:b). A proportion states that two ratios are equal (a/b = c/d). To solve: cross-multiply: a*d = b*c. Ratios can be simplified like fractions.

TEAS Tip: *TEAS ratio questions often involve medication dosages, solution concentrations, or patient-to-nurse ratios. Set up the proportion carefully: make sure the units match on both sides.*

Example: If 3 tablets contain 150 mg, how many tablets for 250 mg? Proportion: 3/150 = x/250. Cross-multiply: 3*250 = 150x -> 750 = 150x -> x = 5 tablets.

26 Unit Conversions

Explanation: TEAS tests metric conversions (kilo-, base, centi-, milli-, micro-) and some household/metric equivalents (1 inch = 2.54 cm, 1 kg = 2.2 lbs, 1 tsp = 5 mL, 1 oz = 30 mL). Know these COLD.

TEAS Tip: *The dimensional analysis (factor-label) method prevents errors: write the given value, multiply by conversion factors so units cancel, compute. The TEAS provides some conversions but not all.*

Example: Convert 65 inches to cm: 65 in * (2.54 cm / 1 in) = 165.1 cm. Convert 154 lbs to kg: 154 lbs * (1 kg / 2.2 lbs) = 70 kg.

27 Algebra: Solving Equations

Explanation: To solve for x, isolate it on one side. Do the same operation to BOTH sides. Reverse the order of operations: undo addition/subtraction first, then multiplication/division, then exponents.

TEAS Tip: *Always check your answer by plugging it back into the original equation. This catches 90% of algebra errors. If your answer doesn't work, you made a mistake -- don't just move on.*

Example: 3x + 7 = 22. Step 1: Subtract 7 from both sides: 3x = 15. Step 2: Divide both sides by 3: x = 5. Check: 3(5) + 7 = 15 + 7 = 22. Correct.

28 Algebra: Word Problems

Explanation: Translate English to algebra: 'more than' = +, 'less than' = -, 'times/of' = *, 'per' = /, 'is' = =, 'a number' = x. 'Five more than twice a number is 17' = 2x + 5 = 17.

TEAS Tip: *TEAS word problems follow predictable patterns. Practice translating until it's automatic. The math itself is usually simple -- the challenge is setting up the equation correctly.*

Example: Q: 'A nurse spends 45 minutes with each patient. How many patients can she see in a 6-hour shift?' Setup: 6 hours = 360 minutes. 360/45 = 8 patients.

29 Mean, Median, Mode, Range

Explanation: Mean = sum of values / number of values. Median = middle value when sorted (average of two middle values for even count). Mode = most frequent value(s). Range = max - min.

TEAS Tip: *TEAS questions often give you a data set and ask which measure changes when a value is added or removed. The median is least affected by outliers. The mean is most affected.*

Example: Data: 72, 85, 85, 90, 94. Mean = 426/5 = 85.2. Median = 85. Mode = 85. Range = 94-72 = 22.

30 Graph Interpretation

Explanation: TEAS includes bar graphs, line graphs, pie charts, and tables. Read the title, axis labels, and units before answering. Estimate when possible -- the TEAS rewards efficient approximation.

TEAS Tip: *For change-over-time questions, look at the SLOPE of the line, not just the values. A steep slope = rapid change. A flat slope = no change. This is faster than calculating differences.*

Example: Line graph: 'Patient admissions by month.' If the line rises steeply from Jan to March, admissions increased rapidly. If it's flat from March to June, admissions were stable.

31 Probability

Explanation: Probability = number of favorable outcomes / total possible outcomes. Expressed as fraction, decimal, or percent. Probability ranges from 0 (impossible) to 1 (certain).

TEAS Tip: *TEAS probability questions are basic: 'A bag has 3 red, 2 blue, and 5 green marbles. Probability of drawing red?' Answer: 3/(3+2+5) = 3/10 = 0.3 = 30%. That's it.*

Example: Q: 'A class has 12 male and 18 female students. If one student is selected at random, what is the probability of selecting a male student?' A: 12/30 = 2/5 = 0.4 = 40%.

32 Roman Numerals

Explanation: I=1, V=5, X=10, L=50, C=100, D=500, M=1,000. Rules: smaller before larger = subtract (IV=4, IX=9). Smaller after larger = add (VI=6, XI=11). You'll see Roman numerals in some TEAS questions.

TEAS Tip: *Roman numerals appear on the TEAS mainly in medical contexts (cranial nerves, clotting factors). Know I-X (1-10) cold. The pattern: I, II, III, IV, V, VI, VII, VIII, IX, X.*

Example: Convert XXIV: X=10, X=10, IV=4. Total: 10+10+4 = 24. Convert 47: 40=XL, 7=VII. Roman: XLVII.

33 Area & Perimeter

Explanation: Rectangle: A = l*w, P = 2(l+w). Triangle: A = 1/2 * b * h. Circle: A = pi*r^2, C = 2*pi*r. The TEAS provides formulas but you must know which formula to use.

TEAS Tip: *For composite shapes (a rectangle with a semicircle on top), break into simple shapes, find each area, then add. Don't try to find one formula for the whole shape.*

Example: Q: Rectangular room 12 ft by 15 ft. Area = 12*15 = 180 sq ft. Perimeter = 2(12+15) = 54 ft. Carpet covers area; baseboard covers perimeter.

34 Volume

Explanation: Rectangular prism: V = l*w*h. Cylinder: V = pi*r^2*h. Know that 1 cubic cm (cc) = 1 mL. This conversion is critical for medication dosage questions.

TEAS Tip: *TEAS volume questions often relate to medical contexts: fluid intake, medication volumes, IV drip rates. The 1 cc = 1 mL conversion is the single most important volume fact for the TEAS.*

Example: Q: A patient drinks 240 mL of water, 120 mL of juice, and 180 mL of soup. Total fluid intake = 240+120+180 = 540 mL. Document as 540 cc (same thing).

35 Scientific Notation

Explanation: A way to write very large or very small numbers: N * 10^k where 1 <= N < 10. Positive k = large number. Negative k = small number. Used frequently in science passages.

TEAS Tip: *To convert: move decimal until you have a number between 1 and 10. Count the moves. Right moves = negative exponent. Left moves = positive exponent.*

Example: 4,500,000 = 4.5 * 10^6 (decimal moved 6 places left). 0.00032 = 3.2 * 10^-4 (decimal moved 4 places right).

36 Direct & Indirect Variation

Explanation: Direct variation: y = kx (as x increases, y increases proportionally). Indirect/inverse variation: y = k/x (as x increases, y decreases).

TEAS Tip: *Set up variation problems as proportions. If y varies directly with x, then y1/x1 = y2/x2. If indirectly, then x1*y1 = x2*y2.*

Example: Direct: If 5 tablets cost $12, how much for 8 tablets? 5/12 = 8/x -> 5x = 96 -> x = $19.20. Indirect: If 4 nurses complete rounds in 3 hours, how long for 6 nurses? 4*3 = 6*x -> 12 = 6x -> x = 2 hours.

37 Estimation & Rounding

Explanation: The TEAS often expects you to estimate rather than calculate precisely. Round to the nearest convenient number. Estimation is faster and catches calculator entry errors.

TEAS Tip: *When answer choices are far apart, estimate. When they're close (e.g., 14.2, 14.5, 14.7), calculate precisely. Look at the spread of answer choices before deciding.*

Example: Q: 47 * 32 = ? If answers are (A) 150, (B) 500, (C) 1,500, (D) 5,000, you can estimate: 50*30 = 1,500. (C) is correct. No precise calculation needed.

38 Measurement Systems

Explanation: Metric: meter (length), gram (mass), liter (volume). Household: inch/foot/yard, ounce/pound, teaspoon/tablespoon/cup. The TEAS tests conversions WITHIN and BETWEEN systems.

TEAS Tip: *Memorize: 1 in = 2.54 cm, 1 kg = 2.2 lbs, 1 tsp = 5 mL, 1 tbsp = 15 mL, 1 oz = 30 mL, 1 cup = 240 mL, 1 L = 1,000 mL, 1 m = 100 cm, 1 g = 1,000 mg.*

Example: Q: A medication order reads 0.5 g. Tablets are 250 mg each. How many tablets? Convert: 0.5 g = 500 mg. 500/250 = 2 tablets.

39 Percentage Change

Explanation: Percent change = (New - Original) / |Original| * 100%. Positive = increase. Negative = decrease. Percent change is always relative to the ORIGINAL value.

TEAS Tip: *The TEAS loves sequential percent change (10% increase then 10% decrease does NOT return to original). Calculate step by step. Starting from $100: +10% = $110; -10% = $99. Net: -1%.*

Example: Q: A patient's weight increased from 150 lbs to 165 lbs. What is the percent increase? (165-150)/150 * 100% = 15/150 * 100% = 10%.

40 Time & Schedule Calculations

Explanation: Time math appears frequently: elapsed time, medication schedules, shift calculations. 24-hour (military) time is tested: 1 PM = 1300, 6 PM = 1800, midnight = 0000.

