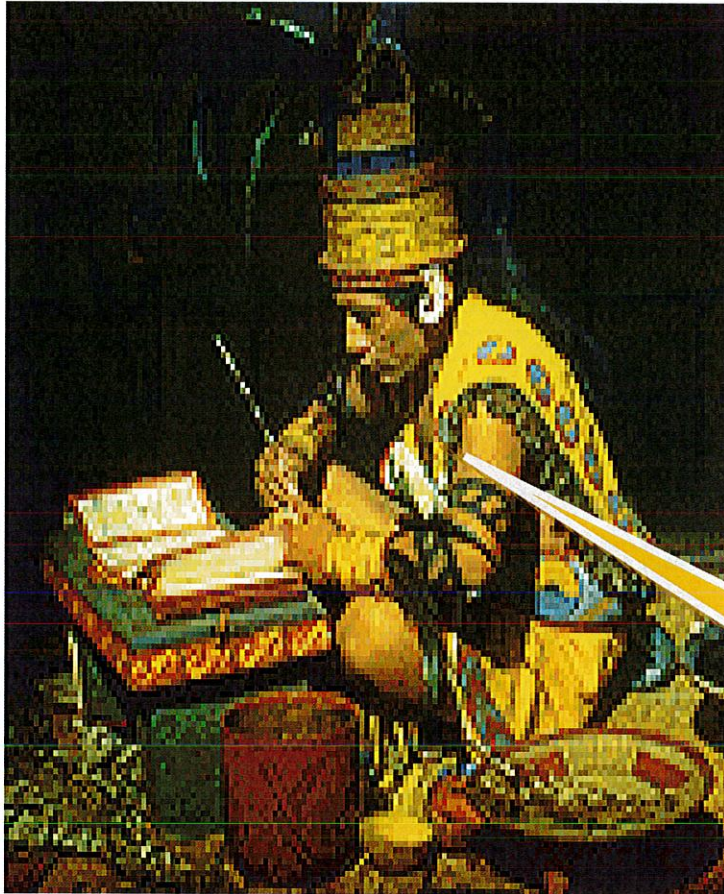


ANCIENT/ADVANCED CIVILIZATIONS



NO. 0 Our civilization is generally dated from 1500 B.C.E to 1700 C.E. The Yucatan Peninsula in Mexico was the scene for the development of one of the most advanced civilizations of the ancient world. We had a sophisticated ritual system that was overseen by a priestly class. This class of priests developed a philosophy with time as divine and eternal. The calendar, and calculations related to it, were thus very important to the ritual life of the priestly class, and hence the entire people. In fact, much of what is known about our culture comes from our calendar records and astronomy data. (Another important source of information on us is the writings of Father Diego de Landa, who went to Mexico as a missionary in 1549.) All that remain are inscriptions, such as those in the Dresden Codex, which has allowed scholars to learn about our ancient numerical system as well as our astronomical and astrological findings. According to Lounsbury, we did not leave “mathematical or astronomical methods or theories. There is of posing of a problem, proof of a theorem, or statement of an algorithm” (Lounsbury, p. 760). However, our inscriptions have allowed scholars to learn that we used a *vigesimal* system, one for arithmetic purposes and one for calculating the passage of time, that we developed a very sophisticated calendar, and made discoveries in astronomy that modern scientists could not have been able to do without the aid of technology.

0	1	3	4	5	6	7	8	9
10	11	12					18	19

WHO ARE WE?

Example:

$$28 = (1 \times 20) + (8 \times 1)$$

$$433 = (1 \times 400) + (3 \times 20) + (3 \times 1)$$



ACCOMPLISHMENTS OF AMERICA'S INDIGENOUS PEOPLES



WHO ARE WE?

