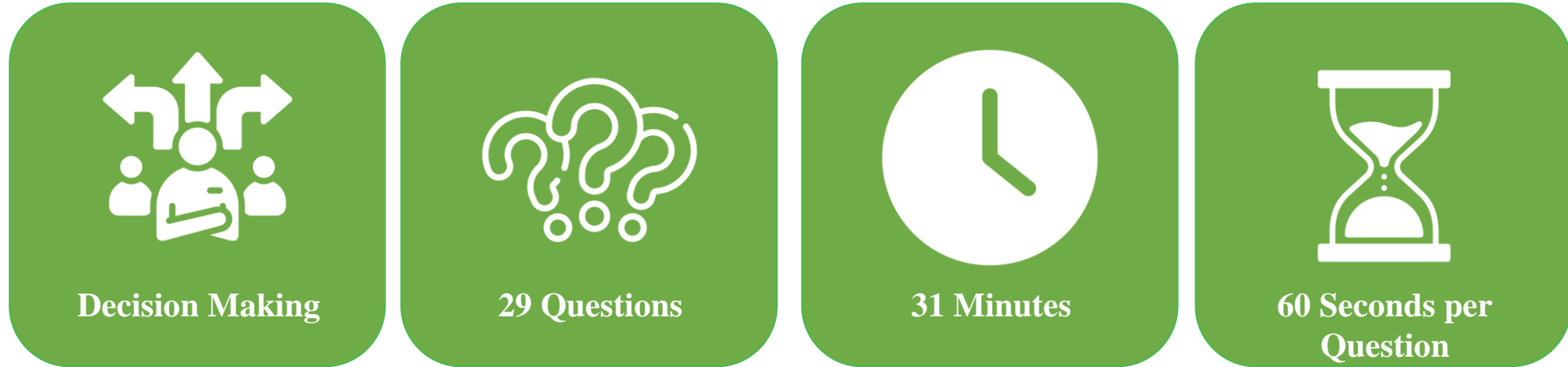


UCAT

DECISION MAKING SESSION 1

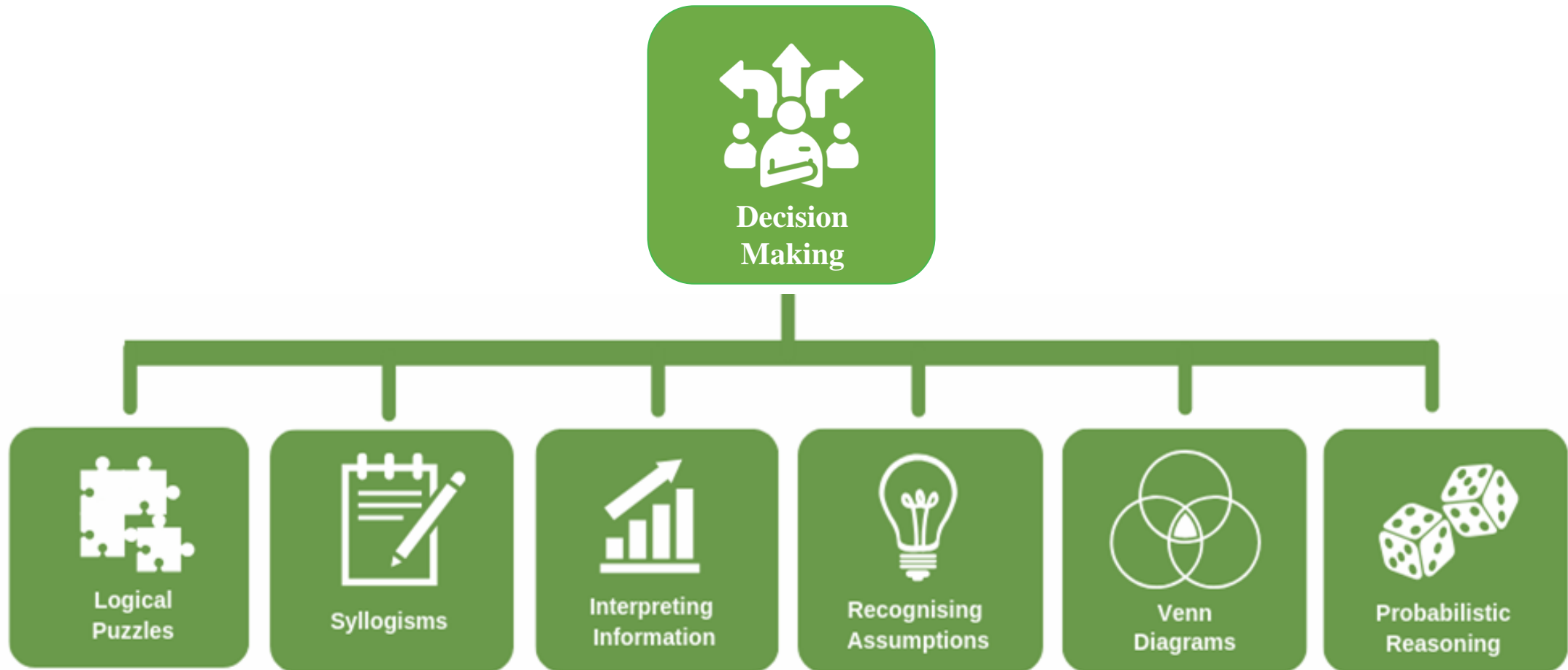


The Structure Of UCAT Decision Making



- The UCAT Decision Making subtest is composed of 29 questions.
- Each question is ‘individual’ – that is, each is associated with text and/or a diagram, followed by an independent question.
- You may be required to interpret text, tables, charts, graphs or other diagrams, and your task is to select the best answer.
- You will have 31 minutes to answer the questions, which is just over one minute per UCAT question.

Types of DM Questions



Explanation of question types

1. **Logical puzzles:** These UCAT questions present you with a puzzle or game that you need to solve in order to arrive at the answer. You are usually presented with text, with or without an accompanying diagram.
2. **Syllogisms:** This type of UCAT question requires you to use deductive reasoning to assess a series of conclusions. You will need to decide whether each conclusion does or does not follow from the information provided. You will need to ‘drag and drop’ your answer accordingly.
3. **Interpreting Information:** In these UCAT questions, you may be provided with text, charts and/or graphs. Your task is to interpret the information and decide whether each conclusion does or does not follow from the information provided. You will need to ‘drag and drop’ your answer accordingly.



Explanation of question types

4. **Recognizing Assumptions:** These questions are perhaps the strangest in UCAT and can be very unfamiliar unless you have acquired and practiced effective UCAT strategies to answer them. You will be required to analyse a statement and four associated arguments. You will need to choose the strongest argument from among the available options.
5. **Venn Diagrams:** These UCAT questions require an understanding of Venn diagrams. You may be presented with a Venn diagram, a series of statements requiring you to draw a Venn diagram, or several Venn diagrams that represent information. You will need to choose the correct answer from among the available options. The diagrams presented in UCAT can look unusual due to a variety of shapes that are used. It is important to have a strong understanding of how Venn diagrams work to answer these UCAT questions.
