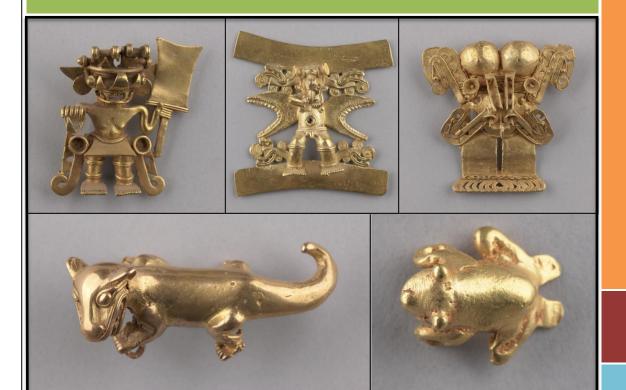


Pre-Columbian Gold

TEACHER PACKET



2016

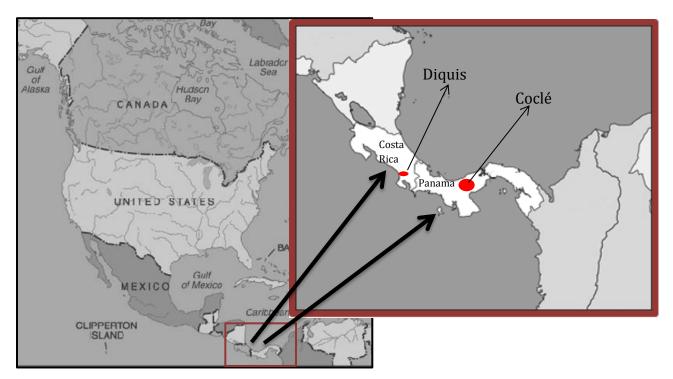
MUSEUM EDUCATION DEPARTMENT

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Introduction

The civilizations of pre-Columbian America (cultures that existed before its "discovery" by Columbus in 1492) excelled in metal-work. The gold objects highlighted in this exhibition are primarily from Panama and Costa Rica (pictured below). The artists of all of these pieces are unknown, as none of these pieces were signed. A great deal of knowledge was lost about these cultures and their history after Europeans arrived. Many native people died from the diseases brought over, and the invaders placed little value on the cultures and people they captured. Pieces like the ones in this exhibition are keys to unlocking the mysteries of these lost cultures.



The Power of Gold

When we think about gold, we think about wealth and currency. Gold has a long history of symbolizing financial power in European countries, and that belief system was brought over to the Americas by colonial powers. However, pre-Columbian people had a different viewpoint all together.

In many pre-Columbian cultures, gold was viewed as divine. Some cultures even believed that it had fallen out of the sky. These people used gold to adorn themselves with symbols that represent who they were, what they believed, and their level of spirituality. While the amount of gold a person had represented power, it was not about wealth and social status, but rather the amount of spirituality that person possessed.

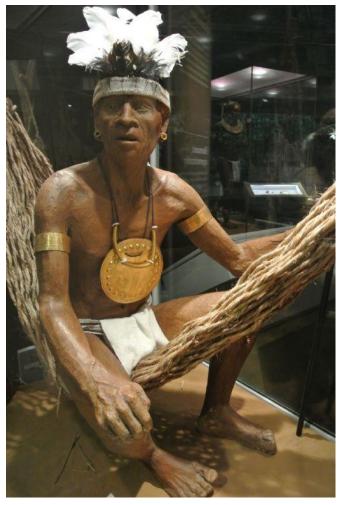
In pre-Columbian cultures, people also believed that gold gained its importance only after it was created into something. One chief, while watching the Spaniards melt gold artifacts into ingots, commented that the unworked gold was equivalent to a lump of clay until it was transformed by a goldsmith.

Adornment

Even in modern times our adornments speak to who we are, and what we are doing. Just like a bride might wear a white dress, or a police officer wears a uniform, we can tell who these people are by visually reading how they have chosen to adorn themselves. Think about what you wear on a daily basis. Think about your clothing, jewelry, shoes, and any other adornments. What do all of these things say about you? Do they tell us who you are, what you believe, or things that you enjoy? This makes us not much different from pre-Columbian people as they also used adornments to communicate who they are.