Poem Sample: El canto del _____
Widow of a thousand fires guardian of the zemi dream
mother to a sea of tears suager of her people's fears
Anacaona, _____ queen
— Fragment of a Taino areito, translated by Fray Pau
Gonçalves, Santo Domingo 1499

NO. 1

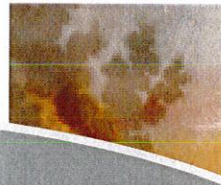
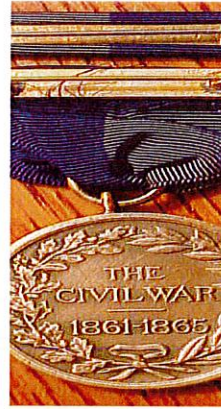
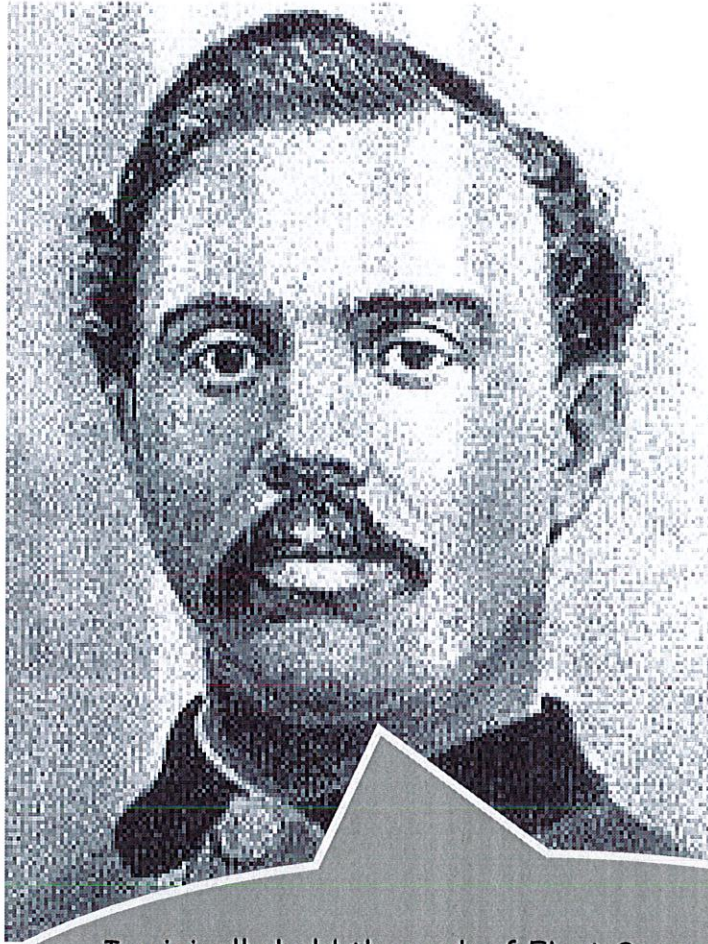
(800 BC-Present)

ACCOMPLISHMENTS AND IMPACT

We were the first humans to live in the Caribbean. We were able to feed a population of millions without harming the environment. From remaining records, it has revealed that no one in our community ever went hungry. We lived in small, clean villages close to the coast. We could build a dwelling from a single tree. From several trees, we could build a canoe that would hold hundreds. We traded throughout the islands with other villages. Our society was based upon the idea that everyone would work even important government and religious leaders. Our Government and religious beliefs encouraged the importance of respecting and caring for the Earth. The worldwide term Hurricane derives from us. *Juracán* was a goddess of chaos, the controller of the weather. There are **23 more words** we contributed to **world languages**; you should attempt to find them out in the near future. Historical records show that we liked to play sports and recite poetry for fun. The ceremonial ball game was called **batey**. The game was played between opposing teams consisting of 10 to 30 players per team using a solid rubber ball. Normally, the teams were composed of only men, but occasionally women played the game as well. The Classic game was played in the village's center plaza or on especially designed rectangular ball courts also called batey. **Batey** is believed to have been used for conflict resolution between communities; the most elaborate ball courts are found in chiefdoms' boundaries. Often, chiefs made wagers on the possible outcome of a game. We had ceremonial dances called *areitos*. All records describe us as generous and kind. Columbus wrote in his diary that we were intelligent people, not that we need his affirmation, but nonetheless, we are an inquisitive people. We were highly skilled sea people—very talented at sailing and fishing. We liked to bathe often, but Spain eventually passed a law prohibiting this because they believed it was unhealthy. We made sure to keep ducks close to our homes for food. We also fished and harvested nuts, corn, cassava and other roots.