6. **Probabilistic Reasoning:** In these UCAT questions, you will be provided with a passage of text containing statistical information. You will need to use your understanding of probability principles to select the best answer.



Purpose

- Decision making is central to the role of a health professional.
- Doctors need to be able to solve problems, manage risk and deal with uncertainty.
- Furthermore, health professionals are often required to make decisions quickly, in complex or stressful situations.



Strategies for UCAT VR questions

- This subtest is assessing three areas of logical reasoning: evaluating arguments, deductive reasoning and statistical and figural reasoning.
- your UCAT Noteboard and pen will be most helpful to you.
- note down important information or key calculations and draw tables or diagrams.
- have a strong understanding of Venn diagrams, probability and logical reasoning to succeed in this UCAT subtest.



Strategies for UCAT VR questions

- **Look For Keywords:** For example, the word '*might*' does not lead to a strong argument, because it's uncertain. The word '*feel*' suggests it may be subjective, which would count as a weak argument. On the other hand, '*shown*' or '*proven*' are strong words that support a strong argument.
- **Don't Make Assumptions:** Even though some conclusions might seem logical, unless something is explicitly stated in the passage, don't draw conclusions based on your prior knowledge – only go by what is mentioned in the passage.
- **Follow A Logical Thought Process:** For these, it's best to think logically: which of the arguments makes the most sense? You can usually narrow these down by picking out the illogical options first, and from there you can decide on the best argument. which is the argument you'd pick if you were debating the topic with a friend and wanted to win the debate?



Strategies for UCAT DM questions

You need to know what a strong and weak argument looks like, so you're able to answer correctly.