We share this belief in the importance of personal adornment with pre-Columbian people. They used jewelry, headdresses, and clothing to represent themselves as an individual, as a tribe, and as cultural belief system. During their time, they would have

been able to "read" the adornments someone else was wearing and be able to



Mannequin of Pre-Columbian Man wearing a Chest Plate Pre-Columbian Gold Museum, San Jose, Costa Rica

tell if they were a chief, a warrior, who they were related to, and what tribe they belonged to.

The importance of adornment is something that humans share beyond borders and timelines. It is something that is fundamental in the history of mankind. Adornments can represent who we are, what we believe, and where we come from.

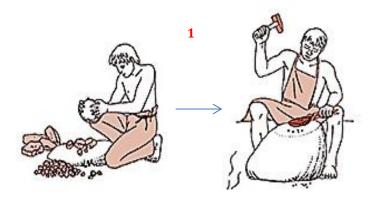
Process

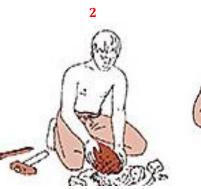
Gold Repoussé

Pre-Columbian goldsmiths fashioned these objects in two ways, the first being Repoussé. Repoussé is the technique of hammering out an object out of a thin sheet of gold. This process is simple, but has many limitations.

Creating Repoussé

- After finding gold ore, it would either be hammered flat with stone hammers or melted into thin sheets.
- 2. These thin sheets would then be cut into the desired shape using a stone knife.
- 3. Gold is usually soft and easy to work with, but after hammering it out into sheets it becomes springy and unworkable. By annealing, or putting the metal back in the heat until it is red hot, the metal becomes workable again. This process can be repeated as many times as needed.
- The sheet of gold would then be placed onto a piece of leather and the design and shape would be hammered into it.
- 5. Eventually the metal would become hardened again, and this would lead to more annealing.









Process

Gold Casting

Pre-Columbian artisans were exceptional in their metal working abilities. Like the Europeans, they used the "lost-wax" method of casting. This made it possible to create hollow castings that were both lightweight and detailed.

1

Clay Core

Creating a Lost-Wax Gold Casting

- 1. The basic form of the object is created in clay. This will form the core of the mold.
- The clay form is repeatedly dipped in wax until a uniform coating of wax is created. Surface details are then added in wax. The dark bars are pins that will keep the clay core perfectly positioned in the finished mold.
- 3. To allow the gold to flow quickly to all areas, the object will be cast upside down in the mold. A wax cone will be poured. Four wax rods will create the spaces for air to escape.
- The wax object is now entirely covered with clay. When the clay hardens, it creates the shell of the mold. The wax is then melted out, creating a cavity between the shell and core of the mold. This empty space is filled with molten gold.
- 3 4 Wax Rods for Air Vents Opening to Pour Gold Clay Core Clay Shell

2

Wax

Metal Flows between Shell and Core

Pins to Keep

Core in Position

5. Once the gold hardens, the clay shell and core will be broken apart and the object removed. The gold that filled the cup and air vents will be cut off and the object smoothed and polished.

Learning Features

Anthropomorphic Pendants

A.D. 800-1500 Costa Rica, Diquis Cast Gold

The Diquis culture was a pre-Columbian indigenous culture of Costa Rica that flourished from 700 AD to 1530 AD. The word "diquís" means "great waters" or "great river" in the language of Costa Rica's Boruca peoples.

Questions for Initial Interaction with materials:

Based on appearance and style, how old do you think these pieces are? What do you think the figure in the center is?

Background Information:

The top pendant is of a man with a hummingbird mask. Visible on the pendant are both wings, as well as small details that are meant to be feathers on the outside edge. In his mouth is what looks to be a monkey. This is interesting because monkeys symbolize former men, and spider monkeys specifically symbolize warriors.

The bottom pendant is another human in a mask. The mask could possibly be of a bat based on the shape of the mouth and lack of feathers on the wings. The shapes protruding from the top of the head are his ears. In his mouth is some kind of lizard.