LATINO SOLDIER-LEADERS IN THE U.S.



I originally held the rank of First Sergeant of Company I. I was then promoted to 2nd Lieutenant. I was a business owner and a volunteer firefighter after the war in New Haven, Connecticut. Read more about the 20,000 Latinos who served in the Civil War.

WHO WAS I?

No. 2

I was born in 1841 in San Juan, Puerto Rico and passed away on March 22, 1880 when the island was still a Spanish possession. I emigrated with my family to the United States in the 1850s. The 1860 census of New Haven, Connecticut, shows there were 10 Puerto Ricans living there, I was amongst them, who resided in Columbus Ave. During the 1800s, commerce existed between the ports of the eastern coast of the United States and Puerto Rico. Ship records show that many Puerto Ricans like myself traveled on ships that sailed from and to U.S. and Puerto Rico. Many of them settled in places such as New York, Connecticut and Massachusetts. Upon the outbreak of the American Civil War, many Puerto Ricans joined the ranks of military armed forces, however, since Puerto Ricans were Spanish subjects, they were inscribed as Spaniards, but nonetheless, we were Boricua. In 1862, I volunteered and joined the **15th Connecticut Regiment, Connecticut Volunteer Infantry**, also known as the "**Lyon Regiment**" in honor of Nathaniel Lyon, the first general officer killed in the U.S. Civil War, organized on August 25, 1862 at New Haven. My Regiment left Connecticut for Washington, D.C., on August 28 and was attached to Casey's Provisional Brigade, Military District of Washington, serving in the defenses of Washington until September 17, 1862. I defended Washington, D.C., became the commander of the division, and led my men at the **Battle of Fredericksburg** and the **Battle of Wyse Fork**. After three years of service, I received the **Army Civil War Campaign Medal**.



FAMOUS ASTROPHYSICIST



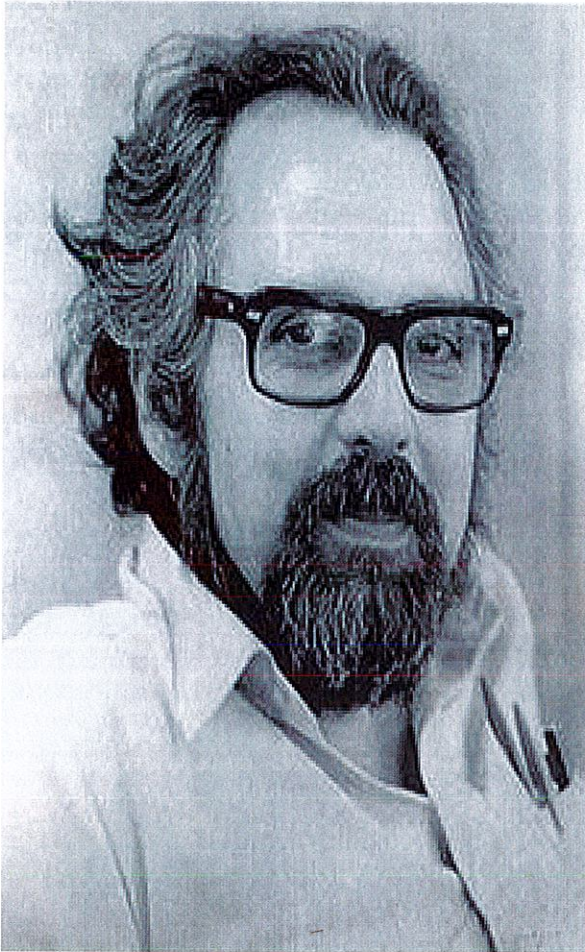
NO. 3

Although I was born the eldest of twelve in Paris, France, August 5, 1947, I am an American. My father was Mexican American, WestPoint graduate and businessman. My love for science led to the contributions in the areas of observational and experimental astrophysics, multi-spectral research on x-ray and gamma ray sources, and space-borne instrumentation. I have published more than 200 scientific and public policy journal articles, reports, and conference abstracts. I was co-principal investigator for a telescope experiment that is currently flying on the satellite XMM-Newton, a cornerstone mission of the European Space Agency. I am the winner of NASA's highest honor, the Distinguished Service Medal, and was recognized as a 2000 Kilby Laureate for "contributions to society through science, technology, innovation, invention, and education."

