What kind of mind have you got?

1. What is the missing number in this sequence?
   96 95 92 87 ( ) 71

2. Turn to page 126 and study the ‘things to buy/do in town’ list for one minute. Then close your book and write down all the things you can remember.

3. How many sides does this figure have?

4. You are looking after some children for the day. One little girl, Anna, comes to you crying because the others won’t play with her. What do you do?
   a. Tell the other children off for being mean.
   b. Tell Anna to sort it out herself.
   c. Give Anna a biscuit to make her feel better.
   d. Tell the children they can all have a biscuit if they promise to play with Anna.
   e. Other:

5. Write down as many possible uses for a newspaper as you can in two minutes.

6. You have a wolf, a goat and a cabbage which you need to take across a river. You have a small boat which in which you can only take two things at a time. However, if the wolf and goat are left alone, the wolf will eat the goat. And if the goat and cabbage are left alone, the goat will eat the cabbage. How can you get across the river with the two animals and the cabbage?

7. How creative do you think you are?
   a. very creative
   b. creative
   c. averagely creative
   d. about as creative as a potato

8. Look again at the sentences in exercise 1a and find an example of a modal passive and a passive infinitive.
Reading and speaking

1a Work in pairs and discuss. What do you understand by the phrase 'nature or nurture'? 

b Do sentences 1–4 below support the theory of nature or the theory of nurture? 

1. Everything comes from our genes. 

2. The roots of personality are in our upbringing. 

3. We can’t change who we are. 

4. Our environment influences our personality. 

2a Read the article. Which paragraphs do the pictures illustrate?

b Work in pairs and discuss. What did you learn about the things/people in the pictures?

3 Work in pairs. Check you understand the words in bold in the questions below. Then read the article again and answer the questions.

1. According to Hippocrates, what personality traits were bile and blood responsible for? 

2. Why long did the theory of the ‘four humors’ last? 

3. Why do you think people consulted phrenologists about job applicants and marriage partners? 

4. Explain in your own words what ‘we are all born as blank slates’ means. How does this relate to the quote from Skinner? 

5. What is the connection between criminals who were executed in ancient China and children in the UK who play truant? 

6. How does the Stanford Prison experiment support the nurture theory? Why do you think it has become infamous? 

7. According to nurture theory, should identical twins who grow up apart be similar? Why? Why not? What happens in practice? 

4 Work in groups and discuss the questions. 

• We blame our parents for our weaknesses but we don’t thank them for our strengths. Do you agree? 

• How would you describe your personality in terms of the ‘big five’ personality traits in the article? 

• What has most influenced your personality? 

What shapes our personality?

Is it the result of nature – what we are born with – or nurture – what we experience? We search for the answer. 

It’s definitely nurture. 

1. Two and a half thousand years ago, the ancient Greeks believed that your personality was the result of different fluids, or ‘humors’, in your body, like blood, phlegm and bile. According to Hippocrates, the ‘father of modern medicine’, black bile caused depression and irritability, while blood made you brave and hopeful. These ideas spread all over the world, and in the 18th century, people with mental illnesses were sometimes treated with leeches in order to restore the balance of their humors. It was only in the 19th century that scientists began to doubt the theory of humors, although patients may have noticed much earlier that they weren’t getting any better! 

2. By the late 19th century, personality had been exactly linked to the brain. This was a big advance and scientists people took it too far and phrenology emerged as a new ‘science’. Phrenologists believed that the brain affected the shape of the head, and so by feeling someone’s head, they could discover the shape of their brain and thus their personality – including, for example, how likely someone was to commit murder. At the peak of its popularity, phrenologists were consulted about marriage partners or to give a background check on job applicants. Job interviews must have been interesting in those days! 

3. More recently, scientists have looked to our genes as the source of personality. While there is certainly a link, it is far from simple. For a start, a single gene might be involved in many different aspects of our personality – and we have around 25,000 genes in our body. And when even a simple thing like the colour of your skin is the result of more than 100 different genes, imagine how many are involved in a character trait like being open, extrovert, agreeable, conscientious or neurotic (the ‘big five’ traits that psychologists nowadays use to describe human personality).

It’s definitely nurture. 