Both of these pendants are called anthropomorphic because they are primarily animal shapes with human body parts. There are also four alligators in profile surrounding each figure. Both of these pendants also have a bar on the top and bottom. This represents the duality of the earth and sky. These bars symbolize the idea that good or bad things can occur from either above or below.

Further Questions:

What emotion do you think the creator of this pendant would like you to feel when you first see this pendant?





Learning Features

Warrior Figures

A.D. 800-1500 Panama, Coclé Cast Gold

During pre-Columbian times, Panama Cocle province had a number of identifiable native cultures. A unified Native American culture appears to have flourished in this area from approximately 1200 BCE until the 1500s.

Questions for Initial Interaction with materials:

What do you think these figures have in their hands? What emotion do you think we are supposed to get from these figures?

Background Information:

These two figures represent cultural heroes, mythical warriors, clan designations, or alter egos. The figures are humans with bat heads and are considered to be vampires. They have a nose leaf, pointed ears, pointed teeth, and their eyes are protruding out in order to accentuate their ability to see at night.

Bats are significant to pre-Columbian cultures because they represent duality. They are a part of the upper world because they fly, but they are also a part of the nether world due to their nocturnal nature.

Vampires were a common superstition in Panama. They are associated with warlike attributes and in one myth were said to have drank the blood of a young girl. So it makes sense that they have wooden clubs, sharp teeth, and come in a pair as this was meant to inspire awe and/or fear.

Further Questions:

Why do you think pre-Columbian people would want to wear these Vampires on them?





Learning Features

Pectoral Ornament

A.D. 800-1500 Panama, Coclé Repoussé

Questions for Initial Interaction with materials:

Where do you think this was worn on the body? Why?

Background Information:

This is a hammered gold breastplate from Panama. It is an intricate embossed image of an anthropomorphic being with claws, bared teeth, and serpentine appendages. While it was known collectively as the "Crocodile God", in recent years this term has fallen into disfavor. They are more accurately a combination of a chief, priest, hero, and/or deity, and they actually combine traits from many creatures, including iguanas, sharks, and even deer.

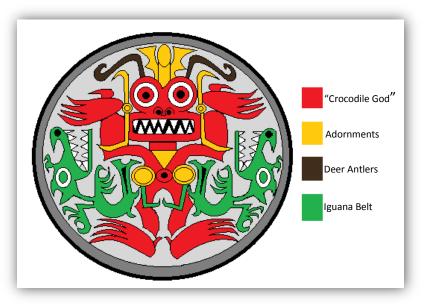


The "belt" that this figure wears is fashioned to look thick and twisted. At the end of the belt are what appear to be iguana heads. The belt, an aspect of "golden clothing", and the iguanas represent this chief-hero-deity's affiliation with the heavens.

Further Questions:

How do you think this piece was made? Casting or repoussé?

Why do you think the artist tried so hard to make this piece symmetrical?



Highlights

Jaguar Pendant

A.D. 800-1500 Costa Rica, Diquis Cast Gold

This jaguar pendant was worn to appear as if it is climbing up the wearer. The curved tale is serpentine in nature, and in some similar pendants, there are serpent heads at the end of the tail. For these pre-Columbian people, the jaguar represented a hunter, killer, warrior, clansman, uncle, brother-in-law, and a symbol of power.



Necklace of Seven Frogs

A.D. 800-1500 Panama, Coclé Cast Gold



This necklace was found in a burial site on Venado Beach. The frog symbolizes a burial helper who sits on a burial to prevent the deceased from arising to trouble the living. Pre-Columbian people believed that the frog played a crucial role in the creation of the ocean. Due to this, some also believe that the spirals found in many cast frogs are meant to symbolize water.

The frogs are often shown in a natural sitting pose, and their feet are often oversized rectangles. Some of the cast frogs also have an emphasis on their poison glands that pre-Columbian people may have extracted its hallucinogenic properties.

Pre-Columbian Gold Educational Standards

Overview

The *Pre-Columbian Gold* on exhibit supports a variety of educational standards in both English and Art. Listed below are some of the possible standards and the specific pieces of art that support them. The final page also lists the possible standards that could be used if an art project is added to the end of a tour. *Pre-Columbian Gold* can be used to discuss artistic themes while supporting listening skills and group discussion skills.