I was the youngest and first woman to be the Chief Scientist at NASA and later in my career became Director of the National Science Foundation

WHO AM I?

FAMOUS MATHEMATICIAN

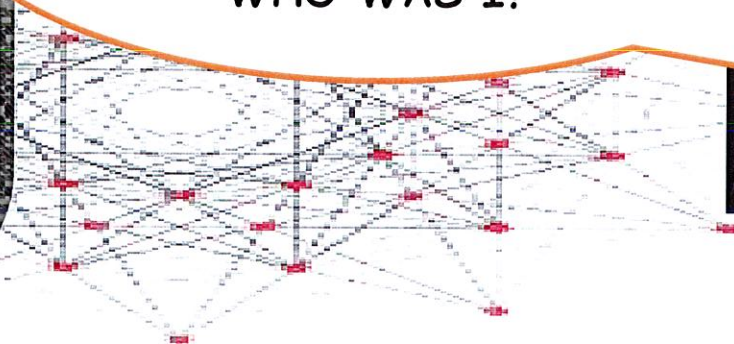


NO. 4

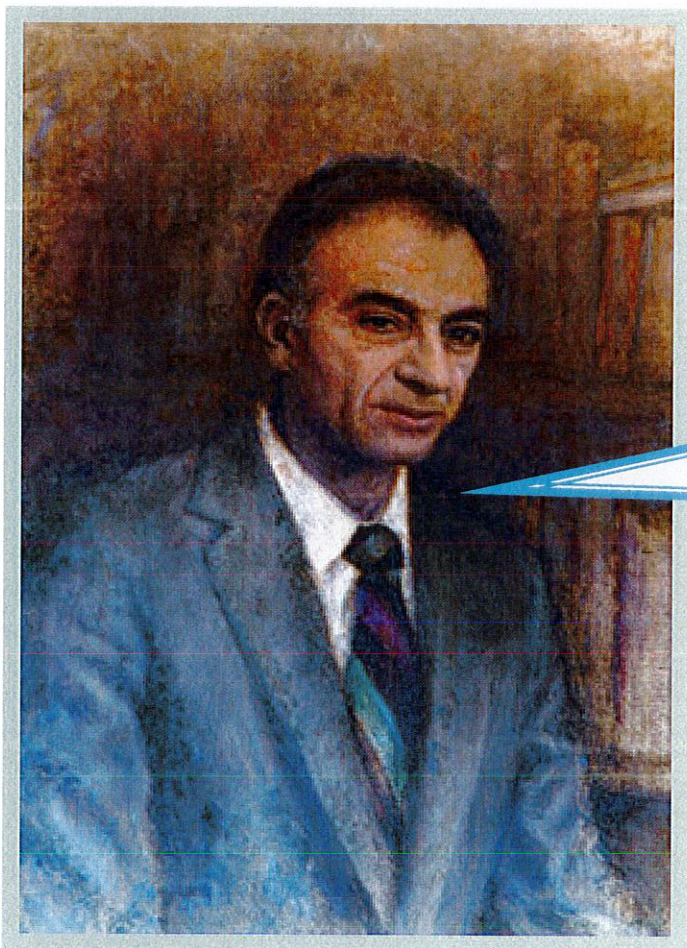
I was born in the city of Huejutla de Reyes, Hidalgo, Mexico (1933-2004). I later moved to Mexico City where I received my bachelor's degree in Mathematics from the School of Sciences. I studied Mathematics at the National Autonomous University of Mexico (UNAM) in Mexico City, a highly regarded research institution, and then went on to teach at UNAM and other schools around the world. I pioneered the field of **graph theory**. I was a sought-after professor known for my innovative and inspiring teaching methods. I often used colored chalk and animated, graphic explanations to engage students. My work in mathematics also covers general topology, game theory and combinatorics. With Montejano, I proved a Mengerian theorem for long paths in 1984. Find out more. There is much to explain about my work.

