

Please enter your student number:

EXTENDED INVESTIGATION CRITICAL THINKING TEST

Wednesday 27 July 2022

Reading time: 10.00 am to 10.15 am (15 minutes)

Writing time: 10.15am to 11.30am (1 hour 15 minutes)

Structure of test

<i>Number of questions</i>	<i>Number of questions to be answered</i>	<i>Number of marks</i>
10	10	40

- Students are permitted to bring pens and pencils into the examination room.
- Students are NOT permitted to bring blank sheets of paper into the examination room.

Materials supplied

- The Critical Thinking Test
- Student instructions

Instructions

- Answer **all** questions in the test provided.
- All responses must be in English.

Students are NOT permitted to bring mobile phones and/or any other unauthorised electronic devices into the examination room.

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Question 1 (3 marks)

Some scientists believe that it may be possible to use cloning to bring back the Tasmanian tiger, a large carnivorous marsupial that became extinct in 1936.

Consider the following proposition:

Scientists should try to bring the Tasmanian tiger back from extinction.

Below is a table with some arguments for and against the proposition.

Read the three statements below and select the most appropriate of the statements for three of the empty cells in the table (in the correct column **and** in opposition to a relevant argument).

STATEMENT 1	STATEMENT 2	STATEMENT 3
Unexpected scientific advances can come from this type of experimentation.	Reintroduced into the wild, Tasmanian tigers could help control pests such as foxes.	We should not attempt to interfere with natural processes such as extinction.

For	Against
Humans are responsible for the extinction of the Tasmanian tiger and we should try to undo the damage.	
	Governments should be directing taxpayers' money to research with more benefit to the community.
Tasmania's tourism sector would benefit.	
Australian scientists would gain some much-needed international recognition.	
	There are no environmental benefits to bringing back the Tasmanian tiger.

Question 3 (3 marks)

A proposition and an argument for the proposition are shown in the diagram below.

Write an opposing argument that directly challenges the proposition and the argument.

Do not merely state the opposite of the proposition or the argument.

Explain how and why the opposing argument directly addresses the proposition and the argument.

Proposition		Argument
Parents and guardians should have read-only access to their child's online presence up to the age of 16.	because	This would help promote responsible online behaviour.

Opposing argument

Question 4 (6 marks)

Some shopping bags and takeaway containers are designed to be used only once. They are then discarded to end up in landfill.

Consider the following arguments **for** and **against** the proposition below:

Shopping bags and takeaway containers made of single-use plastics should be banned in Australia.

The arguments in each column are in random order and are not intended to represent pairs of arguments matched against each other.

For	Against
A. Plastic pollution is a major threat to Australia's waterways and marine life.	F. Alternatives to single-use plastics are more expensive and businesses would have to absorb the extra cost.
B. Using these single-use plastic products is not sustainable.	G. Existing stockpiles of single-use bags and containers would need to be disposed of, which is a waste.
C. People are more likely to bring their own bags and containers if they cannot get them from the store.	H. Non-plastic shopping bags and containers also end up in landfill.
D. The government should intervene to reduce pollution rather than leave it up to businesses and consumers.	I. Banning single-use bags and containers may have unintended consequences for some people.
E. A ban on single-use bags and containers will support Australian jobs in the manufacture of more eco-friendly products.	J. It is our wasteful society that is the problem, not single-use plastics.

Which **one** of the arguments (**A.–J.**) do you find most convincing and why?

Analyse the arguments presented. Do not offer your own opinion about the proposition.

Question 5 (6 marks)

The Victorian public transport system includes city and suburban trams, trains and buses, as well as country trains and buses for longer journeys. These services are paid for by the government using funds collected from taxpayers. Transport users are required to pay fares.

Consider the following arguments **for** and **against** the proposition below:

Public transport in Victoria should be free for all users.

The arguments in each column are in random order and are not intended to represent pairs of arguments matched against each other.

For	Against
Public transport is better for the environment than the use of private vehicles.	Victoria's public transport system is costly and maintaining current standards is not possible without charging fares.
People on low incomes would have better access to medical and other services that are unavailable locally.	The existing public transport system would not be able to cope with a rapid rise in demand.
Greater use of public transport would reduce traffic congestion on roads.	It would be unfair for those who do not use public transport to have to pay for free travel through their taxes.
Tourists would have better access to sightseeing destinations, which would help the economy.	People in areas without public transport would not benefit.
People in rural and regional communities would find it easier to access services that are unavailable locally.	Some people do not pay any tax and it would be unfair for them to have the same free transport service as those who do pay tax.

Having considered the arguments, offer **your position** for or against the proposition.

Question 6 (6 marks)

Research is needed to inform debate about:

- A.** bringing an extinct species back to life.
- B.** reducing income inequality in Australia.
- C.** banning single-use plastic shopping bags and takeaway containers.
- D.** making Victorian public transport free for all users.

Select **one** of these issues (**A.–D.**) to research.

What would be a good research question to explore the issue you have selected?

How might good data be collected to address this research question?

The following information is repeated for Questions 7 and 8.

Below are five possible research questions (**A.–E.**).

- A.** How has the growth of online delivery services affected small restaurant businesses in a specific local government area?
- B.** How many hours of sleep each night do Year 12 students need to maximise their level of concentration at school?
- C.** What is the relationship between income and generosity?
- D.** How effective is drinking two cups of green tea per day in improving health outcomes?
- E.** Would the public support a new regulation for dogs to be kept on a leash at South Outlook beach during hours when the beach is crowded?

Question 7 (3 marks)

Which research question (**A.–E.**) would be the **most** manageable in practice?

Explain why the question would be the most manageable.

The following information is repeated for Questions 7 and 8.

Below are five possible research questions (**A.–E.**).

- A.** How has the growth of online delivery services affected small restaurant businesses in a specific local government area?
- B.** How many hours of sleep each night do Year 12 students need to maximise their level of concentration at school?
- C.** What is the relationship between income and generosity?
- D.** How effective is drinking two cups of green tea per day in improving health outcomes?
- E.** Would the public support a new regulation for dogs to be kept on a leash at South Outlook beach during hours when the beach is crowded?

Question 8 (3 marks)

Which research question (**A.–E.**) would be the **least** manageable in practice?

Explain why the question would be the least manageable.

The following information is repeated for Questions 9 and 10.

Australians consume a lot of sugar-sweetened soft drinks. These drinks are the largest source of added sugars in the Australian diet, contributing directly to poor health outcomes. Some people believe that the government should apply a tax to these products to make them more expensive. This may discourage consumers from buying them.

Question 9 (3 marks)

Present a strong argument for the proposition that there should be a tax on sugar-sweetened soft drinks.

Explain why it is the strongest argument **for** the proposition.

The following information is repeated for Questions 9 and 10.

Australians consume a lot of sugar-sweetened soft drinks. These drinks are the largest source of added sugars in the Australian diet, contributing directly to poor health outcomes. Some people believe that the government should apply a tax to these products to make them more expensive. This may discourage consumers from buying them.

Question 10 (3 marks)

Present a strong argument against the proposition that there should be a tax on sugar-sweetened soft drinks.

Explain why it is the strongest argument **against** the proposition.