DIG Teacher's Guide

September 2013: The Power of Music

Teacher's Guide prepared by Lisa Greenberg, writer and educator. She heard a contemporary type of lithophone for the first time this summer when she listened with her grandchildrento the Stalacpipe organ of Luray Caverns in Virginia which plays music on stalactites.

Getting Ready:

Show the magazine cover to the class and ask, "What does this cover tell you about music? How does it make you feel?" After sharing responses, pair students and have each pair brainstorm when and where they listen to music, in what kinds of places they hear music, what kinds of moods music evokes, and what kind of music goes with what kinds of activities. Then have students discuss their responses in groups of four or as a whole class group. Then challenge the class to think about questions they would like to ask Dr. Dig as they read the articles in the magazine.

Musical vocabulary: reed-pipe, penny whistle, flute, piccolo, ocarina, percussion, luthier, didgeridoo. Encourage students to develop a picture glossary for this list or write a text definition for each of these words.

Ice Age Tunes

UNDERSTANDING WHAT YOU READ (some questions may require research or general knowledge):

Discuss or have students write answers to the questions:

- 1. Why does the author write, "It is difficult to know anything definite about music in the last Ice Age."
- 2. How have archeologists learned about ancient music?
- 3. Why do you think Europeans used hollow bones to make music?
- 4. What is a penny whistle? (Research may be required.)
- 5. What is the difference between a flute and a whistle? (Research may be required.)
- 6. How does a whistle-head change the sound created by a hollow bone?
- 7. Why is the Gessenklosterle ivory flute called a "remarkable specimen"?
- 8. How do archaeologists think the shaped bird bone tubes with no holes were used?
- 9. What kinds of instruments might have been used for drumming?
- 10. What is a lithophone?

Can You Hear the Past?

Writing a contrast or compare essay:

Review the guidelines for essay writing for your class. Then have students write a compare or contrast essay to explain

- 1. how Eastern Woodlands flutes and pan pipes are alike or different, or
- 2. how Eastern Woodlands instruments and modern instruments are alike or different.

Sing!

QUESTIONS FOR CLASS DISCUSSION:

Why are archeologists sure that prehistoric Native Americans sang?

How has singing helped you remember important words and ideas?

CHALLENGE:

Write a song to help you remember everything you need to bring to school.

A Statue That Whistles? and A Singing Well

ORGANIZING SCIENTIFIC INFORMATION:

Write and illustrate a poster that explains how one of these items, the statue or the well, might have made their sounds.

Hagia Sophia

WRITING SHORT ANSWERS

Use complete sentences to answer the following questions:

- 1. What makes Hagia Sophia an architectural masterpiece?
- 2. How did its marble floors influence mediaeval visitors' perceptions?
- 3. How was the entrance of the mediaeval visitor different from that of tourists today?
- 4. How did the words "marmar" and :marmarygma" add to the emotional experience of entering Hagia Sophia?
- 5. How did the acoustics of the building increase the power of the human voice in the building?

6. You may never visit Hagia Sophia, but can you think of another place or building that appeals to all five of your senses? Describe it!

Sea Shanties: Sailors' Art and What a Trip

ORGANIZING INFORMATION WITH GRAPHICS:

Using text and graphics, such as timelines or maps, explain the development of sea shanties or the basic stringed instrument.

WRAP UP:

In classroom discussion, have students review the most interesting items that they learned about ancient music and its instruments. What questions would they like to send to Dr. Dig to answer? (NB: questions can be sent to Dr. Dog via the Internet as part of a computer lab activity.)