



THINKING SKILLS

Paper 2 Critical Thinking

May/June 2021

1 hour 45 minutes

You will need: Answer booklet (enclosed)

- Answer **all** questions.
- Follow the instructions on the front cover of the answer booklet. If you need additional answer paper, ask the invigilator for a continuation booklet.

- The total mark for this paper is 50.
- The number of marks for each question or part question is shown in brackets [].

This document has **8** pages. Any blank pages are indicated.

Section A

Study the evidence and then answer Questions 1 and 2.

Source A

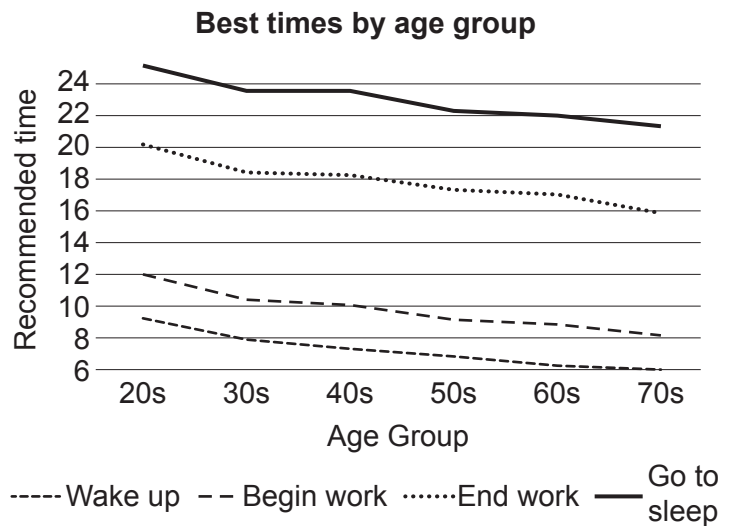
Article in popular psychology magazine

In recent years, neuroscientists have emphasised the effect of 'chronotype' on people's performance in study, at work and in private life. For reasons of individual brain physiology, some people function best early in the day, whereas others are more effective during the evening. They have been termed 'morning larks' and 'night owls' respectively. Several scientists have claimed that forcing people to work at times when they are not at their best prevents them from achieving their full potential. Employers should give greater choice over working hours to their workers, because this would increase productivity.

Source B

Article in newspaper

Dr Paul Kelley, of the Nuffield Department of Clinical Neurosciences, Oxford University, recommends that people's personal timetables should vary according to the decade of their age. As people grow older, they should do everything earlier in the day. For optimum performance, people in their 20s should get up at 09:30 and go to bed at 01:00, while people in their 70s should get up at 06:00 and go to bed at 21:30.

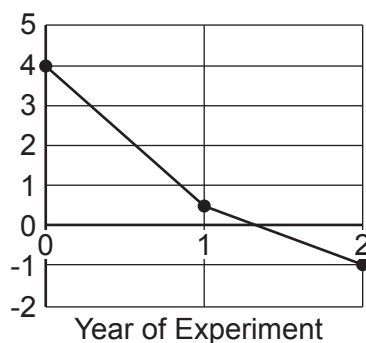


Source C

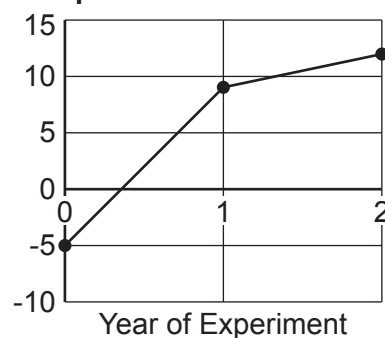
Research report

A school changed its working hours to begin at 10:00 (identified as years '1' and '2' in the graphs below) instead of the previous 08:50 (year '0'). Improvements were noted in attendance and the proportion of students achieving national standards of educational attainment (both compared to national averages, labelled '0' on the vertical axis).

