

## Music Scores



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*Learning to play music is linked to improved academic test scores.*

Got music? Learning to play music is linked to improved academic test scores. More than 200 second graders were studied. Some were trained on piano keyboard and math software. Others used only the software. After six months, the piano players scored higher on math tests. It seems that making music taps into parts of the brain involved with reasoning, say researchers.

Musical middle and high school students score well too. The College Entrance Examination Board compared students with no music background to student musicians. Students in music programs scored 63 points higher on verbal and 44 points higher on math.

UCLA examined the test scores of 25,000 students in grades 8 to 12 over a period of 10 years. Researchers found that students with a high interest in instrumental music scored higher in math knowhow than did others.

## Can't Get that Song Out of My Head

Do you "want some baby back ribs"? Is it "a small world after all"? "Gimme a break." Some advertising jingles and songs really stick with you. The sheer repetition of the words and music has something to do with it. But musicians are even more likely to have a hard time getting a tune out of their heads. Doctors say that's because musicians' brains are hooked up in a special way.

Some people are really wired for sound. Psychologists have even identified a condition in which people experience "musical hallucinations." These hallucinations cause people to hear songs playing in their heads. Many times the tunes are familiar; other times, they're new. Composers report experiencing "piped-in" sound before creating their masterpieces. The parts of the mind that are busy when listening to music are the same that become active when hearing your own private song. So it could be that regions of the brain search for a song-and make their own when none is available.

## Operation Song

You see super cool TV surgeons cranking the tunes while they work. Did you ever wonder if the music had any effect on patients? Researchers wondered, so they put patients and music to the test.

A team of researchers studied groups of surgery patients. All patients had parts of their bodies numbed. They were all given a device to control the amount of pain-relieving sedative they received. All were awake through the process.

The patients were divided into three categories.

- One group brought their favorite CDs and listened through headphones.
- The second group heard "white noise," or background noise meant to drown out other sounds.
- The last group heard only operating-room noise.

The result? **Patients who listened to music used less sedation. Those who listened to their favorite songs were calmer.** The effect may be because the music blocked out the noises of the operating room, say doctors.

*Source: Yale University, American University of Beirut Medical Center*

Name: \_\_\_\_\_ Date: \_\_\_\_\_

1. Which parts of the brain does making music tap into?
  - A. the parts involved with advertising
  - B. the parts involved with reasoning
  - C. the parts involved with moving
  - D. the parts involved with sleeping
  
2. What is a possible effect of learning to play music?
  - A. wanting some baby back ribs
  - B. having parts of your body numbed
  - C. getting a tune out of your head
  - D. improving your academic test scores
  
3. Playing music most likely has an impact on a person's brain. What evidence from the text supports this conclusion?
  - A. "[M]usicians are even more likely to have a hard time getting a tune out of their heads. Doctors say that's because musicians' brains are hooked up in a special way."
  - B. "The College Entrance Examination Board compared students with no music background to student musicians."
  - C. "In the absence of music, some people hear songs playing in their heads. Many times the tunes are familiar; other times, they're new."
  - D. "Did you ever wonder if the music had any effect on patients [in surgery]? Researchers wondered, so they put patients and music to the test."
  
4. What is one positive effect that listening to music may have on people?
  - A. It may help students perform better on social studies exams.
  - B. It may help students perform better on physical tasks.
  - C. It may help patients in surgery stay calmer or use less sedation.
  - D. It may help surgeons perform difficult operations more quickly.
  
5. What is the main idea of this text?
  - A. Playing and listening to music can affect a person in many ways.
  - B. More than 200 second graders were trained to play the piano.
  - C. A team of researchers studied groups of surgery patients.
  - D. Some people hear songs playing in their heads, even in the absence of music.

6. Read these sentences from the text.

"UCLA examined the test scores of 25,000 students in grades 8 to 12 over a period of 10 years. Researchers found that students with a high interest in instrumental music scored higher in math knowhow than did others."

Based on these sentences, what does the word "examine" mean?

- A. to change or adjust slightly
- B. to copy or imitate
- C. to study closely and carefully
- D. to increase or improve

7. Choose the answer that best completes the sentence.

The parts of the brain that are busy when listening to music are the same parts that become active when hearing one's own private song. \_\_\_\_\_, it is possible that these regions of the brain make up those private songs when none are available.

- A. Although
- B. Therefore
- C. Unless
- D. Despite

8. What do some people hear when they experience "musical hallucinations"?

9. The College Entrance Examination Board compared the test scores of students with no music background to the scores of student musicians. What did they find out about the test scores of these students?

10. How might a musician experience life differently than someone who does not play or listen to music?

Support your answer with evidence from the text.