Tips for spotting strong arguments:

- The premise directly links to the conclusion
- The premise is objective
- The premise cites evidence
- There are no holes in the reasoning

Tips for spotting weak arguments:

- The premise is irrelevant or indirectly linked to the conclusion
- The premise is subjective
- The premise contains assumptions
- There are holes in the reasoning



DM 26 Practice Questions-Free Museum Entry

- Q 26** Should entry to museums be made free to the public in order to increase the number of visitors? Select the strongest argument from the statements below.
- A. YES. Most museums are funded by donors or other subsidies. Loss of entrance fee would not significantly affect their finances.
 - B. YES. It would make visits to museums affordable to those with little disposable income.
 - C. NO. Admission fees contribute to meeting museums' running costs.
 - D. NO. It will mostly lead to people who usually visit museums visiting more often.



DM 28 Practice Questions-Civic Education

Q 28 Should the government introduce a compulsory civic awareness day in order to teach all 18-year-olds about politics, the workings of society, and their civic responsibilities? Select the strongest argument from the statements below.

- A. YES. Unless they have an interest in the topic, teenagers tend to enter adulthood without such knowledge.
- B. YES. This would help increase turnout at elections.
- C. NO. A one-day course would only address such issues superficially and its content would quickly be forgotten.
- D. NO. It would make teenagers miss a day off school or work.



DM 32 Practice Questions-Mobile Phones

Q 32 Should schools ban children from bringing their mobile phones to school in order to enhance concentration and learning? Select the strongest argument from the statements below.

- A. YES. Some students use smart phones to access the internet during lessons.
- B. YES. Students can use phones to cheat in exams.
- C. NO. Students may feel safer if they have a phone on them after school is finished.
- D. NO. Some schools have shown that, if used with a strict set of rules, mobile phones do not interfere with lessons.



DM 42 Practice Questions-Pets for Children

Q 42 Should children be encouraged to keep pets to gain a sense of responsibility and care towards others?

Select the strongest argument from the statements below.

- A. YES. Scientific consensus is that owning a pet reduces stress.
- B. YES. Pets require regular duties of care.
- C. NO. Some children are allergic to pets.
- D. NO. Many children are not disciplined enough to look after animals.



DM 49 Practice Questions-Health Cards

Q 49 Should everyone carry a card containing a chip with their health information to ensure accurate and up-to-date information is readily accessible at every healthcare encounter? Select the strongest argument from the statements below.

- A. YES. Not everyone remembers their medical history well.
- B. YES. This could also be used as an ID card system.
- C. NO. This would be too costly to implement.
- D. NO. If lost, the information could be read by others.



DM 51 Practice Questions-Syllogisms

Q 51 Which of the following syllogisms is incorrect?

- A. No baker is tight-fisted. All the people living in this house are bakers. Therefore no one in this house is tight-fisted.
- B. All peacocks are proud. All birds in this park are peacocks. Therefore all birds in this park are proud.
- C. Caterpillars are not edible. Some worms are edible. Therefore some worms are not caterpillars.
- D. All good speakers are talkative. Some clowns are good speakers. Therefore some clowns are not talkative.



DM 68 Practice Questions-Speed Humps

- Q 68** Should speed-reducing road humps be introduced in all town centers and residential areas?
- A. YES. This would help raise awareness of the dangers of the road amongst drivers.
 - B. YES. People hit by vehicles at lower speeds sustain less serious injuries.
 - C. NO. More emphasis should be placed instead on education pedestrians on the dangers of the road.
 - D. NO. Road humps could damage cars.



DM 74 Practice Questions-Curious Food Lovers

Q 74 All curious people are nice. No food lover is beyond reproach. Some food lovers are curious. Which of the following statements contradicts the above statements?

- A. Some food lovers are nice.
- B. Some nice people are beyond reproach.
- C. All nice people are beyond reproach.
- D. Some curious people love food.



DM 76 Practice Questions-Movie Munchies

Q 76 Saria goes to the cinema with her younger brother and two older sisters Suneeta and Varunee(the eldest). One buys salty popcorn, one buys nachos, one buys candy floss and one buys nothing.

- The eldest picks a savoury snack.
- Saria doesn't like nachos.
- The youngest girl has a savoury snack.
- One of the girls picks no snack.

Which one chooses the candy floss?

- A. Saria**
- B. Suneeta**
- C. Varunee**
- D. Saria's brother**



DM 1 Practice Questions-Professional Chefs

Not all chefs are professionally trained, but all chefs who are professionally trained have excellent knife skills. It is fair to say that some professionally trained chefs don't know how to season their food properly.

Answer YES if the conclusion follows and NO if it does not.

Q 1.1 Some of the chefs who know how to season their food properly also have excellent knife skills.