4. If it’s hard to find the roots of personality in nature, then can we find them in nurture? The nurture theory says that we are all born as ‘blank slates’. Our personality develops as the result of our parents, our peers, our environment, and so on. As the famous psychologist BF Skinner once said, ‘give me a child and I’ll shape him into anything’. 

5. Nurture theory has even been enforced by law. In Ancient China, if a young man committed a serious crime and was sentenced to death, then his parents might be executed, too – because they were responsible for the character of their son. Even in modern Britain, if a child plays truant from school, her parents can be prosecuted. 

6. However, there’s more to nurture than parents, there’s environment, too. One striking example of how easily environment can affect personality comes from the infamous 1971 Stanford Prison experiments. These experiments took 24 normal, healthy men and asked them to play the role of prisoners or guards in a prison to see if the experiment had to be ended and just six days because the guards became very cruel. One prisoner in a cupboard and forcing others to bang on the cupboard door. In a new environment, it seems that ‘normal’ people can completely change their behaviour. 

7. Some studies of twins, however, challenge the importance of nurture. According to nurture theory, identical twins (who have the same genes) should only have similar personalities if they grow up together, but different personalities if they grow up apart, due to different upbringing and experiences. However, studies show the same striking similarities in personality: whether these twins are brought up separately or together.

So do we have an answer? 

Well, sort of. The consensus these days is that our personalities result from a complicated interaction between nature and nurture. Perhaps one day we will understand the exact recipe for personality but then again, we may never understand ourselves fully!

Wordspot

mind

1 Replace the words and phrases in bold below with the correct form of a phrase from the diagram.

a) So I won’t tell you if it doesn’t concern you! 

b) Don’t worry about it. I’ll get a pan and brush.

c) I’ve changed my opinion – I’ll take it after all.

d) They were consulted about possible marriage partners.

2 a) be careful b) not a problem c) make up your mind d) a bit forgetful

3 a) decide b) speak your mind c) change d) mind e) mind -ing

4 a) thoughts b) mind c) change d) mind

5 a) open-minded b) never mind c) never mind d) open-minded

6 a) remembering b) my mind c) went blank

7 a) requests b) mind c) your own business

8 a) spoken b) phrases c) mind d) your own business

9 Work in pairs. Write three short conversations with a phrase with mind in each.

Go online to find out more about nature versus nurture.
The future of your mind
...according to Hollywood.

Check out our top five mind-bending future possibilities from Hollywood films.

1. Get rid of bad memories
   In Eternal Sunshine of the Spotless Mind, Clementine and Joel have their memories of each other erased by a doctor when they split up. But things get complicated when they meet again.

2. Plant ideas in other people’s minds
   Wouldn’t it be incredible to plant an idea in someone’s mind while they’re asleep? Then, when they wake up, they believe it’s their idea. That’s all possible in the Christopher Nolan film inception.

3. Learn to do anything - instantly
   In the classic sci-fi film The Matrix, the characters don’t waste time actually learning new skills; they download them directly to their brains. How convenient!

4. Buy memories
   Perhaps we won’t have bad memories erased (see 1), but we’ll have good ones implanted instead. We’ll choose the ones we want, just like we choose clothes in a shop. Both the original version and the 2012 remake of Total Recall explore this idea, in typical Hollywood style.

5. Record and play back your experiences
   Perhaps we won’t be able to record all our experiences so that we (or other people) can watch them again. This is the future reality in Downstream, a film from 1981.

Language focus 2
Passive forms with have and get

1. Read the text ‘The future of your mind.’ Then work in pairs and say which ideas you think will come true and when.

2. Work in pairs. Discuss the questions below.
   • If your mind could be manipulated as suggested in the article, what skill would you download first?
   • What idea would you plant, and in whose mind?
   • Whose memories would you buy? Why?

GRAMMAR

1. Look at the examples and answer the questions.
   The characters record their experiences.
   The characters have bad memories erased.
   1 Who records the memories in the first sentence?
   2 Who erases them in the second sentence?

2. Find two other examples in the article with have + past participle and answer the questions.
   • What is the tense in each example?
   • How is this construction used in other tenses?

