

# Discovering the Story: A City and Its Culture Observations of Metal

## A Science Lesson for Grades K-3 Based on Vase & Medallion, 1878 by Tiffany & Co.

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#### CONCEPT

This lesson will guide young students through detailed scientific observations examining the appearance of *Tiffany & Co. Dedication Vase and Medallion*. Students will document their observations in their science journals and make additional observations about other metal objects. The students will then discuss the similarities and differences among different kinds of metals.

### **OBJECTIVES**

- Students will understand that the *Vase and Dedication Medallion* is a nonliving object.
- Students will conduct and record observations about the qualities of various metal objects.
- Students will compare and contrast the qualities of various metal objects.

"For the future of our children and our communities, we must find new ways to engage students in the learning process. The arts can be a powerful vehicle through which to challenge young people's minds, stir their creativity, instill discipline and build self-esteem."

> Lawrence A. Hough President and Chief Executive Officer Sallie Mae

## Teacher Preparation

### CLASS PERIODS REQUIRED

- 1 (50 min.) class period for Pre-Lesson Activities
- 1 50-min. class period for Videoconference
- 1-2 (30-50 min.) class periods for Post-Lesson Activities

#### **BACKGROUND INFORMATION**

Refer to Background Information on the *Discovering the Story* website at <a href="http://www.discoveringthestory.org/goldenage/springer/background.asp">http://www.discoveringthestory.org/goldenage/springer/background.asp</a> for more on Reuben Springer and the Museum's *Vase and Dedication Medallion* and the company that created them. Background Information has been written for teachers to review before the lesson and then share with students.

#### VIDEO

Share the *Vase and Dedication Medallion* video with your students prior to the videoconference. The video, which is on the *Discovering the Story* website at <a href="http://www.discoveringthestory.org/goldenage/springer/video.asp">http://www.discoveringthestory.org/goldenage/springer/video.asp</a> is an interview with a Museum curator on Reuben Springer and the *Vase and Dedication Medallion*. This video is an excellent resource that will help to prepare students for the videoconference.

Video Duration – five minutes.

I believe arts education in music, theater, dance and the visual arts is one of the most creative ways we have to find the gold that is buried just beneath the surface. They [children] have an enthusiasm for life, a spark of creativity, and vivid imaginations that need training – training that prepares them to become confident young men and women.

Richard W. Riley U.S. Secretary of Education

## Pre- Videoconference

#### VOCABULARY

Definitions can be found in the Glossary on the *Discovering the Story* website at <a href="http://www.discoveringthestory.org/goldenage/springer/glossary.asp">http://www.discoveringthestory.org/goldenage/springer/glossary.asp</a>.

Medallion

Metal

Silver

Vase

## **GUIDING QUESTIONS**

- What words describe what this vase looks like?
- What words describe what the medallion looks like?
- If you could touch the vase/medallion, what do you think it would feel like?
- Do these objects remind you of anything around your house?

#### **MATERIALS**

- Print reproduction of the Museum's *Vase and Dedication Medallion* which is on the website at <a href="http://www.discoveringthestory.org/goldenage/springer/images/springer\_full.jpg">http://www.discoveringthestory.org/goldenage/springer/images/springer\_full.jpg</a>
- Background Information regarding the Vase and Dedication Medallion
- Video
- Science Journal handouts

#### **PROCEDURE**

Teacher will:

- Share background information and photograph of the *Vase and Dedication Medallion* with the students.
- Have students make close observations of the *Vase and Dedication Medallion* during the video and by looking at the photograph.
- Have students record their observations on their Science Journal handouts (Part One) or record observations as a group activity on the blackboard.
- Instruct students to examine the sterling silver surface carefully. Students should think about all the senses: touch, sound, smell, and sight. Students may have to use their imaginations for some of these senses. As students watch and listen to the video, have them record words that describe the vase. These observations will be used as a basis for the post-lesson activity.

## Videoconference

### **OBJECTIVES**

- Students will interact with the Cincinnati Art Museum staff through a sixty-minute videoconference on the website at <a href="http://www.discoveringthestory.org/videoconference/">http://www.discoveringthestory.org/videoconference/</a>
- Students will learn about Cincinnati history from 1850 to 1900.
- Students will use Museum objects to reinforce activities completed in preparation for this videoconference.

#### **CONCEPT**

A videoconference conducted by the Cincinnati Art Museum staff extends student learning through emphasis on the viewing and discussion of art objects. During this videoconference with the Museum, students will explore Cincinnati art history and the methods and practices of many of the artists working in the city.

