

Please enter your student number:

EXTENDED INVESTIGATION CRITICAL THINKING TEST

Wednesday 31 July 2024

Reading time is **15 minutes**: 10.00 am to 10.15 am

Writing time is **1 hour 15 minutes**: 10.15 am to 11.30 am

Approved materials

- Pens and pencils

Materials supplied

- Critical Thinking Test
- Student Instruction Booklet

Instructions

- 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.

Contents

- 10 questions, 40 marks

Table of contents

	Page number
Test cover	1
Table of contents	2
Question 1 (3 marks)	3
Question 2 (4 marks)	4
Question 3 (3 marks)	5
Question 4 (6 marks)	6
Question 5 (6 marks)	7
Question 6 (6 marks)	8
Question 7 (3 marks)	9
Question 8 (3 marks)	10
Question 9 (3 marks)	11
Question 10 (3 marks)	12

Question 1 (3 marks)

The minimum age for voting in Australia is currently 18 years. Some people consider that the right to vote should be extended to younger people, although voting would not be compulsory for them.

Consider the following proposition:

Australians aged 16 or 17 should be allowed to vote.

Below is a table containing some arguments for and against the proposition. Read the three statements below. 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).

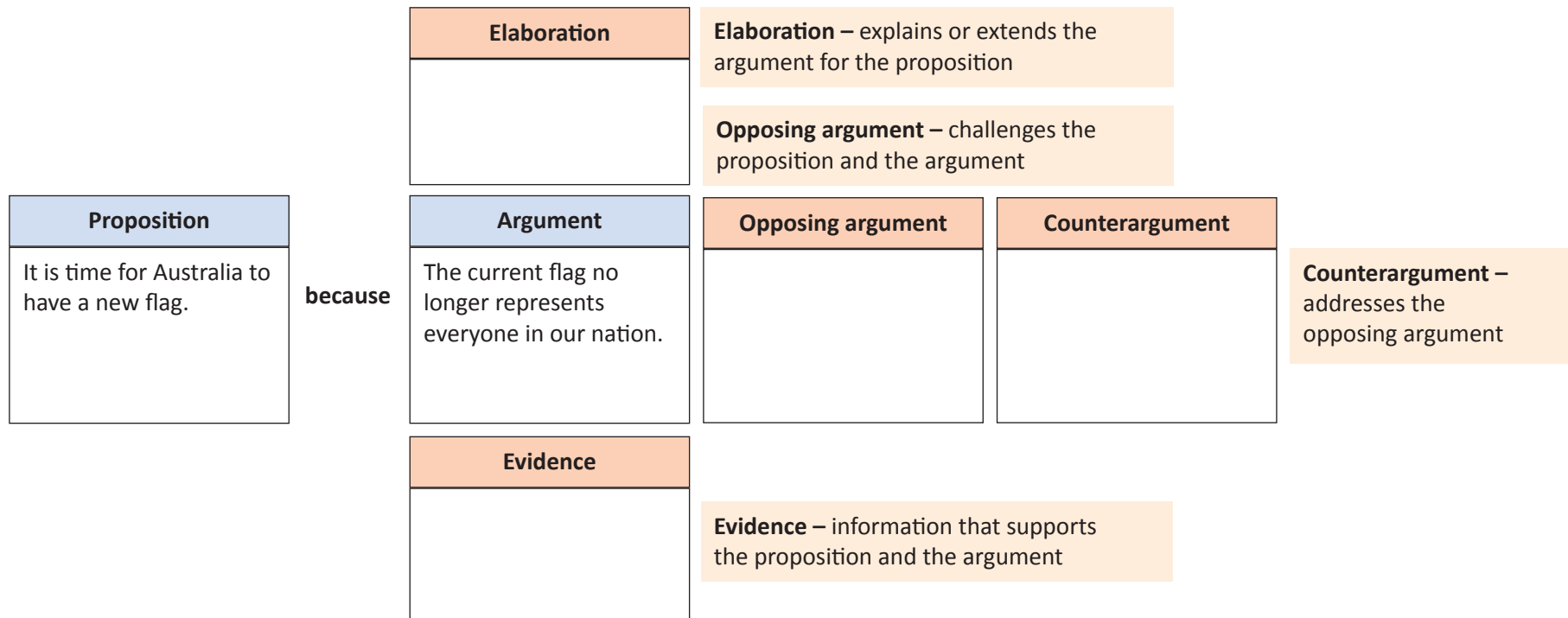
STATEMENT 1	STATEMENT 2	STATEMENT 3
Younger voters would be vulnerable to the claims of dishonest politicians.	Voting means helping to decide what really matters.	Social media is a more effective way to influence governments.

For	Against
Young people have demonstrated how much they care about issues that affect them, yet they cannot vote.	
Statement 2	Younger teenagers are mostly ignorant about politics.
Social media has dramatically raised the level of political involvement among younger people.	
Statement 2	There has to be some practical limit on the number of voters in the electoral system.
	Many young teenagers act impulsively and make bad choices.
We all have good access to reliable information these days.	

Question 2 (4 marks)

The diagram below represents a line of reasoning about whether Australia should have a new national flag. The proposition and an argument for the proposition are shown. Read the six statements below and select the most appropriate statement for each empty cell in the diagram.

STATEMENT 1	STATEMENT 2	STATEMENT 3	STATEMENT 4	STATEMENT 5	STATEMENT 6
The British symbol on the current flag is part of our history.	Australians have fought and died under this flag in wartime, so it cannot be discarded.	National symbols should be able to reflect social change.	Separate flags were introduced by Aboriginal and Torres Strait Islander peoples in 1970 and 1992.	Our multicultural population does not identify with the current flag.	Few people see any difference between the Australian flag and the flag of New Zealand.



