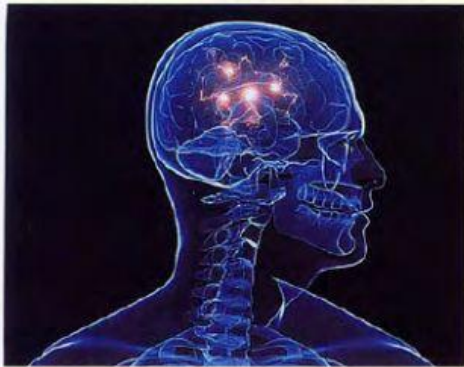




For Better Grades—Use Your Brain!

- 1 If you're like most students, you probably started this new **academic** year with a resolution to study harder. Now, science can help you keep your resolution. Recent discoveries in brain research point to better ways to learn.
- 2 How does the brain save new information? Think of the last time someone told you their phone number. Could you remember that number five minutes later? Probably not! That's because it was in your short-term memory.
- 3 Our memory actually has three **components**. *Sensory memory* takes in information from our five senses and is stored for just a few seconds while our brain processes it. *Short-term memory* works like a "holding area" for new information—that's where you keep the phone number while you dial it. But if you can put the phone number into *long-term memory*, you'll remember that same phone number next week. This part of your memory holds everything from irregular verbs to the names of all your cousins.
- 4 When you study, you **transfer** new information into **long-term** memory. Every time we learn something new, the **structure** of the brain actually changes as we build new connections to information that we already know. When there are more connections to the new information, it's easier to find it again.
- 5 Brain researchers have discovered four key points for **effective** study.
 - 1 **Make an effort.** The brain remembers better when we are interested in the subject, already know a little about it, and know we will need the information in the future.
 - 2 Find the most important information and organize it. Your brain can process only a limited amount of information at one time, so don't try to remember every detail. When studying a textbook, look for titles, headings, and illustrations to show you the main ideas.
 - 3 Make the new brain connections stronger. One **technique** is to recite¹ the ideas out loud in your own words. This is the most powerful way to transfer information from short-term to long-term memory. Another method is drawing a picture of the information to activate the visual part of the brain.
 - 4 Give the new material time to soak in—your brain has to build new physical connections. For this reason, it's better to study for several short sessions than one long one. And cramming² the night before a big test doesn't help.

By understanding how the brain works, and following these four tips, you can make this your most successful academic year ever.

¹ When you **recite** something, you say it aloud after practising or memorizing it.

² When you **cram** for an exam, you try to study for it in a short space of time.

Reading Comprehension

Check Your Understanding

A Choose the correct answers for the following questions.

- 1 Which topic is NOT discussed in the passage?
 - a short and long-term memory
 - b how to study for tests better
 - c why some people are very smart
- 2 According to the passage, what does drawing a picture do?
 - a It puts information into short-term memory.
 - b It shows people you are trying to learn.
 - c It makes the connections in the brain stronger.
- 3 Which sentence is most likely to be true?
 - a Reciting ideas out loud is better than drawing them.
 - b Brain researchers understand short-term memory best.
 - c It's better to have information in your long-term memory when doing a test.

B Read the following sentences. Check (✓) true (T) or false (F).

	T	F
1 When we learn new facts, we save them in our long-term memory.		
2 You remember better if you start studying a long time before a test.		
3 Our brains change physically when we learn new information.		
4 Saying new information out loud is a good way to remember it.		
5 You don't have to memorize every small detail to learn a subject.		

Critical Thinking

C Discuss the following questions with a partner.

- 1 Which study techniques sound useful and which do not? Why? Have you tried any of them?
- 2 What other ideas do you have for how to study better?

Vocabulary Comprehension

Words in Context

A Choose the best answer. The words in blue are from the passage.

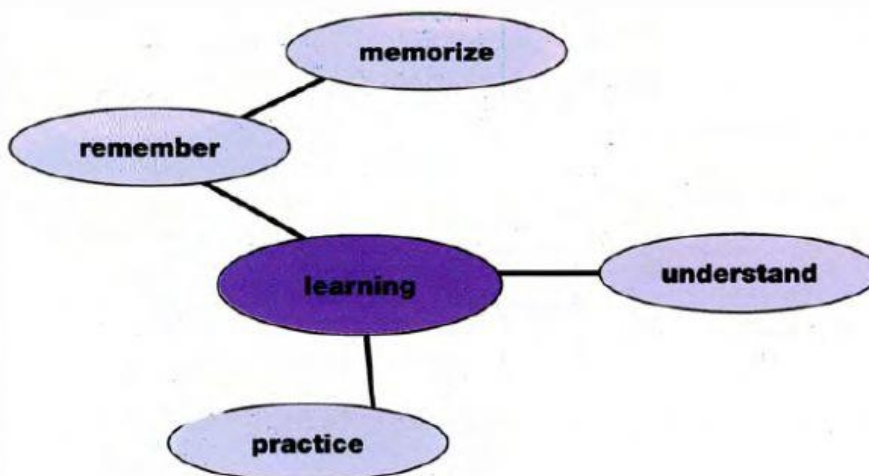
- 1 Some components of a healthy life are _____.
 - a exercise and a good diet
 - b more energy and better skin
- 2 Which of these are long-term plans?
 - a having a family
 - b going on holiday
- 3 You can transfer money _____.
 - a at the bank
 - b in your wallet

- 4** You need to make an effort if a task is _____.
a easy b difficult
- 5** If you use effective ways to study, your grades will get _____.
a better b worse
- 6** The structure of something is how it is _____.
a used b organized
- 7** One technique for remembering new English words is _____.
a writing them in a notebook b taking an exam
- 8** Which of these is an academic skill?
a writing an essay b baking a cake

B Answer the following questions, then discuss your answers with a partner. The words in blue are from the passage.

- 1 What are the main components of a computer?
- 2 What is a useful technique for taking good notes in class?
- 3 What do you think is the most effective way to manage stress?
- 4 What are your long-term goals when it comes to learning English?

A Look at the word web below. Are there other words you can think of to add to this web? Explain your diagram to a partner. How do your ideas connect to each other?



B On a sheet of paper, create a word web using one of the categories in the box below (or one of your own). See how many branches and words you can add. Share your ideas with a partner.

travel music the future food

Vocabulary Skill

Word Webs

One helpful strategy that you can use to memorize new vocabulary is to create a *word web*. Word webs can help you remember the meaning of new vocabulary and relate this vocabulary to other words you know.