



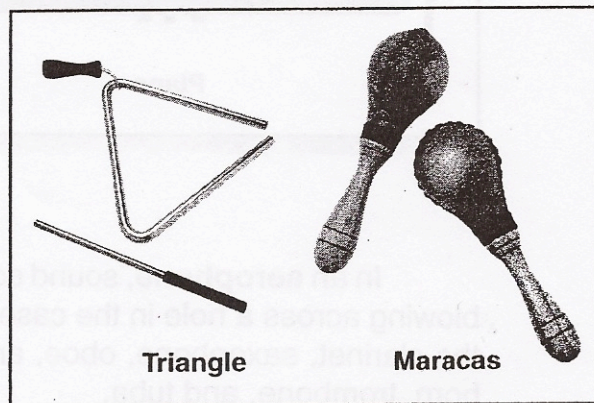
Chapter 2: All Types of "-phones"

Musical instruments in all cultures and societies are classified in a variety of ways: by their shapes, by the sounds they produce, and by their use in a particular culture. Another important way that instruments are classified is by how they produce their individual sounds. The suffix "-phone" comes from the Greek word *phonos*, meaning "sound." Sound is created when vibrations or sound waves are generated. We can place the suffix "-phone" at the end of certain words to describe how sounds are produced on all of the instruments of the world.

There are four main categories of instruments using this method of description. They are *idiophone*, *membranophone*, *chordophone*, and *aerophone*. Let's look at what each of these words means and the instruments found in each category.

Idiophone

Idiophones are instruments upon which vibrations are produced by striking something against something else, or by scraping, shaking, or rubbing the instrument. These instruments generally do not have a specific pitch or tone. Some examples of idiophones are the cymbals, the triangle, claves, wood blocks, and maracas. Modern percussion ensembles have expanded the realm of idiophones to include trash cans and plastic tubes. Many other cultures, such as the traditional island cultures, use hollowed-out logs that are beaten with sticks in their music.



Triangle

Maracas

Membranophone



Conga Drums

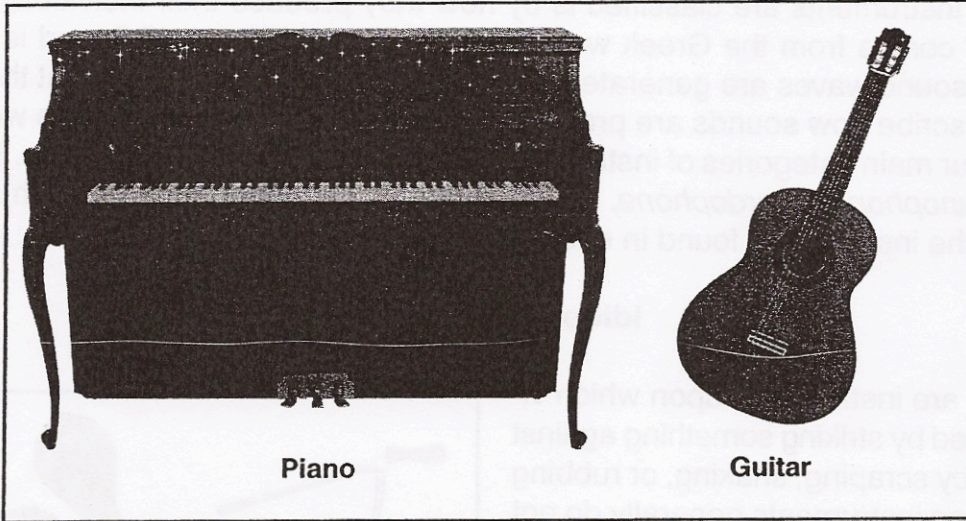
On a **membranophone**, sound is produced by striking a stretched membrane of some sort with either a stick or the hand. The membrane may be either an animal skin or a manmade material such as plastic or rubber. The membrane is usually stretched over a hollow tube. Membranophones may be pitched or non-pitched.

Examples of pitched instruments of this kind are timpani or kettle drums. The tension or tightness of the membrane on these instruments is changed with foot pedals on each drum so that a specific note, or pitch, can be played. Examples of non-pitched instruments of this kind are snare drums, bass drums, congas, and bongo drums.



Chapter 2: All Types of "-phones" (cont.)

