

### Teacher's Guide

The following teacher's guide can be used for multiple grade levels and subjects including: **Music**, **Astronomy**, and **Literature**. It contains discussion questions, resources and activities to accompany the CD "The Constellations - A Guide to the Orchestra". Please scroll down to find your particular subject area.

### About the CD

"The Constellations - A guide to the orchestra" teaches students about the instruments of the orchestra, star constellations, and the Greek myths using narration and musical story telling. Each star constellation is represented by a different instrument of the orchestra culminating in the beauty and wonder of the night sky (the entire orchestra). Each track contains a short narration of a Greek myth, followed by a musical representation of the myth. For ease of instruction, the CD can be played with or without the narration. The tracks range from one to seven minutes in length and cover 16 different constellations. Pictures of the instruments are also included.

View track listings, listen to samples, read reviews, and purchase the CD at [www.CDbaby.com/Artist/JonathanPeters](http://www.CDbaby.com/Artist/JonathanPeters)

## **MUSIC**

### Activities and Resources:

1. Display images of the instruments presented in the CD. A 5 ft. poster of the instruments and their families can be found at McDonald Publishing for \$8.95 [www.mcdonaldpublishing.com](http://www.mcdonaldpublishing.com)
2. Make instruments out of household products. Directions for making 12 instruments can be found in *The Ultimate Activity Book - Over 100 Creative Projects for Lively Minds*.
3. Have an "instrument day" and either invite guest musicians to present their instruments to the class or allow students to bring instruments they are currently taking lessons in.

### Discussion Questions:

1. While listening to tracks 16-28:
  - a. Identify whether each instrument is in a high or low register.
  - b. Identify the family to which each instrument belongs (Woodwind, Brass, Percussion, Strings)
  - c. Describe the emotion depicted.
  - d. Choose one word that best describes the sound of the instrument. (rich, sweet, piercing, etc.)
2. Randomly play portions of tracks 16-28 and ask the students to identify the instrument(s) by both name and sight.
3. How many of the themes from the previous movements can you identify in the finale? (Although there are more than 16, try to find at least one from each constellation for a total of 16.)

## **ASTRONOMY**

### Activities and Resources:

1. Display diagrams of the 16 constellations presented in the CD. *Astronomy for All Ages* by Philip Harrington and Edward Pascuzzi includes small diagrams in the appendix. (This book is an excellent resource, and contains many activities that can be used in daylight.)
2. Students can become familiar with the constellations by making and using a planisphere (a star chart that can be used year-round). A pattern and lesson plans can be found in *Astronomy for All Ages* by Philip Harrington and Edward Pascuzzi.
3. Ask students to draw each constellation presented in the CD and name the major stars in each. This information can be found in the National Audubon Society *Field Guide to the Night Sky* and in *Astronomy for All Ages* by Philip Harrington and Edward Pascuzzi.
4. Using a star chart that does not have the constellations marked on it, ask the students to create their own constellation and write a contemporary myth for their constellation. Blank star charts are available at [www.davidchandler.com](http://www.davidchandler.com). Click on "shareware and upgrades" to download the *Deep Space* program. Suggested classroom activities to use with the program are also available.

### Discussion Questions:

1. How many constellations are there in total? (In 1930, the International Astronomical Union officially recognized 88 constellations.)
2. Can you name the only star which is not part of a constellation? (the Sun)
3. In which hemisphere do each of the constellations featured on the CD appear? (They all appear in the Northern hemisphere because they are all constellations visible from Greece, the origin of these particular myths.)
4. During which time of year can each of the 16 constellations on the CD be seen? (This information can be found in the National Audubon Society *Field Guide to the Night Sky*)

## **LITERATURE**

### Activities and Resources:

1. Ask students to create their own mythological characters and events and write them down in a story.
2. For grade level appropriate stories of Greek mythology see *Books To Build On* by E. D. Hirsch, which is part of the Core Knowledge series.
3. Go to [www.geocities.com/athens/atrium/5924/greekunit.htm](http://www.geocities.com/athens/atrium/5924/greekunit.htm) for Ancient Greece activities and lesson plans such as:
  - a. Rewrite a Greek myth in modern language.
  - b. Invent a mythological creature and write a description of it.
  - c. Have students dress up as characters from Greek mythology and ask questions of each other to discover who they are pretending to be.

### Discussion Questions:

1. Why did the Greeks and Romans make up stories for groups of stars? (to navigate oceans and deserts, know when to plant and harvest, mark the changing seasons, and preserve their myths and folklore)
2. Discuss the virtues and vices possessed by the characters in the myths. (for example: Orion, pride; Gemini, self-sacrifice; Hercules, perseverance; Orpheus, impatience and disobedience)
3. Did other cultures and civilizations have myths? (Yes, all cultures have created myths. For example: Great Britain, King Arthur; Norse, Thor and Odin. For further reference see *Books To Build On* by E. D. Hirsch, which is part of the Core Knowledge series)
4. Did the Greeks believe their myths to be true? (Yes, since there was no scientific way to explain natural phenomena the only way that people during that time could explain such occurrences was through the telling of myths.)