Cambridge English Advanced. Practice Tests Plus 2

Practice Test 1

Reading Part 5

Is the internet making us stupid?

31 What do we learn about Patricia Greenfield's research in the first paragraph?

A It focused on problems resulting from use of media technologies.
B It did not produce consistent patterns in connection with computer use.
C It involved collating the results of work done by other people.
D It highlighted differences between people when using computers.

32 Two of the experiments mentioned in the second paragraph concerned

A the amount of attention people pay to what they see on computers.
B the connection between computer use and memory.
C the use and non-use of computers for studying.
D changes that happen if people's computer use increases.

In an article in *Science*, Patricia Greenfield, a developmental psychologist who runs UCLA's Children's Digital Media Center, reviewed dozens of studies on how different media technologies influence our cognitive abilities. Some of the studies indicated that certain computer tasks, like playing video games, increase the speed at which people can shift their focus among icons and other images on screens. Other studies, however, found that such rapid shifts in focus, even if performed adeptly, result in less rigorous and

In one experiment at an American university, half a class of students was allowed to use internet-connected laptops during a lecture, while the other half had to keep their computers shut. Those who browsed the web performed much worse on a subsequent test of how well they retained the lecture's content. Earlier experiments revealed that as the number of links in an online document goes up, reading comprehension falls, and as more types of information are placed on a screen, we remember less of what we see.

33 One of Greenfield's conclusions was that

A certain claims about the advantages of computer use are false.
B computer use has reduced a large number of mental abilities.
C people do not care about the effects of computer use on their minds.
D too much emphasis has been placed on the benefits of computer use.

34 One of the pieces of research mentioned in the fourth paragraph indicated that

A some people are better at multitasking than others.
B 'mental juggling' increases the mental abilities of only a few people.
C beliefs about the effectiveness of multitasking are false.
D people read online material less carefully than other material.

Greenfield concluded that 'every medium develops some cognitive skills at the expense of others'. Our growing use of screen-based media, she said, has strengthened visual-spatial intelligence, which can strengthen the ability to do jobs that involve keeping track of lots of rapidly changing signals, like piloting a plane or monitoring a patient during surgery. However, that has been accompanied by 'new weaknesses in higher-order cognitive processes', including 'abstract vocabulary, mindfulness, reflection, inductive problem-solving, critical thinking and imagination'. We're becoming, in a word, shallower.

Studies of our behaviour online support this conclusion. German researchers found that web browsers usually spend less than ten seconds looking at a page. Even people doing academic research online tend to 'bounce' rapidly between documents, rarely reading more than a page or two, according to a University College London study. Such mental juggling takes a big toll. In a recent experiment at Stanford University, researchers gave various cognitive tests to 49 people who do a lot of media multitasking and 52 people who multitask much less frequently. The heavy multitaskers performed poorly on all the tests. They were more easily distracted, had less control over their attention, and were much less able to distinguish important information from trivia. The researchers were surprised by the results. They expected the intensive multitaskers to have gained some mental advantages. That wasn't the case, though. In fact, the multitaskers weren't even good at multitasking. 'Everything distracts them,' said Clifford Nass, one of the researchers.

35 What is the writer's purpose in the fifth paragraph?

A to advise on how to avoid the bad effects of new media technology
B to present opposing views on the consequences of use of new media technology
C to warn about the damage done by use of new media technology
D to summarise the findings of the previously-mentioned research

36 The writer mentions Ap Dijksterhuis's research in order to make the point that

A not all research supports beliefs about the dangers of computer use.
B the mind functions in ways that computers cannot.
C problem-solving can involve very complex mental processes.
D uninterrupted concentration on something is not always a good thing.

It would be one thing if the ill effects went away as soon as we turned off our computers and mobiles, but they don't. The cellular structure of the human brain, scientists have discovered, adapts readily to the tools we use to find, store and share information. By changing our habits of mind, each new technology strengthens certain neural pathways and weakens others. The alterations shape the way we think even when we're not using the technology. The pioneering neuroscientist Michael Merzenich believes our brains are being 'massively remodelled' by our ever-intensifying use of the web and related media. In 2009, he said that he was profoundly worried about the cognitive consequences of the constant distractions and interruptions the internet bombards

Not all distractions are bad. As most of us know, if we concentrate too intensively on a tough problem, we can get stuck in a mental rut. However, if we let the problem sit unattended for a time, we often return to it with a fresh perspective and a burst of creativity. Research by Dutch psychologist Ap Dijksterhuis indicates that such breaks in our attention give our unconscious mind time to grapple with a problem, bringing to bear information and cognitive processes unavailable to conscious deliberation. We usually make better decisions, his experiments reveal, if we shift our attention away from a mental challenge for a time.

But Dijksterhuis's work also shows that our unconscious thought processes don't engage with a problem until we've clearly and consciously defined what the problem is. If we don't have a particular goal in mind, he writes, 'unconscious thought does not occur'. The constant distractedness that the Net encourages is very different from the kind of temporary, purposeful diversion of our mind that refreshes our thinking. What we seem to be sacrificing in our surfing and searching is our capacity to engage in the quieter, attentive modes of thought that underpin contemplation, reflection and introspection.

Discussion

1) Do different media technologies influence people's cognitive abilities positively or negatively?

2) Can playing video games be useful?