In 1982, I introduced the notion of *dichromatic number of a directed graph, or a digraph*, in which the edges have a direction associated with them. This innovative idea is still being used to develop new mathematical theories today.

WHO WAS I?



FAMOUS MATHEMATICIAN



NO. 5

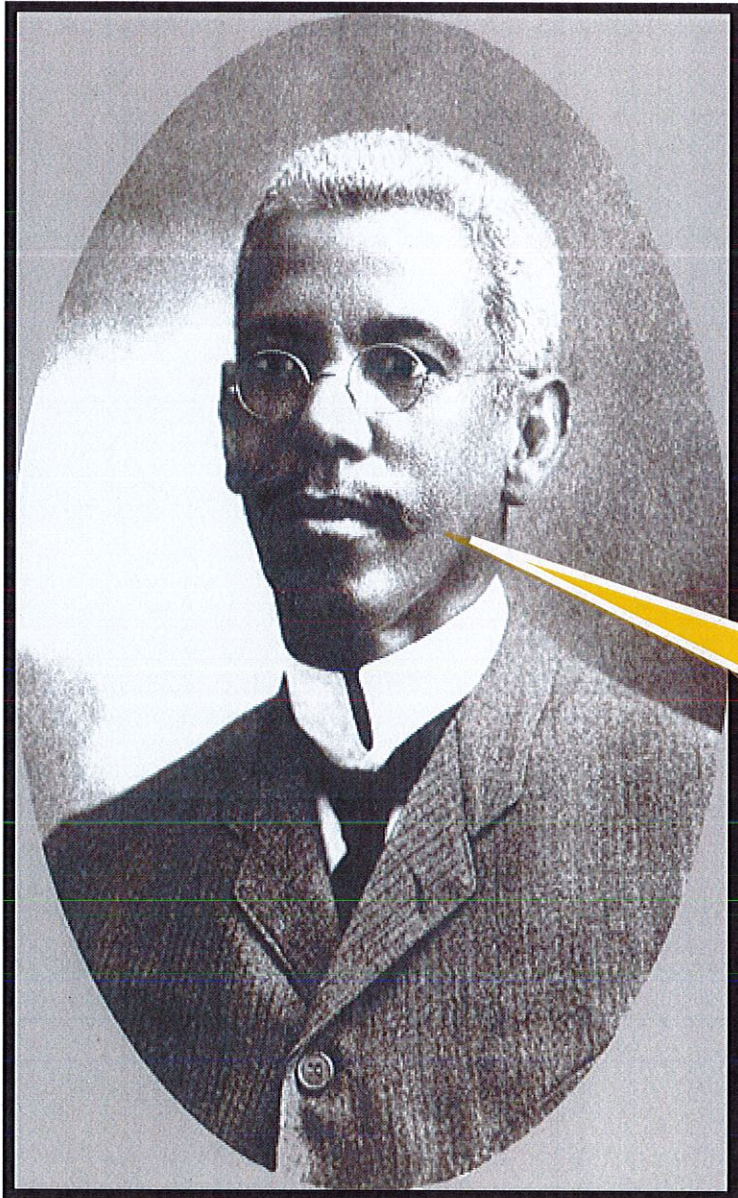
I was born in Veracruz, Mexico, (October 27, 1921-February 14, 1991). I received my degree in mathematics from the National Autonomous University of Mexico and PhD from Princeton University. I worked in algebraic topology and proved the Adem relations between Steenrod squares.