TEAS Tip: *For elapsed time problems, convert everything to minutes, subtract, then convert back. 8:45 AM to 2:30 PM: 8:45=525 min, 14:30=870 min. Elapsed = 345 min = 5 hr 45 min.*

Example: Q: Medication given at 0600, 1200, 1800, and 2400. How many hours between doses? 6 hours. How many doses in 3 days? 4 per day * 3 = 12 doses.

SECTION 3: SCIENCE

Human A&P, Biology, Chemistry, Scientific Reasoning. 50 questions in 60 minutes. The most important section -- it determines your science preparedness for nursing school.

41 Cell Structure & Function

Explanation: Basic unit of life. Cell membrane (phospholipid bilayer, selectively permeable). Nucleus (contains DNA). Mitochondria (ATP production, 'powerhouse'). Ribosomes (protein synthesis). ER (transport). Golgi (packaging). Lysosomes (digestion).

TEAS Tip: *Know the organelles and their functions. 'What would happen if the mitochondria stopped working?' -- No ATP production, cell cannot function. TEAS loves functional consequence questions.*

Example: Q: Which organelle is responsible for energy production? A: Mitochondria. Q: Where does protein synthesis occur? A: Ribosomes (free or on rough ER).

42 DNA & RNA

Explanation: DNA: double-stranded, deoxyribose, A-T and G-C base pairing, stores genetic information. RNA: single-stranded, ribose, A-U and G-C, helps make proteins. DNA replication: semi-conservative (each new DNA has one old and one new strand).

TEAS Tip: *DNA base pairing is the most tested genetics concept on the TEAS. A pairs with T (2 hydrogen bonds). G pairs with C (3 hydrogen bonds). A=U in RNA. Know the difference between DNA and RNA structure.*

Example: If one DNA strand is ATCG, the complementary strand is TAGC. In RNA transcribed from ATCG, it would be UAGC (T replaced by U).

43 Mitosis & Meiosis

Explanation: Mitosis: 1 cell -> 2 identical diploid cells (PMAT: Prophase, Metaphase, Anaphase, Telophase). For growth and repair. Meiosis: 1 cell -> 4 genetically different haploid cells. For reproduction (sperm/egg).

TEAS Tip: *Mitosis produces identical copies. Meiosis produces genetic variation through crossing over and independent assortment. The TEAS asks: which process occurs in body cells (mitosis) vs. gametes (meiosis)?*

Example: Q: A skin cell divides to heal a wound. This is mitosis. Q: Sperm cells are produced through meiosis. Know the difference in purpose and outcome.

44 Genetics Basics

Explanation: Gene = segment of DNA coding for a protein. Allele = variant of a gene. Dominant allele masks recessive. Genotype = genetic makeup (AA, Aa, aa). Phenotype = physical expression. Punnett square predicts offspring ratios.

TEAS Tip: *Homozygous = same alleles (AA or aa). Heterozygous = different (Aa). Monohybrid cross (Aa x Aa): 1:2:1 genotype, 3:1 phenotype. The TEAS tests basic Mendelian genetics only.*

Example: Q: Brown eyes (B) dominant over blue (b). Two heterozygous parents (Bb x Bb). Probability of blue-eyed child? bb = 1/4 = 25%. Use Punnett square to confirm.

45 Atoms & Elements

Explanation: Atom = smallest unit of matter. Protons (+), Neutrons (neutral) in nucleus. Electrons (-) orbit nucleus. Atomic number = # of protons (defines the element). Atomic mass = protons + neutrons.

TEAS Tip: *The TEAS tests basic atomic structure. Isotopes: same # protons, different # neutrons (same element, different mass). Ions: atoms that have gained (anion, -) or lost (cation, +) electrons.*

Example: Q: An atom has 6 protons, 6 neutrons, 6 electrons. Atomic number = 6 (Carbon). Atomic mass = 12. Charge = neutral (6 protons = 6 electrons).

46 Chemical Bonds

Explanation: Ionic bond: transfer of electrons between metal and nonmetal (NaCl). Covalent bond: sharing of electrons between nonmetals (H2O). Hydrogen bond: weak attraction between H and O/N/F (gives water its properties).

TEAS Tip: *Know bond types by what they do: ionic bonds create salts that dissolve in water. Covalent bonds create molecules. Hydrogen bonds create surface tension, capillary action, and water's unique properties.*

Example: NaCl (table salt) dissolves in water because water molecules (polar) surround the Na+ and Cl- ions. This is why salt dissolves -- not because bonds break spontaneously.

47 Acids & Bases

Explanation: Acid: pH < 7, donates H+ (protons). Base: pH > 7, accepts H+ or donates OH-. pH scale is logarithmic: each unit = 10x change in H+ concentration. Blood pH: 7.35-7.45 (slightly basic).

TEAS Tip: *The TEAS tests pH in context of human body systems. Stomach pH ~2 (highly acidic, digests food). Blood pH ~7.4 (tightly regulated). Small changes in blood pH can be life-threatening.*

Example: Q: Which has a higher H+ concentration -- pH 3 or pH 5? pH 3 (lower pH = more acidic = more H+). pH 3 has 100x more H+ than pH 5 (10^2 difference).

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48 States of Matter

Explanation: Solid: fixed shape and volume. Liquid: fixed volume, takes shape of container. Gas: no fixed shape or volume. Plasma: ionized gas. Phase changes: melting, freezing, vaporization, condensation, sublimation.

TEAS Tip: *Temperature affects states. Water freezes at 0 C (32 F) and boils at 100 C (212 F). The TEAS expects you to know these values and interpret phase change diagrams.*

Example: Q: What happens to water molecules during boiling? A: They gain enough energy to overcome intermolecular forces and escape as gas. Temperature stays at 100 C during boiling (energy goes into phase change, not temp increase).

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49 Periodic Table Basics

Explanation: Elements arranged by atomic number. Rows = periods (same # electron shells). Columns = groups (same # valence electrons, similar properties). Key groups: Group 1 (alkali metals), Group 17 (halogens), Group 18 (noble gases).

TEAS Tip: *The TEAS won't ask detailed periodic table questions, but expect to see data about elements. Know that elements in the same column have similar chemical properties.*

Example: Q: Why are sodium (Na) and potassium (K) chemically similar? A: Both are in Group 1, so each has 1 valence electron. They form +1 ions and react similarly with water.

---

50 Scientific Method

Explanation: Steps: Observation -> Question -> Hypothesis -> Experiment -> Data Analysis -> Conclusion. Hypothesis must be testable and falsifiable. Independent variable = what you change. Dependent = what you measure. Control = what stays the same.

TEAS Tip: *Every TEAS science section has questions about experimental design. Identify: (1) What is the hypothesis? (2) What is the independent variable? (3) What is the control group? (4) Is the conclusion supported by the data?*

Example: Experiment: 'Does fertilizer increase plant growth?' Independent variable = fertilizer (some plants get it, some don't). Dependent variable = plant height (what you measure). Control group = plants with no fertilizer.

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51 Macromolecules

Explanation: Four types: (1) Carbohydrates -- energy (sugars, starches). (2) Lipids -- long-term energy, cell membranes (fats, oils). (3) Proteins -- structure, enzymes, signaling (amino acid chains). (4) Nucleic acids -- genetic info (DNA, RNA).

TEAS Tip: *Know each macromolecule's monomer and function. Carbs: monosaccharide -> energy. Lipids: fatty acids -> membrane + energy. Proteins: amino acids -> structure + enzymes. Nucleic acids: nucleotides -> genetic code.*

Example: Q: Which macromolecule is the primary component of cell membranes? A: Lipids (phospholipid bilayer). Q: Enzymes belong to which class? A: Proteins.

---

52 Enzymes

Explanation: Biological catalysts that speed up reactions without being consumed. Lower activation energy. Specific to substrates (lock and key model). Affected by temperature and pH -- each enzyme has an optimal range.

TEAS Tip: *Enzymes are proteins. Denaturation = loss of shape and function due to extreme heat or pH. The TEAS loves to ask: 'What happens to enzyme activity at very high temperatures?' Answer: it decreases because the enzyme denatures.*

Example: Lactase breaks down lactose (milk sugar). Optimal pH ~6. At pH 2 (stomach acid), lactase denatures -- this is why lactase supplements are enteric-coated (to survive stomach acid).

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53 Cellular Respiration

Explanation: Glucose + O2 -> CO2 + H2O + ATP. Three stages: (1) Glycolysis (cytoplasm, 2 ATP). (2) Krebs Cycle (mitochondria, 2 ATP). (3) Electron Transport Chain (mitochondria, ~32-34 ATP). Total: ~36-38 ATP per glucose.

TEAS Tip: *Aerobic (with O2) produces ~36 ATP. Anaerobic (without O2) produces only 2 ATP + lactic acid. The TEAS asks about the difference in ATP yield and when each pathway is used.*

Example: Q: Why do muscles produce lactic acid during intense exercise? A: Oxygen delivery can't keep up; cells switch to anaerobic respiration, which produces lactic acid as a byproduct.

