READING PASSAGE 3

*You should spend about 20 minutes on **Questions 27-40**, which are based on Reading Passage 3 below.*

Video Games' Unexpected Benefits to the Human Brain

A James Paul Gee, professor of education at the University of Wisconsin–Madison, played his first video game years ago when his six-year-old son Sam was playing Pajama Sam: No Need to Hide When It's Dark Outside. He wanted to play the game so he could support Sam's problem-solving. Though *Pajama Sam* is not an "educational game", it is replete with the types of problems psychologists study when they examine thinking and learning. When he saw how well the game held Sam's attention, he wondered what sort of beast a more mature video game might be.

B Video and computer games, like many other popular, entertaining and addicting kids' activities, are looked down upon by many parents as time-wasters, and worse, parents think that these games rot the brain. Violent video games are readily blamed by the media and some experts as the reason why some youth become violent or commit extreme anti-social behaviour. Recent content analyses of video games show that as many as 89 % of games contain some violent content, and there is some form of aggressive content in 70 % of popular games. Many scientists and psychologists, like James Paul Gee, find that video games actually have many benefits – the main one being making kids smart. Video games may actually teach kids high-level thinking skills that they will need in the future.

C "Video games change your brain," according to University of Wisconsin psychologist C. Shawn Green. Video games alter the brain's physical structure the same way as learning to read, playing the piano, or navigating with a map. Much like exercise can build muscle, the powerful combination of concentration and rewarding surges of neurotransmitters like dopamine, which strengthens neural circuits, can build the player's brain.

D Video games give your child's brain a real workout. In many video games, the skills required to win involve abstract and high-level thinking. These skills are not even taught at school. Some of the mental skills trained by video games include: following instructions, problem-solving, logic, hand-eye coordination, fine-motor and spatial skills. Research also suggests that people can learn iconic, spatial, and visual attention skills from video games. There have even been studies with adults showing that experience with video games is related to better surgical skills. Jacob Benjamin, a doctor from Beth Israel Medical Center, NY, found a direct link between skill at video gaming and skill at keyhole or laparoscopic surgery. Also, a reason given by experts as to why fighter pilots of today are more skilful is that this generation's pilots were weaned on video games.

F The players learn to manage resources that are limited and decide the best use of those resources, just as in real life. In strategy games, for instance, while developing a city, an unexpected surprise like an enemy might emerge. This forces the player to be flexible and quickly change tactics, sometimes almost every second of the game, giving the brain a real workout. According to researchers at the University of Rochester led by Daphne Bavelier, a cognitive scientist, games simulating stressful events such as those found in battle or action games could be a training tool for real-world situations. The study suggests that playing action video games primes the brain to make quick decisions. Video games can be used to train soldiers and surgeons, according to the study. Steven Johnson, author of *Everything Bad Is Good for You: How Today's Popular Culture Is Actually Making Us Smarter*, says gamers must deal with immediate problems while keeping their long-term goals on the horizon. Young gamers force themselves to read to get instructions, follow storylines of games, and glean information from the game texts.

G James Paul Gee says that playing a video game is similar to working through a science problem. Like students in a laboratory, gamers must come up with a hypothesis. For example, players in some games constantly try out combinations of weapons and powers to defeat an enemy. If one does not work, they change the hypothesis and try the next one. Video games are goal-driven experiences, says Gee, which are fundamental to learning. Also, using math skills is important to win in many games that involve quantitative analysis such as managing resources. In higher levels of a game, players usually fail the first time around, but they keep on trying until they succeed and move on to the next level.

H Many games are played online and involve cooperation with other online players in order to win. Video and computer games also help children gain self-confidence, and many games are based on history, city-building, and governance, and so on. Such games indirectly teach children about various aspects of life on Earth.

I In an upcoming study in the journal *Current Biology*, authors Daphne Bavelier, Alexandre Pouget and C. Shawn Green report that video games could provide a potent training regimen for speeding up reactions in many real-life situations. The researchers tested dozens of 18- to 25-year-olds who were not ordinarily video-game players. They split the subjects: one group played 50 hours of the fast-paced action video game *Unreal Tournament*, and the other group played 50 hours of the slow-moving strategy game *The Sims 2*. After this training period, all subjects were asked to make quick decisions in several tasks designed by the researchers. The action-game players were up to 25 % faster at reaching a conclusion and answered just as many questions correctly as their strategy-game-playing peers.

Questions 28–31

Choose the correct letter, A, B, C or D.

Write your answers in boxes 28–31 on your answer sheet.

28 What is the main purpose of paragraph A?

A Introduction of Professor James Paul Gee.
B Introduction of the video game Pajama Sam.
C Introduction of types of video games.
D Introduction of the background of this passage.

29 What does the author want to express in the second paragraph?

A Video games are widely considered harmful for children's brains.
B Most violent video games are the direct cause of juvenile delinquency.
C Even though there is a certain proportion of violence in most video games, scientists and psychologists see their benefits to children's intellectual abilities.
D Many parents regard video games as time-wasters that rot children's brains.