In 1952, the relations for $p=2$ were conjectured by Wu (1952) and I proved it in 1952. The Adem relations allows one to write an arbitrary composition of Steenrod squares as a sum of Serre-Cartan basis elements. I provide the relations by the given formula below:

WHO WAS I?

$$Sq^j Sq^i = \sum_{k=0}^{j/2} \binom{j-k}{i-2k} Sq^{j-k} Sq^k$$

FAMOUS MEDICAL DOCTOR/POLITICAL LEADER



NO. 6

I was born (July 27, 1857 – September 21, 1921) in Bayamón, Puerto Rico. I was a Puerto Rican physician, sociologist and political leader. I was one of the first Puerto Ricans and African descent to acquire a medical degree from the United States. I am known as the father of the Statehood for the Puerto Rico movement. After my return to the island in 1880, I made many contributions to medicine and public health. I introduced and initiated the novel idea of employers paying a fee for the future healthcare needs of their employees (a very early health insurance system). In 1900, I was among the first five Puerto Rican leaders appointed to the Executive Cabinet under Governor Charles H. Allen, in the first civilian government organized by the United States. I served in the Cabinet until 1917. From 1917–1921, I served in the first elected Puerto Rican senate. In 1893, I also founded the first Puerto Rican cooperative and named it *El Ahorro Colectivo*.

I tutored students and guided them on ways to save money in order to attend college. In 1875, I moved to NYC myself to attend prep school, where I learned English in a year.

WHO WAS I?

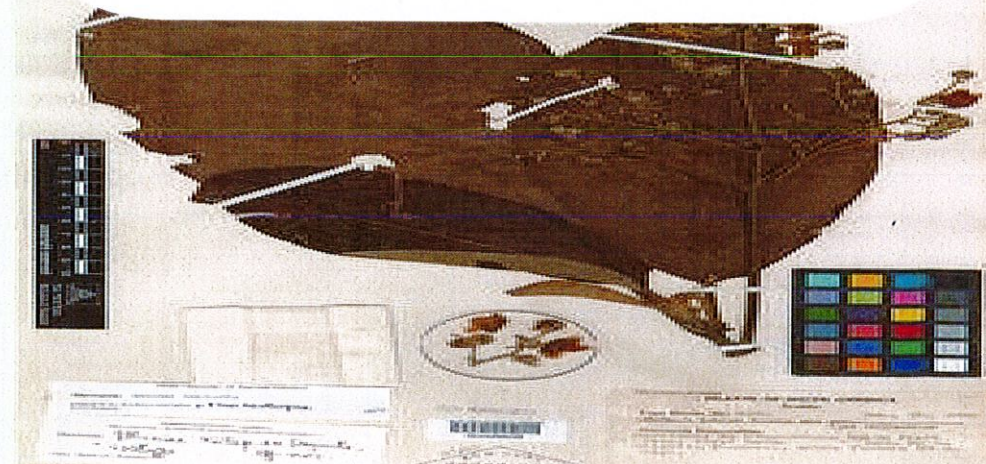
Black! Black! Black! I am proud of being a Negro. Nor have I ever tried to beg tolerance from anyone. Superiority is not proved by color, but by the brain, by education, by willpower, by moral courage.

FAMOUS SCIENTIST/BOTONIST



NO. 7

I was born in Washington D.C. (May 24, 1870-July 12, 1938) to a Mexican **diplomat** father. I spent many years as a **social worker** before enrolling as an undergraduate at the University Berkley where I discovered my passion for **botany**. As a botanist, I was known for my collection of novel plant specimens from areas of Mexico and South America. I was extremely methodical when I collected over 33,000 samples as I embarked on my research. In discovering two new plant **genera**, I revealed a new **genus** of Compositae, called Meianthus (after my name) and was arguably the most accomplished plant collector of my time. I also discovered 500 new plant **species**—and I did not even start collecting **plants** until I was 51 years old. In the 1910s and 1920s, I traveled thousands of miles around Mexico, South America, and Alaska, collecting some 145,000-plant **specimens** in just 13 years. Today, 50 plant species are named by me.