#### **SCHEDULE**

- 5 minutes Introduction to CAM staff (This is also buffer time in case of connection complications)
- 10 minutes Brief discussion of student pre-videoconferencing activities.
- 10 minutes Museum staff will lead an interactive discussion with students on the history of Cincinnati from 1850–1900
- 20 minutes Museum staff will lead students in an in-depth investigation of selected Museum objects.
  - *Bedstead* by Benn Pitman, Adelaide Nourse Pitman, and Elizabeth Nourse. http://www.discoveringthestory.org/goldenage/images/bedstead\_full.jpg
  - Reception Dress by Selina Cadwallader. This image can be found at <a href="http://www.discoveringthestory.org/goldenage/images/dress-full.jpg">http://www.discoveringthestory.org/goldenage/images/dress-full.jpg</a>
  - *Aladdin Vase* by Maria Longworth Nichols Storer, which is available at <a href="http://www.discoveringthestory.org/goldenage/images/aladdin\_full.jpg">http://www.discoveringthestory.org/goldenage/images/aladdin\_full.jpg</a>
  - *Ali Baba Vase* by M. Louise McLaughlin, which is available at <a href="http://www.discoveringthestory.org/goldenage/images/alibaba\_full.jpg">http://www.discoveringthestory.org/goldenage/images/alibaba\_full.jpg</a>
  - *Vase and Dedication Medallion* by Tiffany & Co. This image is on the Website at <a href="http://www.discoveringthestory.org/goldenage/images/springer-full.jpg">http://www.discoveringthestory.org/goldenage/images/springer-full.jpg</a>
- 10 minutes Questions and student sharing of art projects.
- 5 minutes Closing (This is also buffer time in case of connection complications)

### POST - VIDEOCONFERENCE

#### **MATERIALS**

• Six various household metal objects for students to make observations about; make sure that they are very different in their characteristics (i.e., coins, silverware, cans, bottle cap, metal, toy, bolt, etc.)

#### **PROCEDURE**

#### Teacher will:

- Set up each metal object at one of the six stations around the room.
- Divide students into teams for the activity.
- Explain to students that the *Vase and Dedication Medallion* are metals along with all the other objects they are about to study. All metals are nonliving objects and can look very different from each other.
- Have students move from station to station and complete their Science Journal handouts (Part Two). Remind students that even though taste is an important sense, it can be very dangerous to taste things that are not food.
- After students have completed their observations, gather them together and compare the descriptive words different groups used for each object and then note similarities and differences among these metals and between these metals and the *Vase and Dedication Medallion*.

## ASSESSMENT OBJECTIVES

- Students can use accurate descriptive words in the observation of an object.
- Students can compare and contrast characteristics of two or more objects.
- Students can use descriptive words for the senses of sound, sight, touch and smell.

## ACADEMIC CONTENT STANDARDS

#### NATIONAL STANDARDS: SCIENCE

### History and Nature of Science

Standard 11: Understands the nature of scientific knowledge.

Grades K-2

**Benchmark 1:** Knows that scientific investigations generally work the same way in different places and normally produce results that can be duplicated.

Standard 12: Understands the nature of scientific inquiry.

Grades K-2

**Benchmark 1:** Knows that learning can come from careful observations and simple experiments.

Standard 13: Understands the scientific enterprise.

Grades K-2

**Benchmark 1:** Knows that in science it is helpful to work with a team and share findings with others.

#### **OHIO STANDARDS: SCIENCE**

#### Grade 2

Standard: Scientific Inquiry

Students develop scientific habits of mind as they use the processes of scientific inquiry to ask valid questions and to gather and analyze information. They understand how to develop hypotheses and make predictions. They are able to reflect on scientific practices as they develop plans of action to create and evaluate a variety of conclusions. Students are also able to demonstrate the ability to communicate their findings to others.

Benchmark B: Designs and conducts a simple investigation to explore a question.

**Benchmark C:** Gathers and communicates information from careful observations and simple investigation through a variety of methods.

# My Science Journal

| Student Name:                               | Date:  |
|---|--|
| PART ONE                                    |  |
|   | oe the <i>Vase and Dedication Medallion</i> . You may have |
| to use your imagination for some of the sen | ses. Use as many descriptive words as possible.            |
| What does it look like?                     |  |
| _   |  |
|   |  |
|   |  |
| What does it sound like?                    |  |
|   |  |
|   |  |
|   |  |
| What does it smell like?                    |  |
|   |  |
|   |  |
|   |  |
|   |  |
| What does it feel like?                     |  |
|   |  |
|   |  |
|   |  |
| Wilest dans it tooks liles?                 |  |
| What does it taste like?                    |  |
|   |  |
|   |  |
|   |  |

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|----|---|---|---|------------|--------|

**Directions:** Examine the piece of metal that you see located at each of the six different stations around the room. Use as many descriptive words as possible. Remember not to taste the objects. Even though taste is an important sense, it can be dangerous to taste things that are not food.

| Metal #1: |  |  |  |
|-----------|--|--|--|
|           |  |  |  |
|           |  |  |  |
| Metal #2: |  |  |  |
|           |  |  |  |
|           |  |  |  |
| Metal #3: |  |  |  |
|           |  |  |  |
|           |  |  |  |
| Metal #4: |  |  |  |
|           |  |  |  |
|           |  |  |  |
| Metal #5: |  |  |  |
|           |  |  |  |
|           |  |  |  |
| Metal #6: |  |  |  |
|           |  |  |  |
|           |  |  |  |