30 What is correctly mentioned in paragraph D?

A Some schools use video games to teach students abstract and high-level thinking.
B Video games improve brain ability in various aspects.
C Some surgeons have better skills because they play more video games.
D Skilful fighter pilots in this generation love to play video games.

31 What is the finding of the experiment the three researchers conducted in the last paragraph?

A Gamers have to make the best use of limited resources.
B Gamers with better math skills will win in the end.
C Strategy-game players have better ability to make quick decisions.
D Video games help increase the speed of players' reactions effectively.

Questions 32–35

Do the following statements agree with the information given in Reading Passage 3?

In boxes 32–35 on your answer sheet, write

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

32 Most video games are popular because of their violent content.

33 It would be a good idea for schools to apply video games in their classrooms.

34 Those people who are addicted to video games have lots of dopamine in their brains.

35 The action-game players minimised the percentage of mistakes in the experiment.

Questions 36–40

Look at the following statements (Questions 36-40) and the list of people below.

*Match each statement with the correct person, **A–F**.*

*Write the appropriate letters **A–F** in boxes 36–40 on your answer sheet.*

36 Video games, like other daily-life skills, alter the brain's physical structure.

37 The brain is ready to make decisions without hesitation when players are immersed in stressful games.

38 The purpose-motivated experience that video games offer plays an essential role in studying.

39 Players are good at tackling immediate issues while keeping future intentions in mind.

40 Video games help children broaden their horizons in many aspects and gain self-confidence.

List of people

A	The writer's opinion
B	James Paul Gee
C	Shawn Green
D	Daphne Bavelier
E	Steven Johnson
F	Jacob Benjamin

题号	答案	关键信息定位 & 解析（中文说明）
28	**D**	**段落 A** 先用 James Paul Gee 和儿子玩 *Pajama Sam* 的小故事引出“成熟版”电子游戏可能带来的启示，其实是在铺垫后文对“电子游戏益处”这一核心议题的探讨，因此主功能是“介绍全文背景”而不是单纯介绍某个人或某款游戏。
29	**C**	**段落 B** 前半句交代家长和媒体把游戏视作“暴力、浪费时间”，随后转折指出“尽管 70 % 的热门游戏含有一定攻击内容，许多科学家和心理学家却发现它们对孩子智力有益”。正对应选项 C“虽然大多数游戏含有一定暴力元素，科学家和心理学家看到了其益处”。
30	**C**	**段落 D** 倒数第二句 “even been studies with adults showing that experience with video games is related to better surgical skills. Jacob Benjamin … found a direct link between skill at video gaming and skill at keyhole or laparoscopic surgery.” 明确说明“某些外科医生由于玩游戏而技能更好”，对应选项 C。其他选项：A 并未提到学校；B 太宽泛；D“飞行员喜欢玩游戏”属于推测，并非原文表述。
31	**D**	**段落 I** 介绍 Bavelier 等人的实验：50 小时动作类 *Unreal Tournament* 训练后，“action-game players were up to 25 % faster at reaching a conclusion and answered just as many questions correctly”。即“反应速度显著提升且正确率不变”，对应“视频游戏有效提高玩家反应速度”，选 D。
32	**NOT GIVEN**	文中仅说“89 % 的热门游戏含暴力内容”，**未说明**“正因为暴力所以流行”。因果关系在文中没有出现。
33	**NOT GIVEN**	虽然多处谈到游戏的教育潜力，但全文没有任何句子直接表态“学校把游戏引入课堂会是好主意”。
34	**NOT GIVEN**	**段落 C** 提到“游戏会产生多巴胺的奖励激增 (surges of dopamine)”，但既未谈“成瘾者”，也未说“多巴胺水平大量增加”，因此信息缺失。
35	**FALSE**	**段落 I** 明言“动作游戏组的正确率 与 策略游戏组一样 (answered just as many questions correctly)”，并未“减少错误率”或“更少错误”，所以陈述与原文矛盾。
36	**C (Shawn Green)**	**段落 C** 首句引用 Shawn Green：“Video games change your brain … the same way as learning to read, playing the piano …”——强调游戏和日常技能一样会改变大脑结构。
37	**D (Daphne Bavelier)**	**段落 F** “According to researchers at the University of Rochester led by Daphne Bavelier … playing action games primes the brain to make quick decisions”——压力场景下大脑能迅速决策。
38	**B (James Paul Gee)**	**段落 G** Gee 把游戏比作科学实验，强调“goal-driven experiences … fundamental to learning”，即“目标驱动的体验对学习至关重要”。
39	**E (Steven Johnson)**	**段落 F** 中部：Steven Johnson 认为“gamers must deal with immediate problems while keeping their long-term goals on the horizon”——同时兼顾当下与长远。
40	**A (作者观点)**	**段落 H** 无引用具体学者，作者总结：“video and computer games also help children gain self-confidence … indirectly teach children about various aspects of life on Earth”，即游戏帮助开阔视野并增强自信，因此归为作者 (List A)。