YES	NO
-----	----

Q 1.2 Some of the chefs with good knife skills are professionally-trained chefs who know how to season their food properly.

YES	NO
-----	----

Q 1.3 All chefs with good knife skills are professionally trained chefs or know how to season their food properly, or both.

YES	NO
-----	----

Q 1.4 Not all chefs with good knife skills know how to season their food properly.

YES	NO
-----	----

Q 1.5 All chefs who know how to season their food properly and have excellent knife skills are professionally trained.

YES	NO
-----	----



DM 6 Practice Questions-Nuts and Seeds

All biscuit brands produced in a biscuit factory, with the exception of the biscuits sold under the brand NoNut, contain nuts. Several biscuit brands produced in the factory contain seeds.

Answer YES if the conclusion follows and No if it does not.

Q 6.1 Some biscuits contain both nuts and seeds.

YES	NO
-----	----

Q 6.2 There are seeds in NoNut biscuits.

YES	NO
-----	----

Q 6.3 If a biscuit is picked at random from the factory's stock and is found not to contain nuts, then it must be a NoNut biscuit.

YES	NO
-----	----

Q 6.4 If two biscuits of two different brands are picked at random from the factory and both contain seeds, then one of them has to be a NoNut biscuit.

YES	NO
-----	----

Q 6.5 If a biscuit does not contain nuts, then it must contain seeds.

YES	NO
-----	----



DM 12 Practice Questions-Sweets

At school, Johnny has only two friends to whom he gives sweets. George gives sweets to Johnny, who reciprocates. All school children give sweets to Lydia.

Answer YES if the conclusion follows and No if it does not.

Q 12.1 If a child is given sweets by Johnny, then he/she must be either George or Lydia.

YES	NO
-----	----

Q 12.2 All children receive sweets from George.

YES	NO
-----	----

Q 12.3 If a child receives sweets from Adam, then that child must be Lydia.

YES	NO
-----	----

Q 12.4 Johnny reciprocates only with George.

YES	NO
-----	----

Q 12.5 Lydia gives sweets to all children.

YES	NO
-----	----



DM 20 Practice Questions-Mandatory Training

All NHS employees must attend a number of mandatory training sessions every calendar year. This includes training on Health and Safety, Fire Safety, Patient Moving and Handling, Infection Control, and Basic Life Support. All mandatory training sessions are independent of one another and last an hour. Staff must book their course places with the HR department. Though people may cancel attendance(e.g. if unwell), they must ensure that no more than 12 months have elapsed since they last attended the same course. No courses run on weekends, national holidays, and bank holidays, e.g. New Year's Day, May Bank Holidays, etc.

Answer YES if the conclusion follows and No if it does not.

- Q 20.1** The staff has five hours of mandatory training per year. YES NO
- Q 20.2** Drug Administration is not mandatory training. YES NO
- Q 20.3** People who have not canceled attendance at a course are exempt from the 12-month rule. YES NO
- Q 20.4** At least five days of the year will be affected by mandatory training requirements. YES NO
- Q 20.5** An employee could attend the same course two days in a row in order to satisfy requirements. YES NO



DM 27 Practice Questions-Pharmacy

A pharmaceutical company provides drugs in the following formats only:

- **All liquid drugs are sold in bottles or vials.**
- **All non-liquid drugs come in packages weighing more than 250 g.**
- **All drugs sold in bottles come with a syringe doser.**
- **All drugs sold in packages or containers of more than 250 g come with a patient information leaflet setting out the side effects.**

Answer YES if the conclusion follows and No if it does not.

Q 27.1 A powdered drug must come with a leaflet.

YES NO

Q 27.2 A drug coming with a syringe doser always comes in a bottle.

YES NO

Q 27.3 If a drug comes with a leaflet then it must be non-liquid.

YES NO

Q 27.4 A syrup in a 525 g bottle comes with a syringe doser and a patient information leaflet.

YES NO

Q 27.5 If a drug comes in a 200 g package then it must be liquid.

YES NO



DM 29 Practice Questions-Recall

A car manufacturer makes three models: Basic, Intermediate, and Premium. It has made the decision to recall all its Basic and Premium models manufactured in September 2016. All Basic models have developed a fault, whereas only some of the Premium models have.

Answer YES if the conclusion follows and No if it does not.

Q 29.1 A car with no fault cannot have been manufactured in September.

YES	NO
-----	----

Q 29.2 A car with a fault must have been manufactured in September.