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54 Photosynthesis

Explanation: 6 CO2 + 6 H2O + light -> C6H12O6 + 6 O2. Occurs in chloroplasts. Light reactions (thylakoid): capture light, produce ATP and NADPH. Calvin cycle (stroma): uses ATP/NADPH to make glucose.

TEAS Tip: *Photosynthesis is the reverse of cellular respiration. The products of one are the reactants of the other. TEAS questions often ask you to compare these two processes.*

Example: Q: What gas is consumed during photosynthesis? A: CO2 (carbon dioxide). Q: What gas is produced? A: O2 (oxygen). Q: Where does photosynthesis occur? A: Chloroplasts (in plant cells).

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55 Atoms in Biology

Explanation: CHNOPS: Carbon, Hydrogen, Nitrogen, Oxygen, Phosphorus, Sulfur -- the six most abundant elements in living organisms. Carbon is the backbone of all organic molecules.

TEAS Tip: *Carbon forms 4 covalent bonds, allowing complex chains and rings. This versatility makes it the backbone of biology. TEAS uses this to explain why life is carbon-based.*

Example: Q: Why is carbon uniquely suited for biological molecules? A: It forms 4 stable covalent bonds, enabling chains, branches, and rings -- the structural diversity needed for complex biomolecules.

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56 Homeostasis

Explanation: The body's ability to maintain a stable internal environment despite external changes. Uses negative feedback loops: stimulus -> sensor -> control center -> effector -> response. Example: body temperature regulation.

TEAS Tip: *Negative feedback is the primary mechanism. Positive feedback (amplifying change) is rare -- childbirth (oxytocin) and blood clotting. The TEAS asks you to identify which feedback type is at work.*

Example: Q: Blood glucose rises -> pancreas releases insulin -> cells take up glucose -> blood glucose drops -> insulin release stops. This is negative feedback.

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57 Anatomical Terminology

Explanation: Directional terms: superior (above), inferior (below), anterior/ventral (front), posterior/dorsal (back), medial (toward midline), lateral (away from midline), proximal (closer to trunk), distal (farther from trunk).

TEAS Tip: *These terms appear on EVERY TEAS exam. Create flashcards. They're the language of anatomy -- you cannot understand questions without them.*

Example: Q: The hand is _____ to the elbow. A: Distal (farther from the trunk). Q: The nose is _____ to the ears. A: Medial (closer to the midline).

---

58 Body Cavities

Explanation: Dorsal cavity: cranial (brain) + spinal (spinal cord). Ventral cavity: thoracic (heart, lungs) + abdominopelvic (digestive organs, bladder, reproductive). Diaphragm separates thoracic from abdominopelvic.

TEAS Tip: *Know which organs are in which cavity. The TEAS asks specific organ location questions. 'The liver is located in which cavity?' Abdominopelvic. 'The heart is in which cavity?' Thoracic.*

Example: Thoracic cavity contents: heart, lungs, trachea, esophagus, major blood vessels. Protected by rib cage. Abdominopelvic: stomach, liver, intestines, kidneys, bladder, reproductive organs.

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59 Metric System in Science

Explanation: Length: meter (m). Mass: kilogram (kg). Time: second (s). Temperature: Kelvin (K) or Celsius (C). Volume: liter (L) or cubic meter. Prefixes: kilo- (10^3), centi- (10^-2), milli- (10^-3), micro- (10^-6), nano- (10^-9).

TEAS Tip: *Scientific passages use metric. Know how to convert between units. The prefixes are consistent across all measurements. Micrograms (mcg), millimeters (mm), milliliters (mL) -- all use the same prefix system.*

Example: 1 mL = 1,000 mcL. 1 g = 1,000 mg = 1,000,000 mcg. Drug dosages: a 0.25 mg dose = 250 mcg. This conversion is absolutely essential for nursing calculations.

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60 Interpreting Experiments

Explanation: When a passage describes an experiment, identify: (1) Research question. (2) Hypothesis. (3) Independent variable (manipulated). (4) Dependent variable (measured). (5) Control group. (6) Results. (7) Conclusion.

TEAS Tip: *Read the experimental design BEFORE looking at the data. Understand what was tested and how. Then evaluate whether the conclusion matches the data. The TEAS includes experiments where the conclusion does NOT follow.*

Example: Experiment: 'Group A received Drug X; Group B received placebo. Group A had 30% faster recovery.' Independent variable = Drug X. Dependent = recovery time. Valid conclusion only if groups were equivalent at start.

SECTION 4: ENGLISH & LANGUAGE USAGE

Conventions of Standard English, Knowledge of Language, Vocabulary. 37 questions in 37 minutes. Grammar, punctuation, and sentence structure are heavily tested.

61 Subject-Verb Agreement

Explanation: A singular subject takes a singular verb. A plural subject takes a plural verb. Ignore prepositional phrases between subject and verb. 'The nurse (singular) with many patients (plural) IS tired' -- NOT 'are.'

TEAS Tip: *The most common TEAS trap: a prepositional phrase between the subject and verb. The team of nurses (IS, not are) ready. The list of medications (IS, not are) long. Find the TRUE subject.*

Example: The group of students (is/are) studying. Subject = group (singular). Verb = is. 'Of students' is a prepositional phrase -- ignore it. The results of the test (is/are) in. Subject = results (plural). Verb = are.

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62 Pronoun-Antecedent Agreement

Explanation: A pronoun must agree in NUMBER and GENDER with its antecedent (the noun it replaces). 'Each nurse must wash (his or her / their) hands.' Formal English: 'his or her' (each = singular). Modern usage increasingly accepts 'their.'

TEAS Tip: *Indefinite pronouns: each, every, anyone, someone, nobody -- these are all SINGULAR. 'Everyone should bring (his or her / their) ID.' The TEAS generally follows formal/older conventions.*

Example: The patient said that (he or she / they) felt better. If the patient's gender is known, use he or she. If unknown, formal grammar prefers 'he or she.' 'The nurses said that (his or her / their) shifts were long.' Nurses = plural, use 'their.'

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63 Comma Usage

Explanation: Use commas: (1) Between items in a series (I need gloves, a mask, and a gown). (2) After introductory phrases (After the exam, go home). (3) Before coordinating conjunctions joining independent clauses (I studied, and I passed). (4) Around nonessential information (The nurse, who has 20 years of experience, retired).

TEAS Tip: *The Oxford comma (before 'and' in a list) is generally expected on the TEAS. Two independent clauses joined by 'and' or 'but' NEED a comma. An introductory phrase NEEDS a comma.*

Example: Incorrect: 'I studied hard yet I failed.' Correct: 'I studied hard, yet I failed.' (Two independent clauses, coordinating conjunction = comma needed.) Correct: 'After studying for hours, I felt prepared.' (Introductory phrase = comma needed.)

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64 Apostrophes

Explanation: Apostrophes show: (1) Possession -- nurse's notes (one nurse), nurses' notes (multiple nurses). (2) Contractions -- can't (cannot), it's (it is), don't (do not). DO NOT use apostrophes for plurals.

TEAS Tip: *'It's' vs. 'Its' is the single most tested punctuation rule on the TEAS. 'It's' = it is (contraction). 'Its' = belonging to it (possessive). If you can replace with 'it is,' use the apostrophe.*

Example: The hospital updated (it's / its) policies. Can you say 'it is policies'? No. So possessive = its (no apostrophe). (It's / Its) important to wash your hands. 'It is important...' Yes! So contraction = it's.

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65 Semicolons

Explanation: Use semicolons between two closely related independent clauses WITHOUT a conjunction. 'I studied for weeks; I passed the TEAS.' Also use between items in a complex list that already contains commas.

TEAS Tip: *If you can put a period between two sentences, you can use a semicolon. The semicolon is stronger than a comma but weaker than a period. Both sides must be complete sentences.*

Example: Correct: 'The patient was discharged; however, follow-up was scheduled.' (Semicolon before 'however' + comma after.) Incorrect: 'The patient was discharged, however, follow-up was scheduled.' (Comma splice -- two complete sentences joined by only a comma.)

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66 Commonly Confused Words

Explanation: There (location), Their (possessive), They're (they are). To (direction), Too (also/excessively), Two (number). Accept (receive), Except (excluding). Affect (verb, to influence), Effect (noun, result). Then (time), Than (comparison).

TEAS Tip: *The TEAS tests these relentlessly. Create mental substitutions: 'They're' -> 'They are' (if it fits, use the contraction). 'Affect' is the Action (verb). 'Effect' is the End result (noun).*

Example: 'The medication will (affect/effect) your blood pressure.' Action = affect (verb). 'The (affect/effect) of the medication was immediate.' Result = effect (noun).

67 Sentence Fragments

Explanation: A complete sentence must have a SUBJECT and a PREDICATE (verb) and express a complete thought. A fragment is missing one of these. 'Because I was tired.' -- Fragment. 'I went to bed because I was tired.' -- Complete.

TEAS Tip: *The TEAS asks you to identify fragments. Read the 'sentence' alone. Does it feel incomplete? If you're left waiting for more information, it's a fragment. Subordinate clauses (starting with 'because,' 'since,' 'although') need an independent clause.*

Example: Fragment: 'Administering the medication to the patient.' (No main verb -- 'administering' is a gerund, not a tensed verb.) Complete: 'The nurse is administering the medication to the patient.'