FAMOUS SCIENTIST/EPIDEMIOLOGIST

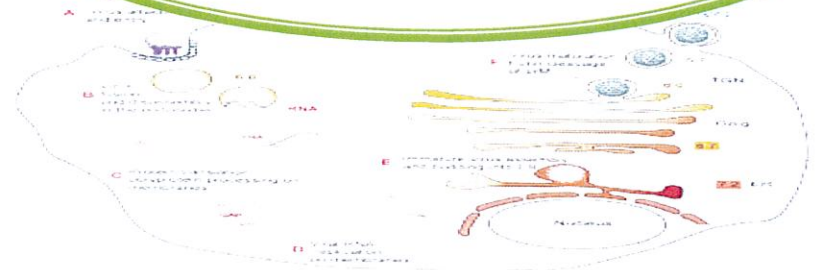


NO. 8

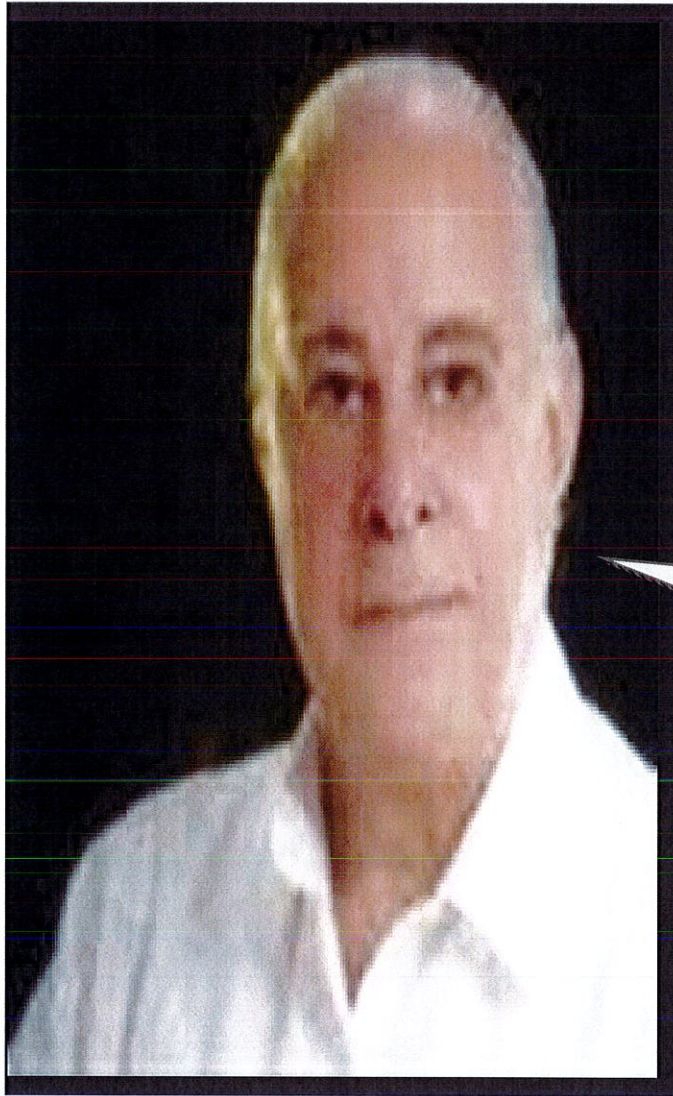
I was born (December 3, 1833 – August 20, 1915) in Puerto Príncipe (now Camagüey), Cuba. I was a Cuban **epidemiologist** recognized as a pioneer in the research of yellow fever, determining that it was transmitted through mosquitoes (*Aedes aegypti*). I received my M.D. degree in 1855. I declined an invitation to establish myself in the United States and gladly returned to Cuba. After passing the required examination to revalidate my American diploma, I went to Paris for postgraduate studies in internal medicine under the direction of Armand Trousseau (1801-1867) in Paris. I was the first to theorize, in 1881, that a mosquito was a carrier, now known as a disease vector, of the organism causing yellow fever: a mosquito that bites a victim of the disease that could subsequently bite and thereby infect a healthy person. I presented this theory at the 1881 International Sanitary Conference, where it was well received. A year later, I identified a mosquito of the genus *Aedes* as the organism transmitting yellow fever. My theory was followed by the recommendation to control the mosquito population as a way to control the spread of the disease. I hypothesized and created exhaustive proofs that were confirmed nearly twenty years later by the Walter Reed Commission of 1900.

WHO WAS I?

