

## LESSON 8

### Students Will Learn

Interesting facts about the organ.

### Additional Materials

Teacher: CD51.

### Procedure

Begin the music class by playing *Toccata In D Minor* by Bach (CD51, band 1). After playing the selection, say: **What do think we are going to study today?** Allow discussion. **Today we are going to learn interesting facts about the organ.**

Turn to page 15. Select student to read one sentence each on page 15 until the entire page is read.

Organ pipes are the easiest part of the organ to locate. Until the invention of modern electronics that could produce an artificial organ sound, pipes were the only way to produce the sustained organ sound. Draw a line connecting the red word “pipes” to the pipes in the picture



The **ORGAN** is a symphony orchestra all rolled up into one instrument. With just a “flick of a switch” the organist can make this instrument sound like stringed instruments, woodwind instruments, or brass instruments. Modern, small organs found in homes and churches produce their sound by electronics and speakers, but larger organs produce their sounds by air blowing through metal **PIPES**. These pipe organs may have thousands of pipes, varying in size from the size of a pencil to the size of a 20-foot tall tree trunk. The pipes are often displayed in lavish decorations in the front of the church, like the ones pictured on page 14. Pipe organs have electric motors that turn a fan, forcing air into a pressurized chamber. Before there were electric motors, several “healthy” church members had to go to the basement beneath the pipe organ and constantly pump air into air chambers while the organist played. When the organist presses the keys on the organ, air travels from the chamber and through the pipes connected to those keys. Each key has several pipes of the same pitch attached to it. By pulling a lever called a **STOP**, the organist can change the sound of the pipes from a soft woodwind or string sound to a powerfully loud brass sound. The organ pictured on this page is the organ at the U.S. Naval Academy, and it has over 500 stops. Volume foot **PEDALS** that look like gas pedals on a car control how loud the organ plays. The farther the pedal is pressed down, the louder the sound. The organ keyboards, which are shorter than piano keyboards, are called **MANUALS**. There may be up to 5 manuals on an organ, each stacked above the other. The organ also has a keyboard for the feet called a **PEDALBOARD**. In addition to the over 500 stops, pedals, and a pedal board, large organs also contain stops which are operated by the feet. Large organs look like they were designed by someone who had 10 hands and 10 feet, but believe it or not, all of these keys, stops, and pedals are played by one very talented organist with just 2 hands and 2 feet!



on page 15. ✍️

Draw a line connecting the red word “stop” to the many white pull-stops on the side of the organ. ✍️

Draw a line connecting the red word “pedals” to the 4 pedals on the organ. ✍️

The manuals are the keys, like on a piano, on which the organist plays. Draw a line connecting the red word “manuals” to the 5 manuals on the organ. ✍️

Notice that the pedalboard on the organ is arranged like a piano keyboard with black keys in groups of 2’s and 3’s. Draw a line connecting the red word “pedalboard” to the pedalboard on the organ. ✍️

It is unusual for music to be written for orchestra and organ. Listen carefully for the organ in this orchestra-organ composition. Play “Finale” from *Organ Concerto Op. 137* by Joseph Rheinberger (CD51, band 11) as an example of an organ with the orchestra. □