Chordophone



Piano

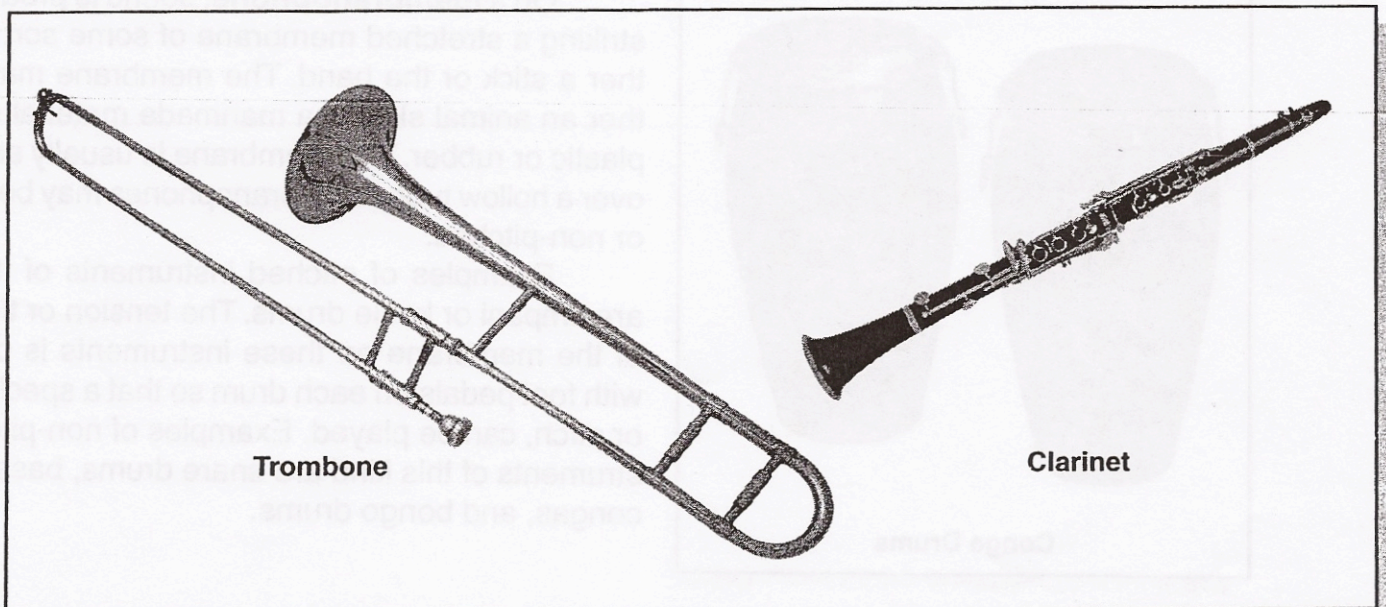
Guitar

Sound is produced on **chordophones** by causing a string to vibrate through striking, plucking, or bowing. Examples of these instruments are the violin, viola, cello (violoncello), piano, harp, and guitar. Pitch is changed by lengthening or shortening the vibrating string.

Aerophone

In an **aerophone**, sound comes from a vibrating column of air. The vibration is started by blowing across a hole in the case of the flute; blowing into or on a reed or reeds in the case of the clarinet, saxophone, oboe, and bassoon; or buzzing your lips in the case of the trumpet, horn, trombone, and tuba.

These four types of "-phones" encompass the instruments of the world. As you will see in the following chapters, many cultures have altogether different instruments from those with which we are most familiar in our culture. Enjoy learning about each one and have fun with the projects and activities at the end of each chapter!



Trombone

Clarinet



Chapter 2: Class Activities

Read the story to Benjamin Franklin, "The Young Person's Guide to the Orchestra" and identify which instruments are playing.

With materials available in the classroom, create your own simple instruments from each of the groups discussed in the story by playing around with the instruments you have on hand.

Word Scramble

Unscramble the words listed below, putting the letters in the correct order to create words from the chapter.

1. BSIAOINRVT _____
2. MHONARPONEEBM _____
3. DNOSU _____
4. NTKRGISI _____
5. OPHDHCNEORO _____
6. BNGWOIL _____
7. OIIEPHNDO _____
8. SICPAGRN _____
9. GUBNZIZ _____
10. ICEHDTP _____
11. RPEOOAHEN _____
12. GHASINK _____
13. NPKGUCLI _____
14. NGBWOI _____
15. GRTSIN _____

Name: _____ Date: _____



Chapter 2: Questions

1. What are three ways in which instruments may be classified other than how they produce their sound?

2. From what language does the suffix “-phone” come? _____
3. What is an idiophone? _____

4. What is a membranophone? _____

5. What is a chordophone? _____

6. What is an aerophone? _____

7. What materials may a membrane be made of? _____

8. What instruments create their sound through the buzzing of the lips? _____

9. What is one of the cultures that uses hollowed-out logs as an idiophone? _____

10. What are the three ways to cause a string to vibrate on a chordophone? _____