3. Look at the example below. Notice that we can also use get + past participle in the article.
   We’ll get our bad memories erased.
   a Read Study 2, page 141
   b Read Study 2, page 141

PRACTICE

1. Use the prompts to write sentences about each picture.
   a 1 read/palm
   b 2 read/horoscope
   c 3 test/eyes
   d 4 take/blood pressure
   e 5 dye/hair
   f 6 paint/nails

WORK IN PAIRS

1. Read the prompts to write sentences about each picture.

2. Work in pairs and discuss the questions.
   • Which things in the pictures do/don’t you do yourself?
   • Do you or have you ever had anything like this done at the optician’s, beautician’s, etc.?

   I sometimes dye my hair myself, but I never cut my own hair – I always have it cut at the hairdresser’s.

3. Work in pairs. Look at the business cards and discuss. What can you have done in each of the places?
   You can have applicants’ handwriting analysed.

4. Work in pairs. Write two similar conversations about the other businesses.

   a Work in pairs. Write two similar conversations about the other businesses.

   b Work in groups and compare answers. Which other qualities do you think would be important on a mission like this?

Listening and vocabulary
Personal characteristics

1. Work in pairs. Look at the photo of six men who spent nearly 18 months alone together in a space capsule. Discuss the questions.
   • What do you think it was like?
   • What do you think their biggest problems were?
   • Do you think you could cope with this situation?

2. Read Study 2, page 141

   a 4.5 Listen to someone phoning one of the businesses. Answer the questions.
   1 Which business is the customer phoning?
   2 Which service is he asking about?

   b Work in pairs. Write two similar conversations about the other businesses.

   c Work in groups and compare answers. Which other qualities do you think would be important on a mission like this?
Choose people to go on a space mission

Preparation Reading

1a. Read the article about Mission 2050 and summarise the main information.

1b. Work in pairs and discuss. What characteristics do you think will be most useful in Novaterra?

2a. You have been accepted for Mission 2050! You have been asked who should go with you.

• Read about the other nine shortlisted candidates.
• Circle the factors that you think make them suitable and underline the factors that do not.
• Find out the most important characteristics that future space travellers need.

The ISA will provide food capsules for three years, but the volunteers should become self-sufficient after this. Water, emergency medical supplies, blankets and basic shelter will also be provided. The volunteers will attend a course covering survival skills, agriculture and first aid, but practical skills that volunteers can bring will of course be an advantage.

Preparation Writing

Imagine you have been on the mission for three months and are allowed to send your first email home. Write to friends or family on the topics below.

- the other volunteers and what you think of them
- what it is like living together
- the best/most difficult things about the mission
- how you feel about the mission now

Task Speaking

1. Work individually. Make a preliminary selection of the five candidates that you would most like to go with you on Mission 2050.

2. Think about how to explain your reasons. Ask your teacher for any words/phrases you need.

2. Work in pairs. Compare the candidates you have chosen and explain why. Reach an agreement on the five candidates you want to go with you.

> Useful language a and b

3. Work in groups. Present your shortlist of five candidates and reasons for your choice. Try to agree on a final shortlist of candidates.

> Useful language c

Follow up Writing

Imagine you have been on the mission for three months and are allowed to send your first email home. Write to friends or family on the topics below.

- the other volunteers and what you think of them
- what it is like living together
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USEFUL LANGUAGE

a. Explaining your choices
b. Persuading/dissuading

Presenting your decision

But what if ( … happens)?

Yes, but what about (his age)?

She’s not … enough

I (don’t) think … is suitable because …

She’s too …

The fact that she is (pregnant) is very useful/ a problem.

His (hot temper/medical skills) might cause problems/be useful.

She must be very (determined/clever), etc.

We need people/women who …

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b. Persuading/dissuading

Presenting your decision

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Yes, but what about (his age)?

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His (hot temper/medical skills) might cause problems/be useful.

She must be very (determined/clever), etc.

We need people/women who …

b. Persuading/dissuading

Yes, but what about (his age)?

Have you thought about (the fact that …)?

Don’t you think … would be a problem/an advantage?

But what if ( … happens)?

To me, the most important thing is that …

C. Presenting your decision

After a long discussion, we decided/it was decided that …

… was selected because …

We were very aware of the importance of …

Another key issue was the fact that …

For that reason, we decided that …

In the end, we/it was agreed that …

SHARE YOUR TASK

You have to give a brief press conference to journalists. Prepare a short presentation explaining who has been chosen for Mission 2050 and why.

