



Worksheet 1. Reading: *A Talk on the Effects of Music on our Brains*

Read the transcript of an interview with Daniel Levitin, a doctor of psychology who is very interested in music. Then review the glossary and complete the exercises that follow it.

1 **Q:** *Why is music so important to us as human beings? What is it about us that seeks music?*

2 **Dr. L:** For many people, music is a way of expressing, sharing, or experiencing emotions
3 that we use as an alternative to language; music does things that language can't. As an art
4 form, it allows us to express emotions and ideas over time, as opposed to painting, for
5 example, which does this over space.

6 **Q:** *Briefly, how did music develop into what it is today?*

7 **Dr. L:** The first 'music' was probably vocalizations: changes in pitch and rhythm made by
8 voice. After that came beating, striking, drumming — mostly rhythmic expression. As the
9 brain evolved to give us language, early humans added lyrics to their melodies. Music is
10 constantly changing. The evolution of it may seem slow to us, like all biological evolution,
11 but music continues to build on what was there before. Harmony (structured harmony) is
12 relatively recent, maybe only in the last few thousand years. And it's important to keep in
13 mind that the human brain is undergoing steady evolution as well. The brain changes a bit
14 over centuries, and our ability to conceive of and make music responds to that changing —
15 advancing — the brain changes again, and then music changes again.

16 **Q:** *How do our brains and body react to music? Why is it that some of us prefer one type of*
17 *music over others?*

18 **Dr. L:** Music activates every region of the brain that we've so far mapped. It causes neural
19 activity in the most primitive parts of our brain and also the most advanced parts. When we
20 listen to music — even if we're lying perfectly still — that part of our brains that also
21 coordinates muscle movement for dancing or finger snapping is active.

22 This points to an ancient evolutionary connection between music and movement. Musical
23 taste can vary greatly from one person to another. But this shouldn't be a surprise. Not
24 everyone likes chocolate, not everyone likes spicy food . . . One thing we know is that
25 people in general like music that has something familiar. For example, if you were born



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- 26 listening to Chinese opera, which uses a separate set of scales that are foreign to Western
27 listeners, it's very unlikely you'll suddenly develop a liking for western music. And vice versa
28 — we learn to appreciate those tonal structures that we're surrounded by as children, just
29 as we learn to speak the language we're brought up with.

Glossary

- Line 7 *pitch* — how high or low in tone that a note or other sound is
Line 7 *rhythm* — a regular repeated pattern of sounds or movements
Line 9 *lyrics* — the words of a song
Line 9 *melodies* — tunes; the music itself
Line 10 *evolution* — development
Line 11 *harmony* — notes of music combined together in a pleasant way
Line 18 *mapped* — made a visual chart of something
Line 18 *neural* — relating to a nerve, or to the system of nerves in the body
Line 27 *vice versa* — means that the opposite of a situation you have just described is also true

Comprehension practice

Decide whether each statement is true or false, according to the reading. Circle T if the sentence is true and F if the sentence is false.

1. Music can do things that language cannot do. T / F
2. The first music was beating on drums. T / F
3. After people learned to speak, they added words to their primitive music. T / F
4. Music has changed over time. T / F
5. Humans have known harmony in music since music began. T / F
6. Music causes activity only in one part of the brain. T / F
7. Your brain responds to music even if you are lying down quietly. T / F
8. People tend to like the kind of music that they are familiar with. T / F
9. The tones of the music of Chinese opera are the same tones used in western music. T / F
10. The speaker compares liking a certain kind of music with learning your native language. T / F