68 Run-On Sentences

Explanation: A run-on joins two or more independent clauses without proper punctuation. Fix by: (1) Period (separate sentences). (2) Semicolon. (3) Comma + coordinating conjunction (and, but, or, so, yet).

TEAS Tip: *Read aloud in your head. If you run out of breath or the thought shifts, you probably need punctuation. Two complete thoughts can't live in one sentence without a connector.*

Example: Run-on: 'The patient was admitted he required surgery.' Fix 1: 'The patient was admitted. He required surgery.' Fix 2: 'The patient was admitted; he required surgery.' Fix 3: 'The patient was admitted, and he required surgery.'

69 Dangling Modifiers

Explanation: A modifier describes something. If the thing being described is missing or in the wrong place, the modifier 'dangles.' Fix: make sure the modified word is right next to the modifier.

TEAS Tip: *Introductory phrases modify the subject of the sentence. 'Walking into the room, the patient was seen by the nurse.' Who was walking? The nurse, not the patient. Fix: 'Walking into the room, the nurse saw the patient.'*

Example: Incorrect: 'After studying for hours, the test seemed easy.' Who studied? The test didn't study. Fix: 'After studying for hours, I found the test easy.'

70 Parallel Structure

Explanation: Items in a series or comparison must have the same grammatical form. 'The nurse enjoys reading, to write, and running.' Fix: all gerunds (-ing) OR all infinitives (to + verb). 'The nurse enjoys reading, writing, and running.'

TEAS Tip: *Parallelism is tested in lists. Scan for mixed forms: '-ing' next to 'to verb' next to a noun. All items should match. This applies to verb forms, phrases, and clauses.*

Example: Incorrect: 'Nursing requires compassion, being patient, and to have knowledge.' Fix: 'Nursing requires compassion, patience, and knowledge.' (All nouns). Or: '...requires being compassionate, being patient, and being knowledgeable.'

71 Verb Tense Consistency

Explanation: Don't shift tenses without reason. If a passage is in past tense, stay in past tense unless describing a universal truth or a future event relative to the narrative.

TEAS Tip: *The TEAS asks you to identify inappropriate tense shifts. Read for time consistency. 'The nurse checked the chart, gives medication, and documented the dose.' Shift from past (checked) to present (gives) to past (documented). All should be past.*

Example: Incorrect: 'Yesterday, the patient reports pain and the nurse administered medication.' (Shift from present to past.) Fix: 'Yesterday, the patient reported pain and the nurse administered medication.' (All past.)

72 Wordiness & Redundancy

Explanation: Concise expression is preferred. Eliminate phrases that add no meaning: 'due to the fact that' -> 'because.' 'In the event that' -> 'if.' 'At this point in time' -> 'now.' Redundant: 'past history,' 'advance planning,' 'basic fundamentals.'

TEAS Tip: *The TEAS tests your ability to identify and correct wordy or redundant sentences. The SHORTEST grammatically correct option is usually right -- but only if it preserves meaning.*

Example: Wordy: 'It is important to note that hand washing is an essential practice.' Concise: 'Hand washing is essential.' Wordy: 'The reason why she left is because she was ill.' Concise: 'She left because she was ill.'

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73 Capitalization

Explanation: Capitalize: (1) Proper nouns (Mercy Hospital, Dr. Chen). (2) Titles before names (Nurse Rodriguez). (3) Days and months (Monday, January). (4) First word of a sentence. Do NOT capitalize: seasons (spring), generic terms (the hospital), directions (north).

TEAS Tip: *Medical capitalization: diseases are NOT capitalized unless they contain a proper noun (Alzheimer's disease, Parkinson's disease, but diabetes, hypertension). Drug names: generic lowercase (ibuprofen), brand capitalized (Advil).*

Example: Capitalize: Medicare, Medicaid, English, Spanish, MRI (acronym), Department of Nursing. Do NOT capitalize: nurse, doctor (unless part of name), x-ray (unless at start of sentence).

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74 Spelling: Medical Terms

Explanation: Commonly misspelled medical words: abscess (not abcess), aneurysm (not anurism), cirrhosis (not cirrosis), hemorrhage (not hemmorhage), ophthalmology (not opthamology), psoriasis (not psorasis), rhythm (not rythm).

TEAS Tip: *Double letters are the most common spelling error. If unsure about a medical term spelling on the TEAS, look for clues in related words. 'Hemorrhage' contains 'hemo' (blood) + 'rrhage' (bursting).*

Example: 'The patient has _____ (cirrhosis/cirrosis).' The correct spelling is cirrhosis (double r). Think: 'cirrh-' from Greek for 'yellow' (as in jaundice).

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75 Contextual Word Meaning

Explanation: Many TEAS English questions ask you to determine a word's meaning from context. Read the sentence before and after. Predict a meaning. Match to answer choices. The word may have an unexpected secondary meaning.

TEAS Tip: *Vocabulary-in-context questions test whether you can use surrounding clues, not whether you memorized the dictionary. The correct meaning is the one that fits THIS passage, not the most common definition.*

Example: 'The nurse had to temper her frustration when dealing with the difficult patient.' 'Temper' here means 'to moderate or restrain' -- not 'to apply heat to metal' or 'anger.' Context tells you which meaning.

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76 Formal vs. Informal Language

Explanation: Academic and professional writing uses formal language. Avoid: slang, contractions (in formal contexts), first-person pronouns in objective writing, and overly casual expressions. The TEAS tests formal standard English.

TEAS Tip: *'The patient was feeling under the weather' -> Informal. 'The patient reported malaise and low-grade fever' -> Formal. TEAS passages are written in formal academic English -- the answers should match that register.*

Example: Informal: 'A lot of nurses quit because they're burned out.' Formal: 'Many nurses leave the profession due to burnout.' The TEAS tests your ability to recognize and produce formal academic English.

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77 Parts of Speech

Explanation: Noun: person, place, thing, idea. Pronoun: replaces noun (he, she, it). Verb: action or state. Adjective: describes noun. Adverb: describes verb, adjective, or other adverb (-ly). Preposition: shows relationship (in, on, at, under). Conjunction: joins (and, but, or). Interjection: exclamation (Oh!, Wow!).

TEAS Tip: *You don't need to label every word, but you DO need to know which part of speech belongs in a blank. 'The patient was _____ (adjective) and required _____ (noun).'*

Example: Q: Choose the word that best completes: 'The nurse documented the patient's _____ carefully.' Blank needs an adverb (modifies 'documented') or a noun (what was documented). 'Carefully' is an adverb. 'Condition' is a noun. Context decides.

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78 Root Words & Affixes

Explanation: Knowing common prefixes, roots, and suffixes helps decode unfamiliar words. Prefixes: pre- (before), post- (after), anti- (against), dys- (bad/difficult), hyper- (excessive), hypo- (deficient). Suffixes: -itis (inflammation), -ology (study of), -ectomy (removal).

TEAS Tip: *The TEAS English section includes vocabulary questions that test your ability to use word parts. You don't need to know every medical term -- you need to know how to decode them.*

Example: If you see 'hypertension' and don't know it: hyper- = excessive, tens- = pressure. Excessive pressure. 'Bradycardia': brady- = slow, cardi- = heart. Slow heart rate. The roots tell you the meaning.

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79 Paragraph Organization

Explanation: A well-organized paragraph has: (1) Topic sentence. (2) Supporting sentences (in logical order). (3) Concluding or transitioning sentence. The TEAS asks you to identify the best placement for a sentence or the best order of sentences.

TEAS Tip: *For paragraph organization questions, look for TRANSITIONS and PRONOUNS. 'This study,' 'these results,' 'such findings' refer to something introduced earlier. A sentence with 'however' likely follows one presenting the initial position.*

Example: Sentences: (1) However, compliance remains low. (2) Hand washing prevents infection. (3) Therefore, hospitals must improve training. Order: 2, 1, 3. The 'however' in sentence 1 contrasts with sentence 2. 'Therefore' in 3 follows from 1.

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80 Tone in Writing

Explanation: The tone should match the purpose. Informative writing = neutral, objective. Persuasive = confident, urgent. Descriptive = detailed, vivid. The TEAS asks you to identify or select writing with appropriate tone.

TEAS Tip: *For healthcare writing, the expected tone is objective and professional. Avoid emotional language in informational passages. The correct answer is usually the most neutral, precise option.*

Example: Q: Which sentence is most appropriate for a patient education handout? (A) 'You really should quit smoking, it's terrible!' (B) 'Smoking cessation reduces cardiovascular risk by 50% within one year.' (B) is objective and evidence-based.

SECTION 5: HUMAN BODY SYSTEMS

Cardiovascular, respiratory, digestive, nervous, endocrine, reproductive, urinary, musculoskeletal. The most heavily tested content on the TEAS Science section. Know structure AND function.