English-State Standards

- SL.4.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.
 - a. Come to discussions prepared having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.
 - b. Follow agreed-upon rules for discussions and carry out assigned roles.
 - c. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.
 - d. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.
- SL.4.2 Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, guantitatively, and orally.
- SL.5.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners

on grade 5 topics and texts, building on others' ideas and expressing their own clearly. a. Come to discussions prepared having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.

b. Follow agreed-upon rules for discussions and carry out assigned roles.

c. Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.

d. Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.

Visual Art- National Standards

VA:Re.7.1.3a - Speculate about processes an artist uses to create a work of art. (Pectoral Ornament)

- VA:Re8.1.3a Interpret art by analyzing use of media to create subject matter, characteristics of form, and mood. (Warrior Figures)
- VA:Re.7.2.4a Analyze components in visual imagery that convey messages. (Warrior Figures)
- VA:Re8.1.4a Interpret art by referring to contextual information and analyzing relevant subject matter, characteristics of form, and use of media. (Anthropomorphic Pendants)
- VA:Cn11.1.4a Through observation, infer information about time, place, and culture in which a work of art was created. (Anthropomorphic Pendants)
- VA:Re8.1.5a Interpret art by analyzing characteristics of form and structure, contextual information, subject matter, visual elements, and use of media to identify ideas and mood conveyed. (Pectoral Ornament)

Possible Art Standards with Project

VISUAL ARTS STANDARDS: CREATING

4 th Grade Standards	5 th Grade Standards	
VA:Cr1.1.4a :	VA:Cr1.1.5a :	
Brainstorm multiple approaches to a creative art or design problem.	Combine ideas to generate an innovative idea for art- making.	
VA:Cr1.2.4a :	VA:Cr1.2.5a :	
Collaboratively set goals and create artwork that is meaningful and has purpose to the makers.	Identify and demonstrate diverse methods of artistic investigation to choose an approach for beginning a work of art	
VA:Cr2.1.4a :	VA:Cr2.1.5a :	
When making works of art, utilize and care for	Experiment and develop skills in multiple art-making	
materials, tools, and equipment in a manner that	techniques and approaches through practice.	
prevents danger to oneself and others.		
VA:Cr2.2.4a :	VA:Cr2.2.5a :	
When making works of art, utilize and care for	Demonstrate quality craftsmanship through care for	
materials, tools, and equipment in a manner that	and use of materials, tools, and equipment.	
prevents danger to oneself and others.		
VA:Cr2.3.4a :	VA:Cr2.3.5a :	
Document, describe, and represent regional	Identify, describe, and visually document places	
constructed environments.	and/or objects of personal significance	
VA:Cr3.1.4a :	VA:Cr3.1.5a :	
Revise artwork in progress on the basis of insights	Create artist statements using art vocabulary to	
gained through peer discussion.	describe personal choices in art making	

References

- Anton, F., & Dockstader, F. (1968). *Pre-Columbian Art and Later Indian Tribal Arts*. New York, New York: H.N. Abrams.
- Emmerich, A. (1965). Sweat of the Sun and Tears of the Moon: Gold and Silver in

Pre-Columbian Art. Seattle, Washington: University of Washington Press.

Kubler, G. (1962). The Art and Architecture of Ancient America; the Mexican,

Maya, and Andean Peoples. (pp. 228-231). Baltimore, Maryland: Penguin

Books. Pages 228-231

- Mitchell, J. (1985). *The Art of Precolumbian Gold: The Jan Mitchell Collection* (J. Jones, Ed.). Boston, New York: Little, Brown and Co.
- Salmoral, M. (1990). *America 1492: Portrait of a Continent 500 Years Ago*. New York, New York: Facts on File.
- Scott, J., & Kelly, L. (2008). *A New World: Pre-Columbian Art from the Carroll Collection*. Ithaca, New York: Herbert F. Johnson Museum of Art, Cornell University. **Page 78**



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Teacher Packet created by Julia Telenko

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