YES	NO
-----	----

Q 29.3 Intermediate cars made in August 2016 have no fault.

YES	NO
-----	----

Q 29.4 A car made in September, which has no fault, is a Premium model.

YES	NO
-----	----

Q 29.5 More Basic models will be recalled than Premium models.

YES	NO
-----	----



DM 30 Practice Questions-Greedy

Jane is taking 7 orange tarts, 6 apple tarts, and 3 lemon tarts to Annie's house. On the way, Jane eats three of the tarts.

Answer YES if the conclusion follows and No if it does not.

Q 30.1 There is at least one lemon tart left for Annie.

YES	NO
-----	----

Q 30.2 Annie will have more apple tarts than lemon tarts.

YES	NO
-----	----

Q 30.3 Annie will have the same number of each tart.

YES	NO
-----	----

Q 30.4 Annie could be left with the same number of apple tarts as orange tarts.

YES	NO
-----	----

Q 30.5 Annie will have fewer lemon tarts than orange tarts.

YES	NO
-----	----



DM 33 Practice Questions-Which Language

In my year at school, there are only 10 students who study Spanish. They are all in Class 8A1, which has 24 students in total. All students study one language and one only.

Answer YES if the conclusion follows and No if it does not.

Q 33.1 John is in my year. He studies Spanish and so he is in Class 8A1.

YES	NO
-----	----

Q 33.2 Allison is in Class 8A1 so she is studying Spanish.

YES	NO
-----	----

Q 33.3 Paul is in my year and studies French, so he cannot be in Class 8A1.

YES	NO
-----	----

Q 33.4 Faheem must be in Class 8A1 because he studies Spanish.

YES	NO
-----	----

Q 33.5 Fatima is in class 8A3 so she must study French.

YES	NO
-----	----



DM 46 Practice Questions-End of Year Bonus

A Human Resources director announced that "One condition for an employee to be eligible for a bonus is that the employee must have participated in the Orion project."

Answer YES if the conclusion follows and No if it does not.

Q 46.1 All those who receive a bonus will have participated in the Orion project.

YES	NO
-----	----

Q 46.2 All those who participated in the Orion project will receive a bonus.

YES	NO
-----	----

Q 46.3 Those who do not receive a bonus will not have participated in the Orion project.

YES	NO
-----	----

Q 46.4 Those who did not participate in the Orion project will not receive a bonus.

YES	NO
-----	----

Q 46.5 Some employees who participated in the Orion project may not receive a bonus.

YES	NO
-----	----



DM 55 Practice Questions-Wooden Tables

In this country, we can proudly assert that:

- Strong tables are made of wood.
- All carpenters are bald.
- Only carpenters build strong tables.
- All bald people wear a hat.

Answer YES if the conclusion follows and No if it does not.

Q 55.1 People who wear a hat can build tables.

YES NO

Q 55.2 All wooden tables are built by bald people.

YES NO

Q 55.3 A carpenter who builds a strong table does not necessarily wear a hat.

YES NO

Q 55.4 All people who wear hats are carpenters.

YES NO

Q 55.5 A flimsy table can't have been built by a carpenter.

YES NO



DM 57 Practice Questions-Library

Consider the following statements:

Answer YES if the conclusion follows and No if it does not.

- All books in English have a red cover.
- All books in a foreign language have more than 200 pages.
- All and only the books with illustrations have red covers.
- All and only the books with an index have more than 200 pages.

Q 57.1 Foreign books can have a red cover.

YES	NO
-----	----

Q 57.2 Some books with illustrations have an index.

YES	NO
-----	----

Q 57.3 An 85-page book in English has an index.

YES	NO
-----	----

Q 57.4 A 600-page book with red cover has no index.

YES	NO
-----	----

Q 57.5 All English books have illustrations.

YES	NO
-----	----



DM 62 Practice Questions-Xanias and Zazas

All Xanias are Yogos. All Zazas are Yogos

Answer YES if the conclusion follows and No if it does not.

Q 62.1 All Xanias are Zazas

YES	NO
-----	----

Q 62.2 All Zazas are Xanias

YES	NO
-----	----

Q 62.3 No Xania can be a Zaza

YES	NO
-----	----

Q 62.4 Some Zazas can be Xanias

YES	NO
-----	----

Q 62.5 All Yogos are Xanias

YES	NO
-----	----



DM 69 Practice Questions-Asthmatic Nurses

- **No nurse has asthma.**
- **Many smokers become asthmatic.**

Answer YES if the conclusion follows and No if it does not.