81 Cardiovascular: Heart Chambers

Explanation: Four chambers: right atrium (receives deoxygenated blood from body), right ventricle (pumps to lungs), left atrium (receives oxygenated blood from lungs), left ventricle (pumps to body -- thickest wall). Blood flow: body -> RA -> RV -> lungs -> LA -> LV -> body.

TEAS Tip: *Trace the path of blood: vena cava -> RA -> tricuspid valve -> RV -> pulmonary valve -> pulmonary artery -> lungs -> pulmonary veins -> LA -> mitral valve -> LV -> aortic valve -> aorta -> body. This path is tested on EVERY TEAS.*

Example: Q: Which chamber pumps blood to the lungs? RV. Q: Which chamber has the thickest wall? LV (it pumps to the entire body against high pressure).

82 Cardiovascular: Blood Vessels

Explanation: Arteries: carry blood AWAY from heart (mostly oxygenated, except pulmonary artery). Thick, muscular, elastic walls. Veins: carry blood TO heart (mostly deoxygenated, except pulmonary veins). Contain valves. Capillaries: thin walls, site of gas/nutrient exchange.

TEAS Tip: *Arteries = Away (both start with A). Veins = toward heart (think 'visiting'). Capillaries = exchange. Blood pressure is highest in arteries and lowest in veins.*

Example: Q: Why do veins have valves but arteries don't? A: Veins carry blood against gravity (especially in legs); valves prevent backflow. Arterial blood is under high pressure and doesn't need valves.

83 Respiratory: Gas Exchange

Explanation: Inhalation: diaphragm contracts (moves down), thoracic volume increases, air enters lungs. Exhalation: diaphragm relaxes (moves up), volume decreases, air exits. Gas exchange in alveoli: O2 diffuses into capillaries, CO2 diffuses out.

TEAS Tip: *O2 and CO2 move by DIFFUSION (high to low concentration). The alveoli are the functional units -- all gas exchange happens there. The rest of the respiratory system (trachea, bronchi) is for AIR TRANSPORT, not exchange.*

Example: Q: What drives gas exchange in the alveoli? A: Concentration gradients -- O2 is high in alveoli (just inhaled) and low in blood, so O2 diffuses into blood. CO2 is high in blood (waste) and low in alveoli, so CO2 diffuses out.

84 Digestive: Pathway & Organs

Explanation: Mouth (mechanical + chemical digestion, amylase) -> Esophagus (peristalsis) -> Stomach (HCl, pepsin, churning) -> Small intestine (duodenum, jejunum, ileum -- most digestion and absorption) -> Large intestine/colon (water absorption, feces formation) -> Rectum -> Anus.

TEAS Tip: *Accessory organs: liver (produces bile), gallbladder (stores bile), pancreas (produces digestive enzymes and bicarbonate). They are NOT part of the digestive tract but contribute to digestion.*

Example: Q: Where does most nutrient absorption occur? A: Small intestine (villi and microvilli increase surface area). Q: What does the large intestine absorb? A: Water and electrolytes.

85 Nervous: CNS vs. PNS

Explanation: Central Nervous System (CNS): brain + spinal cord. Command center. Peripheral Nervous System (PNS): all nerves outside CNS. Carries signals between CNS and body. PNS subdivisions: Somatic (voluntary, skeletal muscle) and Autonomic (involuntary, organs/glands).

TEAS Tip: *Autonomic NS = Sympathetic ('fight or flight' -- increases heart rate, dilates pupils) + Parasympathetic ('rest and digest' -- slows heart rate, stimulates digestion). They have opposing effects on target organs.*

Example: Q: Which system activates during a stressful event? A: Sympathetic NS. Q: Which system dominates after a meal? A: Parasympathetic NS ('rest and digest').

86 Endocrine: Hormones & Glands

Explanation: Major glands: Hypothalamus (master regulator), Pituitary (growth, ADH, oxytocin), Thyroid (metabolism -- T3/T4), Parathyroid (calcium -- PTH), Adrenal (cortisol, adrenaline), Pancreas (insulin, glucagon), Ovaries/Testes (estrogen, testosterone).

TEAS Tip: *Know the hormone-function pairs: Insulin = lowers blood glucose. Glucagon = raises blood glucose. ADH = water retention. Cortisol = stress response. T3/T4 = metabolic rate. PTH = raises blood calcium.*

Example: Q: Which hormone lowers blood glucose? A: Insulin (from pancreatic beta cells). Q: Which gland produces cortisol? A: Adrenal cortex.

87 Reproductive: Male & Female

Explanation: Female: ovaries (produce eggs, estrogen, progesterone), fallopian tubes (fertilization site), uterus (fetal development), vagina (birth canal). Male: testes (produce sperm, testosterone), vas deferens, prostate, penis. Fertilization: sperm + egg in fallopian tube.

TEAS Tip: *The TEAS tests basic reproductive anatomy and the menstrual cycle. Ovulation ~day 14 of a 28-day cycle. Pregnancy: fertilization -> implantation in uterus -> placenta formation -> fetal development.*

Example: Q: Where does fertilization normally occur? A: Fallopian tubes. Q: What hormones do the ovaries produce? A: Estrogen and progesterone.

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88 Urinary: Kidney Function

Explanation: Kidneys filter blood: nephrons are functional units. Steps: (1) Filtration (glomerulus -- water and small solutes forced out of blood). (2) Reabsorption (PCT -- useful substances return to blood). (3) Secretion (DCT -- waste added to filtrate). Urine: ureters -> bladder -> urethra.

TEAS Tip: *Nephron = functional unit. Each kidney has ~1 million nephrons. Filtration happens first; reabsorption returns what the body needs. The kidneys also regulate blood pressure (renin) and produce erythropoietin (RBC production).*

Example: Q: What is filtered at the glomerulus? A: Water, electrolytes, glucose, amino acids, urea -- everything small. Proteins and blood cells are too large and stay in the blood. If protein is in urine, the glomerulus is damaged.

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89 Musculoskeletal: Bones

Explanation: 206 bones. Functions: support, protection, movement, mineral storage (calcium), blood cell production (bone marrow). Axial skeleton: skull, vertebrae, ribs, sternum. Appendicular: limbs, pelvis, shoulders.

TEAS Tip: *Know major bones: femur (thigh -- largest), tibia/fibula (lower leg), humerus (upper arm), radius/ulna (forearm), vertebrae (spine), cranium (skull), pelvis. Joints: ball-and-socket (hip/shoulder), hinge (elbow/knee), pivot (neck).*

Example: Q: Where are blood cells produced? A: Red bone marrow (in flat bones like sternum, pelvis, and ends of long bones). Q: What type of joint is the knee? A: Hinge joint.

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90 Musculoskeletal: Muscles

Explanation: Three types: Skeletal (voluntary, striated, attached to bones), Smooth (involuntary, in organs/blood vessels), Cardiac (involuntary, striated, heart only). Contraction: actin and myosin filaments slide past each other (sliding filament model).

TEAS Tip: *Skeletal muscles work in antagonistic pairs: biceps (flexes) and triceps (extends). Know: tendons connect muscle to bone. Ligaments connect bone to bone. This distinction is frequently tested.*

Example: Q: Which muscle type is under voluntary control? A: Skeletal. Q: What connects muscle to bone? A: Tendons. Q: What connects bone to bone? A: Ligaments.

---

91 Integumentary System (Skin)

Explanation: Largest organ. Layers: Epidermis (outer, protective, contains melanocytes), Dermis (middle, blood vessels, nerves, hair follicles, glands), Hypodermis/Subcutaneous (inner, fat, insulation). Functions: protection, temperature regulation, sensation, vitamin D synthesis.

TEAS Tip: *Skin is the first line of defense against pathogens. It also regulates body temperature through sweating and blood vessel dilation/constriction. Vitamin D is synthesized in skin when exposed to UV light.*

Example: Q: Which layer contains blood vessels and nerves? A: Dermis. Q: What pigment protects against UV radiation? A: Melanin (produced by melanocytes in the epidermis).

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92 Immune System: Innate vs. Adaptive

Explanation: Innate: non-specific, immediate. Barriers (skin), phagocytes (neutrophils, macrophages), NK cells, inflammation, fever. Adaptive: specific, slower, memory. B cells (antibodies -- humoral), T cells (cell-mediated: Helper CD4, Cytotoxic CD8).

TEAS Tip: *Innate = born with it, responds the same way every time. Adaptive = learns and remembers pathogens. Vaccination trains the adaptive immune system. Memory cells enable faster response on second exposure.*

Example: Q: Which immune response is faster on second exposure to a pathogen? A: Adaptive (secondary response is faster and stronger due to memory cells). Q: What do B cells produce? A: Antibodies.

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93 Blood Components

Explanation: Plasma (~55%): water, proteins, electrolytes. Formed elements (~45%): RBCs (erythrocytes -- carry O2, hemoglobin, no nucleus), WBCs (leukocytes -- immune defense), Platelets (thrombocytes -- blood clotting).

TEAS Tip: *RBCs are the most numerous. WBCs include: neutrophils (bacterial), lymphocytes (viral, adaptive), monocytes (become macrophages), eosinophils (parasites, allergies), basophils (histamine). Know what each does.*

Example: Q: Which blood component carries oxygen? A: RBCs (erythrocytes) via hemoglobin. Q: Which component is involved in clotting? A: Platelets (thrombocytes).

