

Name: _____

Use Distributed Practice and Retrieval Practice Instead of Cramming

If you're trying to learn something or getting ready for a test, how do you do it? Maybe you read some paragraphs. After that, you might highlight certain words, and then read the paragraphs again. Perhaps you choose a few facts and recite them over and over. Or, you write the facts again and again on a sheet of paper. You do it all in just one sitting. This is called cramming. It's a popular strategy, but not a good one.



Psychologists, educators, and brain researchers agree: cramming only works for short-term learning. That means it might help you pass a test, but shortly after the test, you'll forget what you learned.

There is a better way to learn, however. It is to study in small sessions, over many days, weeks, or months. Focus on small bits of information and allow some time in-between. Then, the information can sink in. This is called distributed practice. It's an effective way to learn, and it leads to long-term retention. That means you'll remember what you've learned for a very long time.

Retrieval practice is another strategy, and it goes well with distributed practice. To *retrieve* means to "get back". Things you learn are stored in your memory. Retrieval practice is getting them back. You can study with flashcards, take a practice test, and play review games. You can get a blank sheet of paper and draw or write what you know about a topic. These activities help you call to mind (retrieve) what you've learned. It may not be easy. In fact, it shouldn't be very easy at first. You might have to think hard. Or, you might need to ask for a clue. But remember, the harder you work to retrieve information, the easier it is to retrieve it the next time. During retrieval practice, your brain makes neural pathways. When these pathways are strong, they help you remember what you've learned.

Even when you have mastered the material, you should continue to revisit and practice it again and again. Here's why: Practice *beyond the point of mastery* allows you to retain the information much longer, even for the rest of your life.

1. Why practice what you've already learned? Underline your answer in the text.
2. According to the passage, why is cramming NOT a good strategy?
 - A) It helps you get good grades on tests.
 - B) You can do it all in one sitting.
 - C) It only works for short-term learning.
 - D) You pass the test.

3. Explain short-term learning and long-term retention. Write at least two sentences. Support your answer with evidence from the text.

4. Put a check next to the tips that describe distributed practice.

_____ Study in many small sessions, spread out over time.

_____ Study in one long session.

_____ Focus on small bits of information.

_____ Wait until the night before a test to study.

5. What are some good retrieval activities?

_____ reading a passage over and over

_____ using flashcards

_____ writing a word ten times

_____ taking a practice test

_____ playing a review game

_____ drawing or writing what you know

6. Match each term with its clue.

_____ retrieve

A) high level of skill or knowledge

_____ distribute

B) a plan or method

_____ strategy

C) to get and bring back

_____ neural

D) to spread out

_____ mastery

E) affecting nerves or the nervous system

7. What does the brain make that allows you to remember things?

flashcard drills

neural pathways

comic books

math problems

Name: Answer Key

Use Distributed Practice and Retrieval Practice Instead of Cramming

If you're trying to learn something or getting ready for a test, how do you do it? Maybe you read some paragraphs. After that, you might highlight certain words, and then read the paragraphs again. Perhaps you choose a few facts and recite them over and over. Or, you write the facts again and again on a sheet of paper. You do it all in just one sitting. This is called cramming. It's a popular strategy, but not a good one.



Psychologists, educators, and brain researchers agree: cramming only works for short-term learning. That means it might help you pass a test, but shortly after the test, you'll forget what you learned.

There is a better way to learn, however. It is to study in small sessions, over many days, weeks, or months. Focus on small bits of information and allow some time in-between. Then, the information can sink in. This is called distributed practice. It's an effective way to learn, and it leads to long-term retention. That means you'll remember what you've learned for a very long time.

Retrieval practice is another strategy, and it goes well with distributed practice. To *retrieve* means to "get back". Things you learn are stored in your memory. Retrieval practice is getting them back. You can study with flashcards, take a practice test, and play review games. You can get a blank sheet of paper and draw or write what you know about a topic. These activities help you call to mind (retrieve) what you've learned. It may not be easy. In fact, it shouldn't be very easy at first. You might have to think hard. Or, you might need to ask for a clue. But remember, the harder you work to retrieve information, the easier it is to retrieve it the next time. During retrieval practice, your brain makes neural pathways. When these pathways are strong, they help you remember what you've learned.

Even when you have mastered the material, you should continue to revisit and practice it again and again. Here's why: **Practice beyond the point of mastery allows you to retain the information much longer, even for the rest of your life.**

1. Why practice what you've already learned? Underline your answer in the text.
2. According to the passage, why is cramming NOT a good strategy?
 - A) It helps you get good grades on tests.
 - B) You can do it all in one sitting.
 - C) It only works for short-term learning.**
 - D) You pass the test.

3. Explain short-term learning and long-term retention. Write at least two sentences. Support your answer with evidence from the text.

Example: Short-term learning only lasts for a short time. Long-term retention is remembering for a very long time. (Answers will vary.)

4. Put a check next to the tips that describe distributed practice.

Study in many small sessions, spread out over time.

Study in one long session.

Focus on small bits of information.

Wait until the night before a test to study.

5. What are some good retrieval activities?

reading a passage over and over

using flashcards

writing a word ten times

taking a practice test

playing a review game

drawing or writing what you know

6. Match each term with its clue.

C retrieve A) high level of skill or knowledge

D distribute B) a plan or method

B strategy C) to get and bring back

E neural D) to spread out

A mastery E) affecting nerves or the nervous system

7. What does the brain make that allows you to remember things?

flashcard drills **neural pathways** comic books math problems