



الفرقة : الثانية  
دور : يناير ٢٠١٧  
الزمن : ساعة

كلية التربية النوعية  
قسم التربية الموسيقية

## قراءات باللغة الإنجليزية في مجال التخصص

### Resonance

Some of us have probably noticed that singing or whistling at a certain pitch can cause some near-by object, say , a tumbler , to resound sympathetically This illustrates the principle of resonance: when two vibrating sources are at the same pitch, and one is set into vibration, the untouched one will take the vibration sympathetically from the other. Thus, when we sing it is not our vocal cords alone which produce sound, but the sympathetic vibrations set up in the cavities of our head. The same thing happens with man-made instruments.

All musical instruments are made up of two parts: a vibrator, which the performer sets into motions, and the resonator, which serves to reinforce the sound produces by the vibrator. Thus it is belly of the violin which actually produces the tone, by vibrating sympathetically with the bowed string. Similarly, the pipe or tube of a wind instrument does not only control the vibrations but also acts as a resonator.

A piano without a soundboard to reinforce the vibrations of its strings would produce tones of little or no musical value.

The same principle of resonance is applied to other musical instruments.

#### **EXERCISE A. Decide whether the following statements are true or not true.**

1. Whenever we sing, the near-by objects resound.
2. Our vocal cords alone produce sounds.
3. Musical instruments produce sound on the same principle as the human voice produced.
4. When we play the violin its strings are the only part that vibrates.
5. A musical instrument consists of a vibrator and a resonator.
6. A soundboard is used to reinforce the sound in wind instruments.
7. The piano has no resonator.
8. Resonance is an acoustic phenomenon.

#### **EXERCISE B. Complete the following summary of the reading text.**

Resonance is an ..... phenomenon which occurs when a body takes up vibrations ..... from another vibrating ..... Thus, the sound produced by our ..... is reinforced in the ..... of our head. The same principle is applied to musical ..... in which the ..... is amplified by the .....

#### **EXERCISE C. Translate into Arabic**

sound is everything that we hear : a clock ticking, a door slamming, a dog barking, a car changing gear on the hill, the wind in the trees, a voice speaking in the next room and another voice singing in the house across the road.



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## نموذج اجابة مادة قراءات باللغة الانجليزية فى مجال التخصص

### **Resonance**

Some of us have probably noticed that singing or whistling at a certain pitch can cause some near-by object, say , a tumbler , to resound sympathetically This illustrates the principle of resonance: when two vibrating sources are at the same pitch, and one is set into vibration, the untouched one will take the vibration sympathetically from the other. Thus, when we sing it is not our vocal cords alone which produce sound, but the sympathetic vibrations set up in the cavities of our head. The same thing happens with man-made instruments.

All musical instruments are made up of two parts: a vibrator, which the performer sets into motions, and the resonator, which serves to reinforce the sound produces by the vibrator. Thus it is belly of the violin which actually produces the tone, by vibrating sympathetically with the bowed string. Similarly, the pipe or tube of a wind instrument does not only control the vibrations but also acts as a resonator.

A piano without a soundboard to reinforce the vibrations of its strings would produce tones of little or no musical value.

The same principle of resonance is applied to other musical instruments.

### **EXERCISE A. Decide whether the following statements are true or not true.**

1. Whenever we sing, the near-by objects resound. ✓
2. Our vocal cords alone produce sounds. ✗
3. Musical instruments produce sound on the same principle as the human voice produced. ✓
4. When we play the violin its strings are the only part that vibrates. ✗
5. A musical instrument consists of a vibrator and a resonator. ✓
6. A soundboard is used to reinforce the sound in wind instruments. ✗
7. The piano has no resonator. ✗
8. Resonance is an acoustic phenomenon. ✓

### **EXERCISE B. Complete the following summary of the reading text.**

Resonance is an **acoustic** phenomenon which occurs when a body takes up vibrations **sympathetically** from another vibrating **object** Thus, the sound produced by our **vocal cords** is reinforced in the **cavities** of our head. The same principle is applied to musical **instruments** in which the **vibrator** is amplified by the **resonator**.

### EXERCISE C:. Translate into Arabic

sound is everything that we hear : a clock ticking, a door slamming, a dog barking, a car changing gear on the hill, the wind in the trees, a voice speaking in the next room and another voice singing in the house across the road.

الصوت هو كل ما نسمعه من دقات القلب – غلق الباب – نباح الكلب – وحركة تغيير الناقل  
الحركي في السيارة على مطلع تل ، صوت حركة الرياح وهي تتخلخل الشجر ، حديث داخل  
الغرفة المجاورة ، وأصوات أخرى تغني في منزل من الجانب الآخر .

*With my best wishes*