
THINKING SKILLS

9694/21

Paper 2 Critical Thinking

May/June 2019

1 hour 45 minutes

No Additional Materials are required.

READ THESE INSTRUCTIONS FIRST

An answer booklet is provided inside this question paper. You should follow the instructions on the front cover of the answer booklet. If you need additional answer paper ask the invigilator for a continuation booklet.

Answer **all** the questions.

The number of marks is given in brackets [] at the end of each question.



This document consists of **6** printed pages, **2** blank pages and **1** Insert.

1 Study the evidence and answer the questions that follow.

Source A

Letter from new headteacher to teaching staff

I want this school to be a civilised place, in which students and teachers work together willingly and treat each other with respect. The committee which appointed me was concerned about the large number of punishments, including suspensions, which were being imposed on students, and has asked me to reduce those figures. In future, only members of the Senior Management Team will be able to put students into detention, and any teacher who wishes to punish a student must consult a manager.

Source B

Email from Frank Bell to friend

Our new headteacher has already shown that he is going to be too soft on troublesome students. I advised him that he needs to be tough at the beginning and then he will be able to ease up later, but I don't think he is going to take any notice. I have my eye on a small group of boys in Year 9 who will make a lot of trouble if they are given half a chance, and as Assistant Head I am determined to act quickly to prevent them from becoming a problem.

Source C

Memo from headteacher to teaching staff

Mr Bell has reported to me several incidents of bad behaviour by Jack Reid, of Year 9. At the request of colleagues, Mr Bell has put Reid into detention on several occasions for failing to submit homework and for rudeness. On two occasions, he failed to attend the detentions. I have spoken seriously to Reid and his parents, and I have informed them that if any further incidents are reported to me I will have no alternative but to suspend him from school.

Source D

Memo from headteacher to teaching staff

Following last week's memo concerning Jack Reid, Mr Bell has reported a further case of unacceptable behaviour. Reid refused to perform the task given to him, and swore at Mr Bell when reprimanded. Since he had already received a final warning, I had no alternative but to suspend him from school for three days, beginning tomorrow. If you teach Reid, please set him some work to undertake at home during his suspension and inform me if he fails to complete it to your satisfaction.

Source E**Memo from Ann Lee to headteacher**

I believe the incident mentioned in your memo concerning Jack Reid occurred when I was supervising a private study period for Reid's class. I had already discovered that a few of the students did not have any work to do, and I told them that they could read a book of their choice, provided they were quiet and did not disturb students who were working. Part-way through the lesson, Mr Bell entered the room, and began shouting at Jack Reid, accusing him of wasting time. Reid tried to explain that he did not have any work to do, but Mr Bell refused to listen. Eventually Reid swore at Mr Bell, whereupon Mr Bell removed him from the room. In my opinion, Mr Bell provoked this incident and behaved unprofessionally by interfering in a class which was under the authority of a colleague.

- (a) Explain the significance of the email from Frank Bell (Source B) in relation to the suspension of Jack Reid from school. [2]
- (b) How reliable is the information in Source D about Jack Reid's bad behaviour? Explain your answer. [3]
- (c) (i) Identify **two** factors which make Ann Lee's evidence in Source E useful. [2]
- (ii) Explain **one** factor which reduces the reliability of the memo from Ann Lee (Source E). [2]
- (d) How likely do you think it is that Jack Reid deserved to be suspended from school? Write a short, reasoned argument to support your conclusion, with critical reference to the evidence provided and considering a plausible alternative conclusion. [6]

2 Study the evidence and answer the questions that follow.

Source A

Extract from Psychology textbook

Chaser is a Border Collie dog with the largest tested memory of any non-human animal. In addition to common nouns like house, ball and tree, she has memorised the names of more than one thousand toys. Chaser belongs to Dr John Pilley, a retired teacher of Psychology, who spent four hours a day teaching her. Dr Pilley also taught Chaser three different actions: pawing, nosing and fetching an object. She was then presented with three of her toys and correctly pawed, nosed or fetched each one depending on the command given to her. Border Collies are bred for the ability to pay close attention to the shepherd and follow instructions.