Practise the presentation until you feel confident.

Film/Record yourself giving your presentation.

Share your film/recording with other students.
WORLD CULTURE

NATURE OR NURTURE?

Find out first

1a Work in pairs. Read the information below about the differences between males and females and try to guess the correct answers.

Men versus Women

Various scientific studies over the last two decades have proved that there are differences between boys and girls at school in terms of how good they are at certain skills (although we don’t know the reasons for those differences). For example, boys / girls tend to be better at spatial skills, for example rotating an object in their mind, while boys / girls are better at judging what people are feeling when boys and girls grow up, we find that men / women tend to make more money over the long terms when they invest in the stock market.

We also find that men / women are more likely to have an accident while driving, despite being more able to see detail at a distance.

b Go online to check your answers or ask your teacher.

Search: boys versus girls spatial skills / judging feelings / men versus women stock market / driving accidents

View

2a You are going to watch a video about why boys and girls like different toys. What gender-stereotyped toys do you think the video will mention?

b Watch the video. Then work in pairs and answer the questions.

1 What does the experiment with toddlers prove?
2 What does the experiment with monkeys prove?
3 Why might males be attracted to vehicles like helicopters and cars?
4 What does the presenter conclude about the nature-nurture debate?

3 Watch the video again and tick the three sentences that are true. Correct the false sentences.

1 Before 15 months, boys and girls don’t show a preference for particular toys.
2 The first experiment with toddlers is designed to test the nature argument.
3 The volunteers are tricked into believing the toddlers are the opposite sex.
4 The first experiment shows that nurture is probably important.
5 The second experiment is new and surprising.
6 Dr Hines chose monkeys because she couldn’t find the right kind of children.
7 Dr Hines found that both male and female monkeys were more likely to play with cars, trucks and so on.
8 The classic scientific view is still supported by recent research.

4 Work in pairs. Were you surprised by the outcome of the experiment? What are your views on the nature-nurture debate in terms of children and toys?

World view

5a Watch seven people answering the question ‘Did your parents treat you / your siblings in a gender-stereotyped way?’. Complete the first column in the table.

<table>
<thead>
<tr>
<th>Treated in a gender-stereotyped way?</th>
<th>Issues mentioned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eben</td>
<td>yes</td>
</tr>
<tr>
<td>Heather</td>
<td></td>
</tr>
<tr>
<td>Fauzia</td>
<td></td>
</tr>
<tr>
<td>Monica</td>
<td></td>
</tr>
<tr>
<td>Elliot</td>
<td></td>
</tr>
<tr>
<td>Louisa</td>
<td></td>
</tr>
<tr>
<td>Luis</td>
<td></td>
</tr>
</tbody>
</table>

5b Watch again and complete the second column.

6 Work in groups and discuss.

• Whose experiences do you most relate to?
• Did the age of the speaker make a difference to the way they answered?
• Do you think the way parents treat boys and girls has changed much in your country in recent generations?

Find out more

7a Look at the psychology experiments listed below. What do you think each one is about?

• Pavlov’s dogs experiments
• Stanford prison experiment
• Milgram obedience experiment
• Asch conformity experiments

b Choose one of the experiments and go online to find out more about it. Make notes about the following points.

• when it was conducted
• who led it and who took part
• what the researchers / participants did
• what the findings were
• what the public reaction was at the time
• the impact of the experiment

Search: Pavlov’s dogs experiments / Stanford prison experiment / Milgram obedience experiment / Asch conformity experiments

Write up your research

8 Write one or two paragraphs about the experiment you researched. Use the prompts below to help you.

• The experiment was carried out in …
• Each participant was asked to …
• As the experiment progressed …
• The study showed that …
• The surprising / shocking conclusion of the experiment was that …
• It changed the way people saw …

AFTER UNIT 4 YOU CAN …

Describe and discuss personal and mental characteristics.
Persuade other students of your point of view, giving detailed reasons.
Present decisions in public.

Search: boys versus girls spatial skills / judging feelings / men versus women stock market / driving accidents