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94 Lymphatic System

Explanation: Network of vessels, nodes, and organs. Functions: (1) Return excess fluid to blood. (2) Transport fats from digestive system. (3) Immune defense (lymph nodes filter pathogens). Organs: lymph nodes, spleen, thymus, tonsils.

TEAS Tip: *The lymphatic system is the 'second circulatory system' -- it drains interstitial fluid. Lymph nodes swell during infection (immune cells multiplying). The spleen filters blood and removes old RBCs.*

Example: Q: What happens to excess fluid in tissues? A: It enters lymphatic capillaries, becomes lymph, and is returned to the bloodstream. Q: Where do T cells mature? A: Thymus.

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95 Nervous: Neuron Structure

Explanation: Dendrites (receive signals) -> Cell body (soma, contains nucleus) -> Axon (sends signals) -> Axon terminal (releases neurotransmitters). Myelin sheath (insulation, speeds conduction). Synapse: gap between neurons where neurotransmitters cross.

TEAS Tip: *Action potential: all-or-nothing electrical signal. Resting potential: -70 mV (inside negative). Depolarization: Na+ enters (more positive). Repolarization: K+ exits (returns to negative). Threshold: ~-55 mV for action potential.*

Example: Q: Which part of the neuron receives signals? A: Dendrites. Q: What speeds up signal conduction? A: Myelin sheath. Q: What crosses the synapse? A: Neurotransmitters (chemical signals).

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96 Digestive: Enzymes

Explanation: Amylase (mouth/pancreas): breaks down starch. Pepsin (stomach): breaks down protein (activated by HCl). Trypsin (pancreas/SI): breaks down protein. Lipase (pancreas): breaks down fats. Bile (liver): emulsifies fats (not an enzyme, but critical for fat digestion).

TEAS Tip: *Each enzyme is specific to its substrate. Amylase -> carbs. Protease/pepsin/trypsin -> proteins. Lipase -> fats. The small intestine is where most enzymatic digestion occurs. Bile is not an enzyme -- it's an emulsifier.*

Example: Q: Which enzyme digests starch? A: Amylase. Q: Where is pepsin active? A: Stomach (requires acidic environment). Q: What does bile do? A: Emulsifies fats -- breaks large fat globules into smaller droplets.

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97 Cardiovascular: Conduction System

Explanation: SA node (pacemaker, 60-100 bpm) -> AV node (delay) -> Bundle of His -> Purkinje fibers -> Ventricular contraction. ECG: P wave (atrial depolarization), QRS complex (ventricular depolarization), T wave (ventricular repolarization).

TEAS Tip: *The SA node sets the rhythm. If it fails, the AV node takes over (40-60 bpm). If that fails, Purkinje fibers (20-40 bpm). The ECG shows electrical activity -- NOT mechanical contraction (which follows milliseconds later).*

Example: Q: What is the heart's natural pacemaker? A: SA node (sinoatrial node). Q: What does the QRS complex represent? A: Ventricular depolarization (electrical signal triggering ventricular contraction).

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98 Endocrine: Feedback Loops

Explanation: Most hormone regulation uses negative feedback. Example: Blood glucose rises -> pancreas releases insulin -> glucose enters cells -> blood glucose drops -> insulin release stops. Positive feedback (rare): oxytocin during childbirth (contractions -> more oxytocin -> stronger contractions).

TEAS Tip: *The TEAS asks you to identify the feedback type. Negative feedback = the response OPPOSES the stimulus (restores normal). Positive = the response AMPLIFIES the stimulus. Negative is far more common in the body.*

Example: Q: TSH (thyroid-stimulating hormone) stimulates T3/T4 release. When T3/T4 levels rise, TSH release decreases. This is: negative feedback. The response (TSH decrease) opposes the stimulus (high T3/T4).

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99 Respiratory: Lung Volumes

Explanation: Tidal Volume: normal breath (~500 mL). Inspiratory Reserve: extra air you can inhale. Expiratory Reserve: extra air you can exhale. Residual Volume: air remaining after maximal exhale (keeps lungs from collapsing). Vital Capacity: max you can exhale after max inhale. Total Lung Capacity: everything.

TEAS Tip: *The TEAS may present a spirometry graph. Know: vital capacity = tidal + IRV + ERV. Total lung capacity = vital capacity + residual volume. Residual volume cannot be measured by spirometry (you can't exhale it).*

Example: Q: What is the volume of a normal breath? A: Tidal volume (~500 mL). Q: What volume remains after maximal exhalation? A: Residual volume. This prevents alveolar collapse.

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100 Skeletal: Bone Types

Explanation: Long bones: femur, humerus (levers for movement). Short bones: carpals, tarsals (stability). Flat bones: skull, ribs, sternum (protection + RBC production). Irregular bones: vertebrae, pelvis (complex shapes, multiple functions). Sesamoid bones: patella (embedded in tendon).

TEAS Tip: *Flat bones contain red bone marrow (blood cell production). Long bones store yellow bone marrow (fat). The TEAS tests bone classification and which bones belong to which category.*

Example: Q: Where are RBCs produced in adults? A: Red bone marrow in flat bones (sternum, ribs, pelvis) and ends of long bones. Q: What type of bone is the patella? A: Sesamoid bone.

SECTION 6: MEDICAL TERMINOLOGY

60 must-know prefixes, roots, and suffixes. Medical terminology is a puzzle -- each term can be broken into parts. Master these building blocks and you can decode thousands of terms. Presented in 30 groups of 2 related word parts each.

101 a-, an- (without/not) & -algia (pain)

Explanation: a-/an- = absence of: afebrile (without fever), anesthesia (without sensation). -algia = pain: neuralgia (nerve pain), myalgia (muscle pain), arthralgia (joint pain).

TEAS Tip: *These appear in both the Science and English sections. 'Afebrile' = no fever (normal finding). 'Neuralgia' = pain along a nerve. Don't confuse -algia (pain) with -itis (inflammation).*

Example: Anuria = without urine (no urine output, serious condition). Arthralgia = joint pain (symptom). Arthritis = joint inflammation (diagnosis).

102 brady- (slow) & tachy- (fast)

Explanation: brady- = slow: bradycardia (<60 bpm), bradypnea (slow breathing). tachy- = fast: tachycardia (>100 bpm), tachypnea (rapid breathing). Both describe rates.

TEAS Tip: *These appear in vital sign descriptions. Bradycardia may be normal in athletes. Tachycardia is expected during exercise. The prefix tells you the direction of the abnormality.*

Example: Bradycardia = slow heart rate. Tachycardia = fast heart rate. Bradypnea = slow breathing. Tachypnea = rapid breathing (as in respiratory distress).

103 dys- (difficult/painful) & eu- (normal/good)

Explanation: dys- = abnormal, difficult, painful: dyspnea (difficult breathing), dysphagia (difficulty swallowing), dysuria (painful urination). eu- = normal, good: eupnea (normal breathing), euthyroid (normal thyroid).

TEAS Tip: *Dys- is one of the most common prefixes in clinical documentation. If a patient has 'dyspnea on exertion,' they get short of breath with activity. Eu- confirms a normal state.*

Example: Dyspnea = SOB (shortness of breath). Dysphagia = difficulty swallowing (risk for aspiration). Dysuria = burning/pain with urination (classic UTI symptom).

104 hyper- (excessive) & hypo- (deficient)

Explanation: hyper- = above normal, excessive: hypertension (high BP), hyperglycemia (high blood sugar), hyperthermia (elevated temperature). hypo- = below normal, deficient: hypotension (low BP), hypoglycemia (low blood sugar), hypothermia (low temperature).

TEAS Tip: *These are the most clinically important prefixes. Hyper- and hypo- are opposites. Confusing them in practice can be dangerous. Know the difference cold.*

Example: Hyperkalemia = high potassium (dangerous for heart). Hypokalemia = low potassium (also dangerous). Hyperthyroidism = too much thyroid hormone. Hypothyroidism = too little.

105 -itis (inflammation) & -osis (condition)

Explanation: -itis = inflammation: appendicitis, bronchitis, dermatitis. Usually involves redness, swelling, heat, pain. -osis = abnormal condition or disease: cirrhosis, tuberculosis, osteoporosis. More general than -itis.

TEAS Tip: *-itis conditions are usually acute. -osis conditions are often chronic. The TEAS tests this distinction. 'Hepatitis' (liver inflammation) vs. 'cirrhosis' (chronic scarring).*

Example: Bronchitis = inflammation of bronchi (acute, often viral). Tendonitis = inflammation of a tendon. Osteoporosis = porous bone condition (chronic, progressive bone loss).

106 -ectomy (removal) & -otomy (cutting into)

Explanation: -ectomy = surgical removal: appendectomy (remove appendix), cholecystectomy (remove gallbladder). -otomy = cutting into: tracheotomy (cut into trachea), laparotomy (cut into abdomen).