Average days absent compared to national average



Percentage of students achieving national standard compared to national average



Source D

Education News

For an experimental period, lessons for 16–18-year-old students at one school have begun at 13:30 and ended at 19:00. Lessons for younger students have remained at more traditional times. The school believes the experiment has been a success and has proved that the later working hours are more productive and less stressful for students. The school has therefore decided to make this arrangement permanent. The headteacher commented that poor sleep routines had a “significant impact on teenage cognition and mental and physical health generally”. One student said, “I want to wake up in my bed, not in my maths lesson.”

Source E

Comment on Source D

As a teacher, I hope that other schools will not imitate this ill-judged experiment. Teachers are people too, and we have a right to spend time with our own families. If students switch off their mobile phones and go to bed at a reasonable hour, they will be bright and alert in the mornings. Indulging their wishes in this way will not help them long-term, because they will soon find that employers will expect them to be at work on time, ready to put in a day's work for a day's pay.

- 1 (a) How well does Source B support Source A? [2]
- (b) The improvements presented in Source C may have been caused by the change in working hours. Suggest **two alternative** explanations for either or both of these improvements. [4]
- (c) Is Source D an argument? Justify your answer. [2]
- (d) Identify **three** features of Source D which **reduce** the support it could give to a proposal to move the working hours of schools to later in the day. [3]
- (e) Assess the credibility of Source E. [3]

- 2 *You are advised to spend some time planning your answer before you begin to write it.*

‘The working hours of schools should begin no earlier than 10:00.’

To what extent do you agree with this claim? Write a short, reasoned argument to support your conclusion, using and evaluating the evidence provided. [8]

Section B

Read the following passage and then answer Questions 3, 4 and 5.

- 1 Birthdays fulfil an important psychological function, because they provide an opportunity for everyone to feel special for one day each year and for their family and friends to show how much they love and appreciate them. Those few people who are not willing to be the centre of attention in this way must recognise that they have an extremely low sense of self-esteem. Everyone should therefore celebrate their own birthday and the birthdays of family and friends. However, birthdays are not selfish events: everyone's special day is more than balanced by the occasions on which they celebrate other people's birthdays.
- 2 Birthdays are fairer than other celebrations. Not everyone achieves sporting success or graduates from university; some people never even have the opportunity to be the focus of attention at their own wedding, either because they have chosen not to marry or because they have been unable to find a spouse; but everyone has a birthday every year. It is as if every citizen of a country had a turn at being President for a day.
- 3 Birthday presents – perhaps a book, chocolates or flowers – are worth far more than the monetary value of the gift. The effort that someone has made and the time they have taken to think about you, to work out precisely what would please you, and then to select and pay for the appropriate gift make it a physical expression of emotions which may rarely be put into words.
- 4 People who refuse to celebrate their own birthday may think that they are being humble and self-effacing, but they are actually being selfish. They draw more attention to themselves by explaining that they do not observe birthdays than they would by quietly accepting good wishes from those who are close to them. Their family and friends feel uncomfortable, because they do not know whether to ignore the birthday or acknowledge it in some way.

- 3 (a) Using the exact words from the passage as far as possible, identify the *main conclusion*. [2]
- (b) Using the exact words from the passage as far as possible, identify **two** *intermediate conclusions* from paragraphs 2 to 4. [4]
- (c) Using the exact words from the passage as far as possible, identify a *counter-assertion*. [2]
- (d) Identify the argument element and explain the function of the following words from paragraph 3:
 'a book, chocolates or flowers' [2]
- (e) Identify an *unstated assumption* required by the reasoning in paragraph 3. [2]
- 4 (a) Explain how the reasoning in paragraph 1 is weakened by a flaw of *restricting the options*. [2]
- (b) 'It is as if every citizen of a country had a turn at being President for a day' (Paragraph 2).
 Evaluate this *analogy*. [2]
- (c) Explain why the claim in paragraph 4 that some people "are actually being selfish" is **not** an example of the flaw of *personal attack (ad hominem)*. [2]
- (d) Identify an *inconsistency* in the reasoning in paragraphs 1 and 4. [2]
- 5 You are advised to spend some time planning your answer before you begin to write it.
- 'Young people need to know that they are special.'
- Write your own short argument to support **or** challenge this claim. The conclusion of your argument must be stated. Credit will not be given for repeating ideas from the passage. [8]

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