Reading

1a What is a 'genius'? Write a definition. Then write a list of people that you think are geniuses.

1b SPEAKING Work with a partner. Compare your definition and lists. Are they similar?

2 Read the text. What is the main message of the text?

3 Read the text again and choose the best answer.

1 The best violinists in the Berlin Academy of Music
   a started before the other violinists.
   b practised the same as the other violinists between the ages of five and eight.
   c were so good that they didn't need to spend as much time playing as the other violinists.

2 At the Academy
   a some great violinists didn't practise much.
   b some violinists played for hours and hours but weren't very good.
   c the level of the musicians seemed to depend on the amount of time they practised.

3 The writer is suggesting that Mozart was
   a good but he needed to practise a long time to be great.
   b always a brilliant musician and composer, starting at a very young age.
   c great because his father helped him to write music.

What makes a genius?

a In the early 1990s, the psychologist K. Anders Ericsson and two colleagues did some investigation at Berlin's elite Academy of Music. With the help of the Academy's professors, they divided the school's violinists into three groups. First were the stars – the students with the potential to become world-class soloists. Second were those who were very good, but not as good as the stars. In the third group were the students who would probably never play professionally. All the violinists were to answer the same question: 'Over the course of your career, ever since you first picked up the violin, how many hours have you practised?'

b Everyone, from all three groups, started playing at roughly the same age – around five. In those first few years, everyone practised roughly the same – two or three hours a week. But around the age of eight real differences began to appear. The students who would become the best in their class began to practise more than everyone else. Six hours a week by age nine, eight by age twelve, sixteen a week by age fourteen, until by the age of twenty they were practising well over thirty hours a week. By then, the elite performers had all totalled 10,000 hours of practice over the course of their lives. The good but not great students had totalled 8,000 hours, and the third group just 4,000 hours.

c The curious thing about Ericsson's study is that he and his colleagues couldn't find any 'naturals' – musicians who could float effortlessly to the top while practising much less than their colleagues. They didn't find 'grinds' either, people who worked harder than everyone else but just couldn't get into the top groups. Their research suggested that once you have enough ability to get into a top music school, the thing that distinguishes one performer from another is how hard he or she works. The longer you practise, the better you get. That's it.

d This idea – that excellence at a complex task needs a critical, minimum level of practice – appears again and again in studies. In fact, researchers have agreed on what they believe is a magic number for true expertise: 10,000 hours. 'In study after study, of composers, basketball players, fiction writers, ice-skaters, concert pianists, chess players,' writes the neurologist Daniel Levitin, 'this number comes up again and again.'

e This is true even of people we think of as prodigies. Mozart, for example, famously started writing music at six. But, compared to the standards of mature composers, Mozart's early works

4 The writer thinks that Bill Gates' story
   a is amazing because he created a small business which became globally famous.
   b shows that you need to be determined and assertive to become successful.
   c is easy to understand because it follows the theory explained in this article.

5 The writer suggests that to become successful
   a apart from practice, the year you were born is important.
   b there is a perfect age, for example in your early twenties.
   c you can't still be studying at school.

Guess the meaning of the

are not outstanding. His father probably wrote down all the earliest pieces, and perhaps improved them in the process. People generally agree that Mozart didn't write his first masterwork until he was twenty-one; by that time he had already been composing concertos for ten years.

f Ten thousand hours is, of course, an enormous amount of time. It's almost impossible to reach that number all by yourself. You need parents who are encouraging and supportive. You can't be poor, because there won't be enough time in the day to practise and work full-time to earn money.

g Let's turn to the history of Bill Gates. A gifted young mathematician discovers computer programming. He drops out of Harvard. Then he starts a little computer company called Microsoft® with his friends. Being brilliant, ambitious and hard-working, he builds it into the giant of the software world. Now let's look more closely. Gates went to a very exclusive school. One year the school spent $3,000 on a computer terminal. From that moment on, Gates lived in the computer room, learning how to use this strange new machine. In one seven-month period in 1971, Gates and his friends ran up 1,575 hours of computer time. By the time Gates left Harvard, he'd been programming non-stop for seven years. He had spent a lot more than 10,000 hours doing it. Very few teenagers at that time had the kind of experience Gates had.

h January 1975 was the start of the personal computer age. Who was in the best position to take advantage of it? You don't want to be too young. It's no good if you're still at high school. The perfect age to be in 1975 is young enough to see the coming revolution but not so old as to have missed it. You want to be twenty or twenty-one, born in 1954 or 1955. When was Bill Gates born? 28 October 1955.

5 SPEAKING What about *you*?

The text suggests that to be a genius you need to work hard and have opportunities. Do you agree? How important is natural talent?