TEAS Tip: *'-ectomy' = excise/remove. '-otomy' = cut into (but don't necessarily remove). '-ostomy' = create an opening (colostomy = create opening in colon). These three suffixes are frequently confused.*

Example: Appendectomy = removal of appendix. Tracheotomy = incision into trachea (for airway access). Colostomy = surgical creation of an opening in the colon (for waste elimination).

107 cardi/o (heart) & pulmon/o (lung)

Explanation: cardi/o = heart: cardiology, electrocardiogram, cardiomyopathy. pulmon/o = lung: pulmonary, pulmonology. Often seen together: cardiopulmonary (heart-lung).

TEAS Tip: *Cardiopulmonary resuscitation (CPR) = heart-lung revival. Cardiac arrest = heart stops. Pulmonary edema = fluid in lungs. These roots combine with others to form complex terms.*

Example: Cardiomyopathy = disease of heart muscle. Pulmonary embolism = blood clot in lung artery. Cardiovascular = relating to heart and blood vessels.

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108 gastr/o (stomach) & enter/o (intestine)

Explanation: gastr/o = stomach: gastritis, gastroenterology. enter/o = intestine (usually small): enteritis, gastroenteritis. Often combined: gastroenterology (study of stomach and intestines).

TEAS Tip: *Gastroenteritis = stomach flu (inflammation of stomach + intestines). Gastric ulcer = stomach ulcer. Enteral feeding = feeding through a tube into the GI tract.*

Example: Gastrectomy = removal of part or all of stomach. Enteritis = inflammation of small intestine. Gastroenterologist = specialist in digestive system disorders.

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109 hepat/o (liver) & nephr/o (kidney)

Explanation: hepat/o = liver: hepatitis, hepatomegaly. nephr/o = kidney: nephrology, nephritis, nephrectomy. Both are vital organs for filtering: liver filters toxins from blood, kidneys filter waste into urine.

TEAS Tip: *Hepatitis = liver inflammation (viral, alcoholic, etc.). Nephritis = kidney inflammation. Hepatotoxic = toxic to the liver. Nephrotoxic = toxic to the kidneys.*

Example: Hepatomegaly = enlarged liver (sign of disease). Nephrolithiasis = kidney stones. Nephrectomy = removal of a kidney (you can live with one).

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110 oste/o (bone) & arthr/o (joint)

Explanation: oste/o = bone: osteoporosis, osteomyelitis. arthr/o = joint: arthritis, arthroscopy. Often related: osteoarthritis (bone + joint condition).

TEAS Tip: *Osteoporosis = porous bones (weak, fracture-prone). Osteoarthritis = joint inflammation from wear and tear (most common type of arthritis). Arthritis = joint inflammation.*

Example: Osteoblast = bone-building cell. Osteoclast = bone-breaking cell. Arthralgia = joint pain. Arthroscopy = looking inside a joint with a scope.

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111 neuro/o (nerve) & my/o (muscle)

Explanation: neuro/o = nerve: neurology, neuropathy, neuron. my/o = muscle: myalgia, myocardium, myopathy. Together: neuromuscular junction = where nerve meets muscle.

TEAS Tip: *Neurology = study of nervous system. Myalgia = muscle pain. The myocardium is the heart muscle. Neuropathy = nerve damage (common in diabetes).*

Example: Neurotransmitter = chemical that carries signals between neurons. Myocardial infarction = heart attack (death of heart muscle). Myopathy = muscle disease.

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112 derm/o (skin) & hemat/o (blood)

Explanation: derm/o = skin: dermatology, dermatitis, hypodermic. hemat/o = blood: hematology, hematoma, hematuria. Skin and blood are both easily accessible for examination.

TEAS Tip: *Dermatitis = skin inflammation (rash). Hematoma = collection of blood outside vessels (bruise). Hypodermic = under the skin (injection).*

Example: Dermatologist = skin specialist. Hematologist = blood specialist. Hematuria = blood in urine (sign of UTI, kidney stones, or worse).

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113 -oma (tumor) & -pathy (disease)

Explanation: -oma = tumor or mass: carcinoma, melanoma, lymphoma. Not all -omas are malignant, but they all refer to growths. -pathy = disease or disorder: neuropathy, cardiomyopathy, retinopathy.

TEAS Tip: *-oma can be benign (lipoma = fatty tumor) or malignant (carcinoma). -pathy is a general suffix meaning 'disease of.' Diabetic neuropathy = nerve disease from diabetes.*

Example: Carcinoma = malignant tumor of epithelial tissue. Lymphoma = cancer of lymphatic system. Myopathy = muscle disease. Nephropathy = kidney disease.

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114 pre- (before) & post- (after)

Explanation: pre- = before: preoperative (before surgery), prenatal (before birth), premorbid (before illness). post- = after: postoperative (after surgery), postnatal (after birth), postmortem (after death).

TEAS Tip: *These prefixes are essential for timelines in nursing. Pre-op vitals are taken before surgery. Post-op care starts after. Prenatal vitamins are taken during pregnancy (for the developing baby).*

Example: Preoperative = before operation. Postoperative = after operation. Prenatal = before birth (during pregnancy). Postpartum = after birth.

115 poly- (many) & olig/o (few/scanty)

Explanation: poly- = many, excessive: polyuria (excessive urination), polydipsia (excessive thirst). olig/o = few, scanty: oliguria (low urine output), oligohydramnios (low amniotic fluid).

TEAS Tip: *Polyuria is a classic sign of diabetes. Oliguria (<400 mL urine/day in adults) is a sign of kidney failure or dehydration. Both are important clinical indicators.*

Example: Polyphagia = excessive hunger (another diabetes sign). Oliguria = decreased urine output (report immediately -- may indicate renal impairment).

SECTION 7: TEAS TEST STRATEGY

Time breakdown, elimination techniques, calculator tips. The TEAS is 4 hours. Strategy keeps you on pace and maximizes your score.

131 TEAS 7 Format Overview

Explanation: 4 sections, 170 questions total, 209 minutes: Reading (45 Q, 55 min), Math (38 Q, 57 min), Science (50 Q, 60 min), English (37 Q, 37 min). No penalty for wrong answers -- ALWAYS answer every question.

TEAS Tip: *Time per question: Reading ~73 sec, Math ~90 sec, Science ~72 sec, English ~60 sec. The English section is the tightest on time. Budget carefully.*

Example: Total testing time: 3 hours 29 minutes + breaks. You get a 10-minute break after the Math section. Use it -- restroom, water, snack, reset.

132 Elimination Strategy

Explanation: For every question: (1) Read the question first (not the passage/answers). (2) Predict the answer if possible. (3) Eliminate obviously wrong choices. (4) Choose the best remaining option. Each elimination increases your odds.

TEAS Tip: *Even eliminating ONE wrong choice turns a 25% guess into 33%. Eliminating two makes it 50/50. Never leave a question blank -- there is NO penalty for wrong answers.*

Example: Strategy for 'select all that apply': treat each option as a true/false question. If it's true, select it. If false, don't. Don't let the format intimidate you.

133 Reading Section Pacing

Explanation: 45 questions, 55 minutes. Budget ~1 min per question. For passage-based questions: spend 2-3 min reading, then ~45 sec per question. For standalone questions: 30-45 seconds each.

TEAS Tip: *Don't read passages twice. Read ONCE, actively (note main idea per paragraph). Answer questions. Return to passage ONLY for specific detail questions. Your margin notes answer most questions.*

Example: Pacing checkpoints: Q15 @ 37 min left. Q30 @ 18 min left. If behind, skip the longest passage and come back. Don't sacrifice 5 easy questions for one hard passage.

134 Math Section Pacing

Explanation: 38 questions, 57 minutes. Budget ~90 sec per question. Use the on-screen calculator -- it's there for a reason. But don't rely on it for simple calculations (faster to do them mentally).

TEAS Tip: *Word problems take the most time. If a problem takes more than 2 minutes, flag it, pick your best guess, and move on. You can return to flagged questions if time allows.*

Example: Write formulas on scratch paper BEFORE starting (PEMDAS, area/perimeter, conversions). This is your cheat sheet -- you wrote it during the instructions period, so it's 100% allowed.

135 Science Section Strategy

Explanation: 50 questions, 60 minutes. The most content-heavy section. Prioritize: Human A&P (most questions), then biology, then chemistry, then scientific reasoning.

TEAS Tip: *Use the process of elimination aggressively. Science questions often have answer choices where 2 are clearly wrong (wrong system, wrong direction), 1 is close but flawed, and 1 is correct.*

Example: For experimental passages: identify the hypothesis, independent variable, and dependent variable BEFORE looking at questions. 90% of the questions test these three things.

136 English Section Pacing

Explanation: 37 questions, 37 minutes. Exactly 1 minute per question. This section moves fast. Trust your grammar instincts -- don't overthink.

TEAS Tip: *Grammar questions: if it 'sounds wrong,' it probably is. Read the sentence in your head. Your brain has internalized more grammar rules than you realize. Don't over-analyze.*

Example: Spelling questions: look for double-letter errors (accommodate has two c's and two m's; embarrass has two r's and two s's). These are the most common TEAS spelling traps.