Q 69.1 No nurse is a smoker.

YES	NO
-----	----

Q 69.2 Some smokers are nurses.

YES	NO
-----	----

Q 69.3 No asthmatic is a nurse.

YES	NO
-----	----

Q 69.4 All smokers are asthmatic.

YES	NO
-----	----

Q 69.5 An asthmatic smoker cannot be a nurse.

YES	NO
-----	----



DM 79 Practice Questions-Golf Club

The following relates to guests invited to a reception.

Answer YES if the conclusion follows and No if it does not.

- All guests wearing black jackets are golf players.
- All guests with brown hair have a hearing aid.
- None of the dishonest people wear glasses.
- None of the guests who wear a black jacket have a beard.
- All guests with a bowler hat wear glasses.
- All golf players have blue eyes.
- All guests who wear white socks wear a bowler hat.
- Many of the dishonest guests have brown hair.

Q 79.1 Those who wear white socks are dishonest.

YES	NO
-----	----

Q 79.2 Guests who don't have blue eyes have no beards.

YES	NO
-----	----

Q 79.3 Guests who wear a bowler hats are dishonest.

YES	NO
-----	----

Q 79.4 All those who wear glasses are honest.

YES	NO
-----	----

Q 79.5 Some people with brown hair do not wear glasses.

YES	NO
-----	----

Q 79.6 No bearded guest wears a black jacket.

YES	NO
-----	----



DM 79 Practice Questions-Golf Club

The following relates to guests invited to a reception.

Answer YES if the conclusion follows and No if it does not.

- All guests wearing black jackets are golf players.
- All guests with brown hair have a hearing aid.
- None of the dishonest people wear glasses.
- None of the guests who wear a black jacket have a beard.
- All guests with a bowler hat wear glasses.
- All golf players have blue eyes.
- All guests who wear white socks wear a bowler hat.
- Many of the dishonest guests have brown hair.

Q 79.7 Those who do not play golf do not have beards.

YES	NO
-----	----

Q 79.8 All guests with black jackets have blue eyes.

YES	NO
-----	----

Q 79.9 Guests with no bowler hat don't wear white socks.

YES	NO
-----	----

Q 79.10 Some people with glasses have brown hair.

YES	NO
-----	----

Q 79.11 Guests with no hearing aid do not have brown hair.

YES	NO
-----	----

Q 79.12 Many dishonest guests have a hearing aid.

YES	NO
-----	----



DM 90 Practice Questions-Cuppa Anyone?

Liang owns a shop. Her product catalog lists over 100 options for tea that customers can buy. Her teas come from at least six different countries.

- Teas can be either "single origin" which means that they originate from the same estate, or "blends", which means that leaves from different estates have been mixed.
- The tea subtypes she sells are black, green, and oolong.
- No blend can contain more than one subtype.
- The tea produced in Kenya is always black.
- All green teas are single origin.
- Most of her Taiwanese teas are oolongs.
- Her most expensive teas are oolongs.
- All her Japanese tea is green.
- She has more tea from India than Taiwan.
- Both blends and single-origin teas can be scented with perfumes

Answer YES if the conclusion follows and No if it does not.

Q 90.1 Most teas from China are blends.

YES NO

Q 90.2 Most tea from Taiwan is expensive.

YES NO

Q 90.3 Most expensive teas contain a green/oolong blend.

YES NO

Q 90.4 Chinese teas are cheaper than Taiwanese.

YES NO

Q 90.5 A blend may contain teas from several countries.

YES NO



DM 90 Practice Questions-Cuppa Anyone?

Liang owns a shop. Her product catalog lists over 100 options for tea that customers can buy. Her teas come from at least six different countries.

- Teas can be either "single origin" which means that they originate from the same estate, or "blends", which means that leaves from different estates have been mixed.
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- The tea produced in Kenya is always black.
- All green teas are single origin.
- Most of her Taiwanese teas are oolongs.
- Her most expensive teas are oolongs.
- All her Japanese tea is green.
- She has more tea from India than Taiwan.
- Both blends and single-origin teas can be scented with perfumes

Answer YES if the conclusion follows and No if it does not.

Q 90.6 Kenyan teas can be scented.

YES NO

Q 90.7 Liang has more non-black tea than black tea.

YES NO

Q 90.8 Liang has some Japanese and Kenyan blends.

YES NO

Q 90.9 Some of her teas do not come from Taiwan, Japan, China, India or Kenya.

YES NO

Q 90.10 Taiwanese tea production is expensive.

YES NO





Thank you