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 the opposing argument directly addresses the proposition and the argument.

Proposition		Argument
If forced to choose, we should value loyalty above honesty.	because	Honesty can be damaging to friendships and family relationships.

Opposing argument

Question 4 (6 marks)

Australia is currently the world's third largest exporter of marine sand, which is found on beaches and the ocean floor, and in river beds. It is an essential ingredient in concrete, glass and other materials, which cannot be made using desert sand. Marine sand is among the most heavily consumed natural resources and is being used at a much faster rate than nature can replace it.

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

Australia should gradually phase out the mining and export of marine sand.

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

For	Against
<p>A. We know from experience that natural resources tend to be endangered or destroyed before we get around to protecting them.</p> <p>B. Limiting supply will encourage the use of more sustainable building materials like wood, metal and stone.</p> <p>C. It is not possible to dredge up sand from the ocean floor or river beds without affecting ecosystems, which are often already under threat.</p> <p>D. Concrete construction is ultimately not sustainable, and a slow-down would stimulate scientific efforts to develop new materials.</p> <p>E. By exporting its sand, Australia gains short-term financial rewards, but loses the long-term advantage of having a local supply.</p>	<p>F. The use of concrete has been a key factor in the construction of much better and safer buildings in cities across the world.</p> <p>G. A decline in supply may lead to shortages that would have very negative effects on the economies of other countries.</p> <p>H. The market is best placed to determine whether a resource should or should not be exported, not politicians or environmentalists.</p> <p>I. Phasing out Australian sand exports would simply drive other, less responsible, countries to develop their own sand-mining industries.</p> <p>J. Australia's international standing as a dependable trading partner would be damaged if it did not continue to supply this essential resource.</p>

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)

Australia is a signatory to an international treaty to prevent the employment of children under the age of 15 years. However, in some parts of Australia, children below that age are allowed to undertake work for payment, depending on the nature and hours of the work.

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

There should be a national law to prevent the paid employment of children under the age of 15 years.

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

For	Against
<p>A. Younger teenagers are not yet fully mature, and are at a power disadvantage in relation to their employer and other workers.</p> <p>B. Even adults have trouble with workplace harassment or bullying, and younger teenagers do not have the skills to cope with this.</p> <p>C. There is no guarantee that appropriate safety training will be provided or that young workers are in environments that are appropriate for them.</p> <p>D. Children under 15 years of age should be fully occupied developing their skills and learning through the education system.</p> <p>E. Younger teenagers are more vulnerable to exploitation through excessive working hours or underpayment or substandard working conditions.</p>	<p>F. Earning money gives young people feelings of responsibility, pride and independence, and this experience should be available to them if they are capable of doing a job.</p> <p>G. The entertainment industry rewards child actors, singers and dancers, so children who work in other fields should also be able to earn.</p> <p>H. Some children younger than 15 years can and do take on responsible roles, and are just as mature as other workers.</p> <p>I. Younger children are often needed in the family business or farm and it is only fair that they should be able to receive payment for this.</p> <p>J. Early participation in the workforce teaches young teenagers valuable life skills and employment skills that can't be learned in any other way.</p>

Having considered the arguments (A.–J.), offer **your position** for or against the proposition.

Question 6 (6 marks)

Research is needed to inform debate about:

- A. allowing people of 16 and 17 years to vote, on a non-compulsory basis.
- B. replacing the current Australian national flag.
- C. phasing out Australian mining and export of marine sand.
- D. setting 15 years as the minimum age for paid workforce participation.

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. Has the removal of recycling bins along Cillian Bay beach reduced the volume of non-biodegradable plastics polluting the area?
- B. Do the educational benefits of a community garden program in Years 4–6 at Leicester Street Primary School justify the expense of the program?
- C. What methods are most effective in reducing the number of unwanted marketing phone calls?
- D. To what extent have native grasses declined across metropolitan Melbourne since 1950?
- E. For cyclists riding through Lost Dingo Bend Park during magpie nesting season, is the use of a spiked helmet the best way to prevent magpie attacks?

Question 7 (3 marks)

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

Explain why the question would be most manageable.

The following information is repeated for Questions 7 and 8.

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

- A. Has the removal of recycling bins along Cillian Bay beach reduced the volume of non-biodegradable plastics polluting the area?
- B. Do the educational benefits of a community garden program in Years 4–6 at Leicester Street Primary School justify the expense of the program?
- C. What methods are most effective in reducing the number of unwanted marketing phone calls?
- D. To what extent have native grasses declined across metropolitan Melbourne since 1950?
- E. For cyclists riding through Lost Dingo Bend Park during magpie nesting season, is the use of a spiked helmet the best way to prevent magpie attacks?

Question 8 (3 marks)

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

Explain why the question would be least manageable.

The following information is repeated for Questions 9 and 10.

Participation in at least two hours of physical activity per week during school time has been compulsory for children in all Australian primary schools since 2005. However, there are growing concerns about health and fitness during childhood and in later life. It has been suggested that participation in team sports should be compulsory for all Victorian primary school children, in addition to the existing requirements.

Question 9 (3 marks)

Present a strong argument for the proposition that participation in team sports should be compulsory for all Victorian primary school children in addition to scheduled physical activity at school.

Explain why it is a strong argument **for** the proposition.

The following information is repeated for Questions 9 and 10.

Participation in at least two hours of physical activity per week during school time has been compulsory for children in all Australian primary schools since 2005. However, there are growing concerns about health and fitness during childhood and in later life. It has been suggested that participation in team sports should be compulsory for all Victorian primary school children, in addition to the existing requirements.

Question 10 (3 marks)

Present a strong argument against the proposition that participation in team sports should be compulsory for all Victorian primary school children in addition to scheduled physical activity at school.

Explain why it is a strong argument **against** the proposition.