137 Calculator Tips

Explanation: The TEAS provides an on-screen 4-function calculator. Use it for: large multiplication/division, decimal operations, percentage calculations. Do NOT use it for: simple arithmetic, fraction simplification, quick estimates.

TEAS Tip: *The calculator is slow. Every keystroke takes time. For problems like 1/4 + 1/2, just do it in your head (1/4 + 2/4 = 3/4). Save the calculator for 23.87 * 14.6.*

Example: Before the Math section starts, practice using the calculator during the instructions. Get comfortable with the buttons. Don't waste your first 2 minutes figuring out how to use it.

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138 Test-Taking Mindset

Explanation: The TEAS is a marathon. Maintain steady energy: eat protein before the test (not sugar -- you'll crash). Stay hydrated but not overly so (bathroom breaks cost time).

TEAS Tip: *If a section goes badly, RESET. The Reading section doesn't affect your Math score. Each section is scored independently. A bad Reading section does NOT mean you'll do poorly on Math.*

Example: During the 10-minute break: use restroom, drink water, eat a handful of nuts or a protein bar. Do NOT discuss the test with anyone. Do NOT try to look up answers.

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139 Day Before Checklist

Explanation: 1. Confirm test location and time. 2. Pack: ID, admission ticket, layers (test center temp varies), water (clear bottle), quiet snacks. 3. Lay out comfortable clothes. 4. Set 2 alarms. 5. No studying after 6 PM. 6. In bed by 10 PM.

TEAS Tip: *The night before is for REST, not cramming. Whatever you don't know by then, you won't learn. A good night's sleep is worth more than 3 extra hours of anxious studying.*

Example: If you can't sleep (normal!), don't panic. Lie quietly in the dark. Resting is almost as restorative as sleeping. Do NOT get up and start studying -- that guarantees you'll be exhausted.

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140 Morning Of Protocol

Explanation: Wake 2 hours before. Eat your normal breakfast. Light review of formula sheet only -- 10 minutes max. Do 5 easy practice questions from your strongest area. Arrive 30 min early.

TEAS Tip: *The warm-up questions should be EASY. You're activating your brain, not testing yourself. The feeling of 'I know this' builds confidence. The feeling of 'I don't know this' creates anxiety.*

Example: Absolute don'ts: (1) Don't study new material. (2) Don't drink excessive caffeine. (3) Don't skip breakfast. (4) Don't arrive late. (5) Don't discuss the test with other test-takers in the waiting area.

SECTION 8: STUDY PLANNER

4-week and 8-week preparation schedules. Choose based on your timeline. Stick to the daily schedule. Consistent daily study beats weekend cramming every time.

141 8-Week Plan: Weeks 1-2

Explanation: Week 1: Science foundation. Study Section 5 (Body Systems) + Section 6 (Medical Terminology). Goal: understand every body system and learn 60 word roots. Week 2: Reading + English. Study Section 1 (Reading) + Section 4 (English). Take a diagnostic test at the end of Week 2.

TEAS Tip: *Daily: 2 hours. Morning: 1 hour of new content. Evening: 1 hour of review (flashcards, practice questions). Weekends: one 3-hour session for deeper study and a practice quiz.*

Example: Week 1, Day 1: Cardiovascular system. Day 2: Respiratory + digestive. Day 3: Nervous + endocrine. Day 4: Reproductive + urinary. Day 5: Musculoskeletal + immune. Day 6: Review all systems. Day 7: Medical terminology (first 30 roots).

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142 8-Week Plan: Weeks 3-4

Explanation: Week 3: Science deep dive. Study Section 3 (Science concepts). Focus on chemistry, biology, and scientific reasoning. Week 4: Math. Study Section 2 (Math). Practice every formula until automatic. Take a full-length practice test at the end of Week 4.

TEAS Tip: *Daily: 2 hours. Add timed practice: 15-20 questions in 20 minutes, review answers carefully. The review is where learning happens -- spend as much time reviewing as you did answering.*

Example: Week 3 focus: cell biology, DNA/RNA, atoms, bonds, macromolecules. Week 4 focus: fractions, decimals, percentages, ratios, conversions, word problems. Every formula on flashcards.

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143 8-Week Plan: Weeks 5-6

Explanation: Week 5: Integration. Alternate between Science and Math days. Start doing mixed practice (questions from multiple subjects). Week 6: Reading + English deep review. Focus on your weakest areas from the diagnostic tests. Take a second full-length practice test.

TEAS Tip: *Daily: 2.5 hours. Increase timed practice to 30 questions in 30 minutes. Start tracking accuracy by topic. Identify your 3 weakest sub-topics and dedicate extra time to them.*

Example: Week 5: Monday=Science, Tuesday=Math, Wednesday=Science, Thursday=Math, Friday=Reading, Saturday=English, Sunday=Practice Test + Review.

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144 8-Week Plan: Weeks 7-8

Explanation: Week 7: Targeted review. Focus exclusively on weak areas identified from practice tests. Drill your 3 weakest topics until accuracy exceeds 80%. Week 8: Final review + simulation. Take 2 full-length practice tests. No new content -- review only.

TEAS Tip: *Daily: 3 hours in Week 7, 2 hours in Week 8 (taper before the test). The taper is important -- you can't cram. In the final 3 days, study no more than 1 hour per day.*

Example: Week 8 activities: formula sheet from memory, quick-review flashcards, 1 full simulation (exact timing, same breaks), error log review. No new content. Rest and confidence are your priorities.

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145 4-Week Plan: Week 1

Explanation: Intensive launch. Days 1-3: Science (Body Systems focus). Days 4-5: Math (conversions, ratios, algebra). Days 6-7: Reading + English diagnostic focus + review weak areas. Daily: 3-4 hours.

TEAS Tip: *The 4-week plan is intense. You must study every day. Split your time: 60% on your weakest subject, 30% on your strongest, 10% on maintaining the others.*

Example: Day 1: All 8 body systems -- overview only (don't go deep yet). Day 2: Cardiovascular + respiratory deep dive. Day 3: Nervous + endocrine + digestive. Day 4: Math fundamentals. Day 5: Math word problems. Day 6: Full-length practice test. Day 7: Review test results.

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146 4-Week Plan: Week 2

Explanation: Science + Math deep dive. Days 1-3: Science (chemistry, biology, scientific reasoning). Days 4-5: Math (geometry, data, probability). Day 6: Full-length practice test. Day 7: Review + identify top 5 weak areas.

TEAS Tip: *After each practice test, create a 'hit list' of your 5 weakest topics. These become your focus for Week 3. Don't study what you already know well.*

Example: Week 2 practice test goal: identify patterns. Are you missing questions because of content gaps or because of misreading? The fix is different for each.

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147 4-Week Plan: Week 3

Explanation: Weak area attack. Day 1-2: Weak area 1 + 2. Day 3-4: Weak area 3 + 4. Day 5: Weak area 5 + Reading review. Day 6: Full-length practice test. Day 7: Review + refine strategy.

TEAS Tip: *During weak area days, do targeted practice: 20 questions on ONE topic, review, repeat. Don't move on until you understand WHY each wrong answer was wrong.*

Example: Goal: accuracy on weak areas should increase from whatever it was to >75%. If one area doesn't improve after focused work, it may be a reasoning issue, not content.

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148 4-Week Plan: Week 4

Explanation: Final preparation. Day 1-2: Review all formulas, body systems, and terminology. Day 3: Full simulation (exact test conditions). Day 4: Review simulation results -- light review only. Day 5: Rest or very light review. Day 6: Test day!

TEAS Tip: *Taper is critical in the final 3 days. Study no more than 1 hour. You've done the work. Now rest, hydrate, and trust your preparation.*

Example: Day before test: No studying after 6 PM. Pack your bag. Lay out clothes. Set 2 alarms. Read something enjoyable. Go to bed early. You're ready.

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149 Daily Study Session Structure

Explanation: Every study session: (1) 5 min -- review previous session (active recall). (2) 40 min -- new content (reading + note-taking). (3) 15 min -- practice questions on new content. (4) 10 min -- review answers + log errors. (5) 5 min -- preview tomorrow's topic.

TEAS Tip: *The 5-minute review at the start is the most important part. It activates prior knowledge and uses retrieval practice (the most effective study technique). Don't skip it.*

Example: Error log: keep a running list of every question you get wrong. Write: topic, why you got it wrong, what you'll do differently. Review this log weekly. Patterns will emerge.

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150 Weekly Progress Check

Explanation: Every Sunday: (1) Review your error log. Tally error types (content gap vs. misread vs. time pressure). (2) Rate confidence 1-5 for each topic. (3) Adjust next week's schedule based on data, not feelings.

TEAS Tip: *If practice test scores aren't improving, change something. Don't just study more -- study differently. Switch from reading to active recall. Switch from passive review to timed practice.*

Example: Sample progress check: 'This week I scored 72% on Science (up from 68%). Weakest area: chemistry (55%). Plan for next week: 3 extra chemistry sessions, focus on chemical bonds and reactions.'

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