Applaa UCAT Practice Mock 161

Mock Practice Exam Booklet

Applaa: Socratic Practice Engine

Submit and grade your answers online for instant worked solutions:

https://applaa.com/practice/check?exam=ucat&paper=161

Instructions & Study Method

Welcome to your Applaa offline practice booklet. Please follow these guidelines to maximize your learning outcome:

1. Distraction-Free Practice: Solve the multiple-choice questions in Section 1 under timed conditions. Do not look for shortcuts or answers until you are completely done.

2. Check & Submit Online: We have intentionally excluded the answer key from this printout. To get your score, see worked solutions, and track your progress metrics, open: **https://applaa.com/practice/check?exam=ucat&paper;=161** on any browser. Bubble in your answers in our digital check sheet.

3. Learn with Appy Buddy (AI Socratic Tutor): Applaa is a 100% ad-free educational space. Our online AI Tutor guides you step-by-step through questions you get wrong, showing you how to solve them rather than just giving you the answer.

Section 1: Practice Questions

Question 1 — [Verbal Reasoning / true_false_cant_tell]

Read the passage below and decide if the following statement is True, False, or Can't Tell based on the text. Passage: In 2023, research conducted by researchers led by Dr. Aris Thorne at the Renewable Energy Research investigated the properties of Graphene. Initial experimental setups achieved an energy conversion efficiency of 26 percent. By refining the chemical vapor deposition process and reducing crystalline defects, the team successfully boosted the efficiency of Graphene to 46 percent in follow-up trials. Despite these promising results, commercial viability is currently limited by the high cost of raw precursor materials and safety regulations governing nanotechnology manufacturing. Statement: The research at the Renewable Energy Research was funded by a government scientific grant.

A: True

B: False

C: Can't Tell

Question 2 — [Verbal Reasoning / true_false_cant_tell]

Read the passage below and decide if the following statement is True, False, or Can't Tell based on the text. Passage: Public health campaigns in Italy during the late twentieth century made significant progress in combating infectious diseases. In 2002, the incidence rate of Cholera was recorded at 271 cases per 100,000 people. Following a nationwide distribution of protective nets and sanitation improvements, the rate fell to 191 cases per 100,000 people over the next decade. While this decline was celebrated as a major victory, health officials warned that rising temperatures could allow vector populations to rebound in rural regions. Statement: The nationwide distribution of protective nets cost the government of Italy over ten million dollars.

A: True

B: False

C: Can't Tell

Question 3 — [Verbal Reasoning / true_false_cant_tell]

Read the passage below and decide if the following statement is True, False, or Can't Tell based on the text. Passage: Public health campaigns in Poland during the late twentieth century made significant progress in combating infectious diseases. In 1991, the incidence rate of Yellow Fever was recorded at 254 cases per 100,000 people. Following a nationwide distribution of protective nets and sanitation improvements, the rate fell to 192 cases per 100,000 people over the next decade. While this decline was celebrated as a major victory, health officials warned that rising temperatures could allow vector populations to rebound in rural regions. Statement: The incidence rate of Yellow Fever per 100,000 people in Poland decreased after the public health campaign.

A: True

B: False

C: Can't Tell

Check Answers: applaa.com/practice/check?exam=ucat&paper=161

Question 4 — [Verbal Reasoning / true_false_cant_tell]

Read the passage below and decide if the following statement is True, False, or Can't Tell based on the text. Passage: In 2024, research conducted by researchers led by Dr. Rosalind Franklin at the Materials Science Lab investigated the properties of Graphene. Initial experimental setups achieved an energy conversion efficiency of 20 percent. By refining the chemical vapor deposition process and reducing crystalline defects, the team successfully boosted the efficiency of Graphene to 35 percent in follow-up trials. Despite these promising results, commercial viability is currently limited by the high cost of raw precursor materials and safety regulations governing nanotechnology manufacturing. Statement: The research team led by Dr. Rosalind Franklin managed to increase the energy conversion efficiency of Graphene.

A: True

B: False

C: Can't Tell

Question 5 — [Decision Making / venn_deduction]

Based on the Venn diagram, how many members belong to both Tennis and Athletics?

A: 18

B: 28

C: 20

D: 26

Question 6 — [Decision Making / venn_deduction]

Based on the Venn diagram, how many members belong to both Tennis and Athletics?

A: 14

B: 17

C: 19

D: 7

Question 7 — [Decision Making / error_checking]

How many of the four pictures in the left-hand column are exactly the same as the corresponding picture in the right-hand column?

A: 0

B: 1

C: 2

D: 3

E: 4

Question 8 — [Decision Making / venn_deduction]

Based on the Venn diagram, how many members belong to EXACTLY one club/group?

A: 59
B: 74
C: 69
D: 71

Question 9 — [Quantitative Reasoning / chart_interpretation]

What is the simplified ratio of the revenue of Dept C to that of Dept D?

A: 13:5
B: 2:1
C: 3:5
D: 4:3
E: 1:2

Question 10 — [Quantitative Reasoning / chart_interpretation]

What is the simplified ratio of the revenue of Dept A to that of Dept B?

A: 1:3
B: 7:4
C: 3:4
D: 5:3
E: 4:3

Question 11 — [Quantitative Reasoning / chart_interpretation]

What is the combined revenue of Dept A and Dept B (in thousands)?

A: $230k
B: $220k
C: $200k
D: $210k
E: $240k

Question 12 — [Quantitative Reasoning / chart_interpretation]

What is the simplified ratio of the revenue of Dept B to that of Dept A?