3) What may the consequences of automatic thinking be?

4) Do you spend more or less than ten seconds looking at a page while browsing?

5) Are you easily distracted?

influence cognitive abilities
shift the focus among icons
perform adeptly
rigorous thinking
collate the results
a subsequent test
retain the content
at the expense of
visual-spatial intelligence
keep track
mindfulness
inductive problem-solving
shallow
bounce rapidly

shift smn's attention away from

the unconscious thought process
don't engage with a problem

the constant distractedness

temporary purposeful diversion

capacity to engage in the quieter, attentive modes of thought

underpin contemplation, reflection and introspection

mental juggling
take a big toll
distinguish important information from trivia
gain some mental advantages
the ill effects go away
the cellular structure
the alterations shape the way smn thinks
be profoundly worried
cognitive consequences of the constant distractions and interruptions
the internet bombards smn
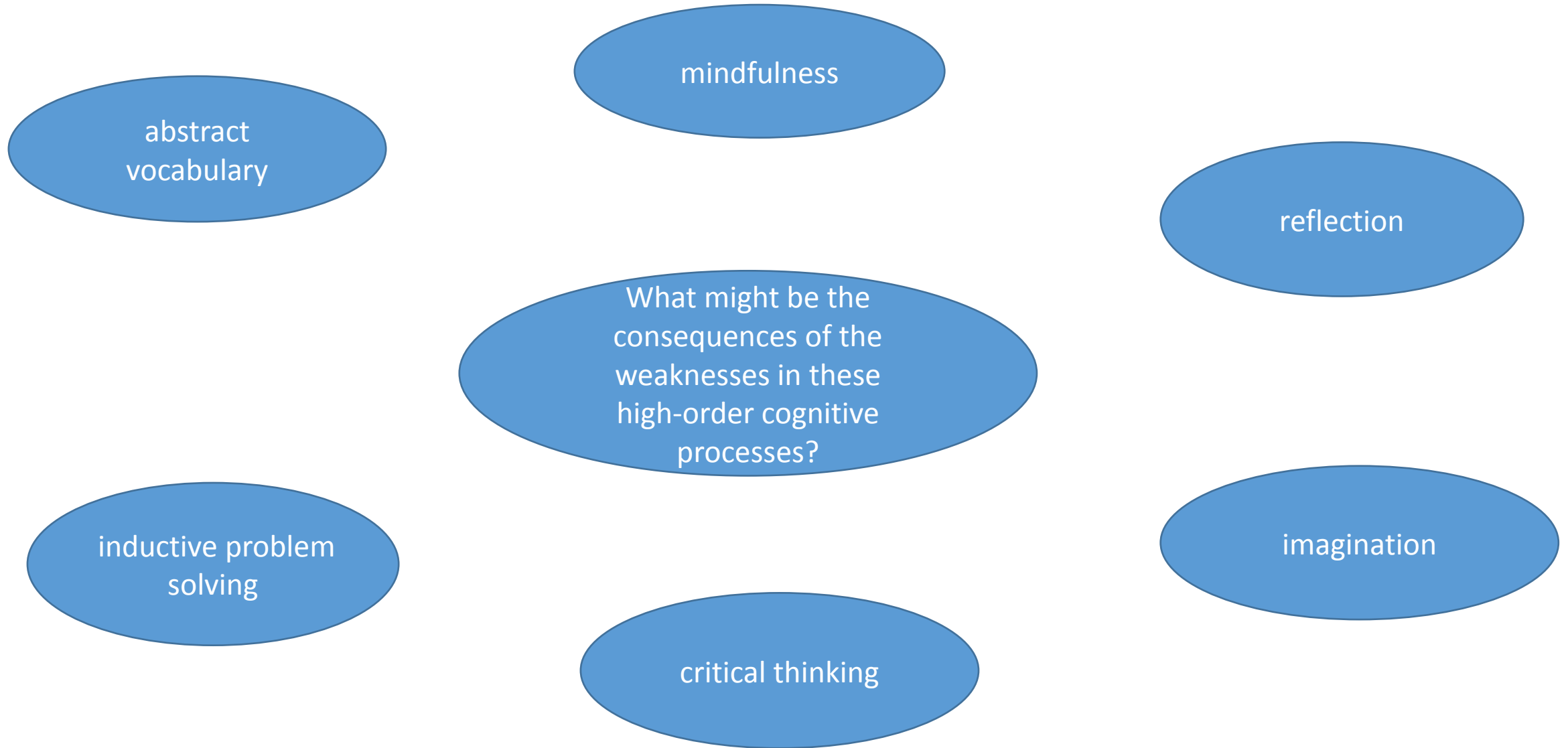a tough problem
get stuck in a mental rut
let the problem sit unattended for a time
a fresh perspective
a burst of creativity
grapple with a problem
conscious deliberation

mindfulness

abstract vocabulary

reflection

What might be the consequences of the weaknesses in these high-order cognitive processes?

inductive problem solving

imagination

critical thinking

• Which consequence is the most serious?

Discussion

mental juggling

take a big toll

distinguish important information from trivia

gain some mental advantages

the ill effects go away

the cellular structure

the alterations shape the way smn thinks

be profoundly worried

cognitive consequences of the constant distractions and interruptions

the internet bombards smn

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get stuck in a mental rut

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