Source B

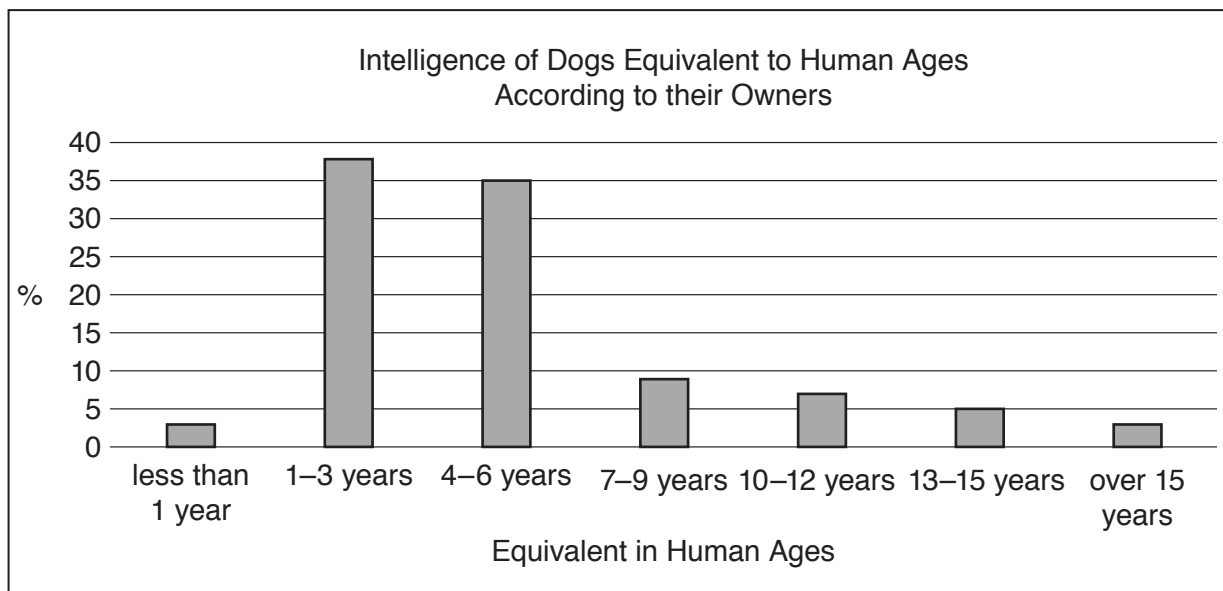
Blog

Scientists and vets claim that dogs see in black and white, but my dog can recognise colours. She has a blue ball and a green ball, and when I want her to fetch one of them, I tell her "Fetch the blue ball" or "Fetch the green ball," and she almost always gets it right. If she brings the wrong ball, I just have to say "No, I said the green ball," and she will bring the correct one.

Source C

Research report

Dog owners were asked to estimate the intelligence of their dogs by comparison with human development. They were asked to state the age of human that would have the same intelligence as their dog. The graph shows the results.



Source D**From magazine for dog owners**

Some simple intelligence tests for dogs:

- Take a large towel or blanket and gently place it over your dog's head. Can she free herself from the towel in less than 15 seconds?
- Quietly pick up your dog's lead at a time of day when she does not usually go for a walk. Does she get excited immediately?
- Place three buckets next to each other, and let your dog see you hide a favourite toy under one of the buckets. Turn the dog away for a few seconds and then let her look for the toy. Does she know first time which bucket to look under?
- Construct a barrier from cardboard 5 feet wide and too tall for your dog to see over it. Support the barrier at each end. Cut a hole in the barrier, so that your dog can see through but cannot get through the hole. Throw a toy through the hole. Does your dog immediately walk round the barrier rather than trying to climb through the hole?

Source E**Extract from magazine article**

Early in the twentieth century, a horse named Hans was reported to have been taught to perform arithmetical calculations and to understand German. Hans answered questions by tapping his hoof. Deliberate fraud was ruled out, because Hans gave the correct answer even when someone other than the owner asked the questions. However, Hans selected the right answer only when the questioner knew what the answer was and when the horse could see the questioner. Eventually, investigators realised that as the horse's taps approached the right answer, the questioner's posture and facial expression showed subtle signs of an increase in tension, which relaxed when the horse made the final, correct tap. Hans recognised the cue and stopped tapping.

- (a) How well does the evidence described in Source B support the blogger's claim that her dog can recognise colours? Explain your answer. [3]
- (b) Source C shows data on estimates by dog owners of the intelligence of their dogs.
- (i) Suggest one factor which **increases** the reliability of these estimates. [1]
- (ii) Suggest and explain one factor which **reduces** the reliability of these estimates. [2]
- (c) Explain the relevance of the story of Hans (Source E) to research into the intelligence of dogs. [3]
- (d) 'Dogs are more intelligent than people think they are.'

To what extent do you agree with this claim? Write a short, reasoned argument to support your conclusion, using and evaluating the information provided in Sources A–E. [6]

3 *Read the passage and answer the questions below.*

- 1 Most countries require people to pass a test before being allowed to drive, but this policy should be changed. There are many incompetent drivers on the roads, and the fact that they presumably passed a test at some time in the past has not reduced the danger they now pose to other road users. So the existence of the driving test does not guarantee that only safe drivers are allowed to drive.
- 2 When cars began to appear on the roads and driving licences were first issued, drivers were not required to pass a test in order to qualify for a licence. Since tests were not considered necessary then, they are not needed now, because there is no reason to suppose that drivers have become less competent with the passing of time.
- 3 Driving tests infringe against equality of opportunity. Wealthy people have no problem in paying for driving lessons and the test, but poor people can barely afford to run a car and it is unrealistic to expect them to pay for lessons and tests, too.
- 4 In many countries the system of tests is based on bribery. So passing a driving test is proof of ability to pay, not to drive safely. Everyone in those countries accepts that the main source of income for public officials is gifts from grateful citizens who have benefited from their services.
- 5 People who are good at passing tests pass the driving test, even if they are not very good drivers, whereas many people fail the test, despite being excellent drivers, simply because they become very stressed at taking tests of any kind. Driving tests therefore assess the wrong skills.

- (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 **three** intermediate conclusions. [3]
- (c) Evaluate the strength of the reasoning in the argument. In your answer you should consider any flaws, unstated assumptions and other weaknesses. [5]
- (d) 'We should drive cars only when necessary.'

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. [5]

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