A: 9:11
B: 3:2
C: 5:3
D: 3:5
E: 4:3

Check Answers: applaa.com/practice/check?exam=ucat&paper=161

Question 13 — [Abstract Reasoning / sequence]

Which of the options completes the sequence shown in the diagram?

A: <svg width="70" height="70" viewBox="0 0 70 70" xmlns="http://www.w3.org/2000/svg" style="background-color:#f8f9fa;border:1px solid #ced4da;"> <rect x="0" y="0" width="70" height="70" rx="4" ry="0" fill="#f8f9fa" stroke="#343a40" stroke-width="2" fill-opacity="1.0" /> <polygon points="18.5,6.9 31.1,19.5 18.5,32.1 5.9,19.5" fill="#888888" stroke="#000000" stroke-width="2" /> <polygon points="51.5,5.9 64.1,18.5 51.5,31.1 38.9,18.5" fill="#888888" stroke="#000000" stroke-width="2" /> <polygon points="17.5,42.9 30.1,55.5 17.5,68.1 4.9,55.5" fill="#888888" stroke="#000000" stroke-width="2" /> <polygon points="50.5,36.9 63.1,49.5 50.5,62.1 37.9,49.5" fill="#888888" stroke="#000000" stroke-width="2" /> </svg>

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Question 14 — [Abstract Reasoning / sequence]

Which of the options completes the sequence shown in the diagram?

A: <svg width="70" height="70" viewBox="0 0 70 70" xmlns="http://www.w3.org/2000/svg" style="background-color:#f8f9fa;border:1px solid #ced4da;"> <rect x="0" y="0" width="70" height="70" rx="4" ry="0" fill="#f8f9fa" stroke="#343a40" stroke-width="2" fill-opacity="1.0" /> <polygon points="15.5,41.16 25.320439999999998,58.17 5.67956,58.17" fill="#888888" stroke="#000000" stroke-width="2" /> <polygon points="17.5,4.16 27.320439999999998,21.17 7.67956,21.17" fill="#888888" stroke="#000000" stroke-width="2" /> <polygon points="49.5,66.84 59.32044,49.83 39.67956,49.83" fill="#888888" stroke="#000000" stroke-width="2" /> <polygon points="54.5,28.84 64.32044,11.83 44.67956,11.83" fill="#888888" stroke="#000000" stroke-width="2" /> </svg>

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D: <svg width="70" height="70" viewBox="0 0 70 70" xmlns="http://www.w3.org/2000/svg" style="background-color:#f8f9fa;border:1px solid #ced4da;"> <rect x="0" y="0" width="70" height="70" rx="4" ry="0" fill="#f8f9fa" stroke="#343a40" stroke-width="2" fill-opacity="1.0" /> <polygon points="15.5,9.16 25.320439999999998,26.17 5.67956,26.17" fill="#888888" stroke="#000000" stroke-width="2" /> <polygon points="51.5,38.16 61.32044,55.17 41.67956,55.17" fill="#888888" stroke="#000000" stroke-width="2" /> <polygon points="54.5,25.84 64.32044,8.83 44.67956,8.83" fill="#888888" stroke="#000000" stroke-width="2" /> <polygon points="19.5,62.84 29.320439999999998,45.83 9.67956,45.83" fill="#888888" stroke="#000000" stroke-width="2" /> </svg>

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Question 15 — [Abstract Reasoning / set_ab]

Does the Test Shape belong to Set A, Set B, or Neither?

A: Set A

B: Set B

C: Neither

Question 16 — [Abstract Reasoning / odd_one_out]

Which of the following boxes does not belong with the others?

A: Box A

B: Box B

C: Box C

D: Box D

E: Box E

Question 17 — [Situational Judgement / importance]

Scenario: An elderly 80-year-old patient at Methodist Hospital on Sunday night tells a medical student, Sarah, that she lives alone and has no heating. The registrar, who has worked there for 11 years, tells the student to ignore this and focus only on the medical form. How important is the following factor to consider? Factor: The patient's domestic living conditions and safety at home.

A: Very Important

B: Important

C: Of Minor Importance

D: Not Important at All

Question 18 — [Situational Judgement / importance]

Scenario: A medical student, Amelia, at State Medical Center is writing up a clinical case study about a 73-year-old patient from their urology rotation that lasted 8 weeks. How important is the following factor to consider? Factor: The student's personal opinion of the patient's lifestyle choices.

A: Very Important

B: Important

C: Of Minor Importance

D: Not Important at All

Question 19 — [Situational Judgement / importance]

Scenario: A medical student, Lucy, at County Hospital is deciding whether to raise a complaint about a consultant in dermatology who is consistently 19 minutes late to teaching sessions. How important is the following factor to consider? Factor: How popular the consultant is among the rest of the student cohort.

A: Very Important

B: Important

C: Of Minor Importance

D: Not Important at All

Question 20 — [Situational Judgement / importance]

Scenario: A junior doctor, Grace, in urology at Memorial Hospital is considering whether to stay past her shift on Wednesday evening to finish routine paperwork. She has already worked 10 hours. How important is the following factor to consider? Factor: The doctor's current level of fatigue and its potential impact on accuracy.

A: Very Important

B: Important

C: Of Minor Importance

D: Not Important at All

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■ **Section Complete!**
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Simply bubble in your choices (e.g. A, B, C, D) and get instantly scored! You can then review the explanations or chat with Appy Buddy (AI Socratic tutor) to understand complex concepts.