Although Dr. Reed received much of the credit in history books for "beating" yellow fever, Reed himself credited me with the discovery of the yellow fever vector, and thus how it might be controlled.



FAMOUS RESEARCH SCIENTIST/NEURORADIOLOGY



NO. 9

I was born (September 27, 1919, Moca, Dominican Republic—March 28, 2002, Santo Domingo, Dominican Republic). I was Professor Emeritus at Harvard Medical School and Radiologist-in-Chief Emeritus of the Massachusetts General Hospital. I was widely regarded as the **father** of the medical specialty of **neuroradiology**, having co-authored **the first textbook** of this specialty and founded both the American Society of Neuroradiology and its journal, of which I served for several years as editor.

Additionally, I was the main force behind the development of the Hospital General de la Plaza de la Salud in Santo Domingo, as well as its Centro de Diagnóstico, Medicina Avanzada, Laboratorio y Telemedicina (CEDIMAT), a state-of-the-art medical clinic for diagnosis and treatment, which has become one of the major centers for medical education in Latin America .

I also made important innovations in training, investigation, radiologic administration, and professional organization, which had global impact on the broader spectrum of radiology and the neurosciences throughout the world. I received MD degrees from the University of Santo Domingo in 1943 and from the University of Pennsylvania in 1949.

WHO WAS I?



WELL-KNOWN UPCOMING SCIENTIST/PHYSICIST



NO. 10

I was born in Chicago, Illinois (June 3, 1993). I am Cuban-American. I have been interested in aviation for a number of years. The first time I flew a plane, I was 10 years old. As a sophomore at MIT, I worked on the CMS experiment at the Large Hadron Collider. I have been called by Harvard as the next Einstein. I am currently pursuing a Ph.D. degree in high energy physics under the supervision of Andrew Strominger from whom I was given my academic freedom in the Spring of 2015 based upon my 2014 discovery of the "*spin memory effect*" which may be used to detect/verify the net effects of gravitational waves.

I had a GPA of 5.00 at MIT and was granted academic freedom at Harvard, thereafter, completing the Pasterski-Strominger-Zhiboedov Triangle for electromagnetic memory in a 2015 solo paper that Stephen Hawking cited in early 2016.

WHO AM I?

THE TRIAD

- i) Weinberg – photon $\mathcal{O}(\frac{1}{2})$
- ii) Weinberg – graviton $\mathcal{O}(\frac{1}{2})$
- iii) Cachazo & Strominger – graviton $\mathcal{O}(1)$

Soft Factors

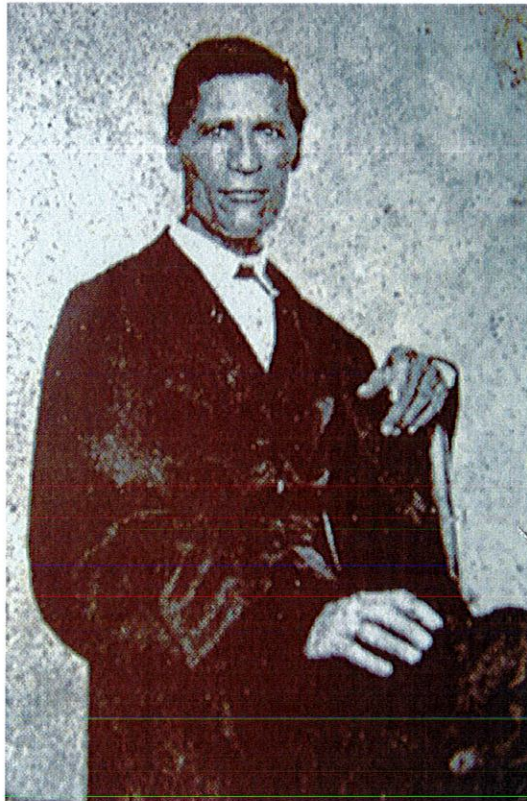
Memories

- i) Liénard-Wiechert / Bieri & Garfinkle
- ii) Zeldovich & Polnarev / Christodoulou
- iii) Pasterski, Strominger, & Zhiboedov

Symmetries

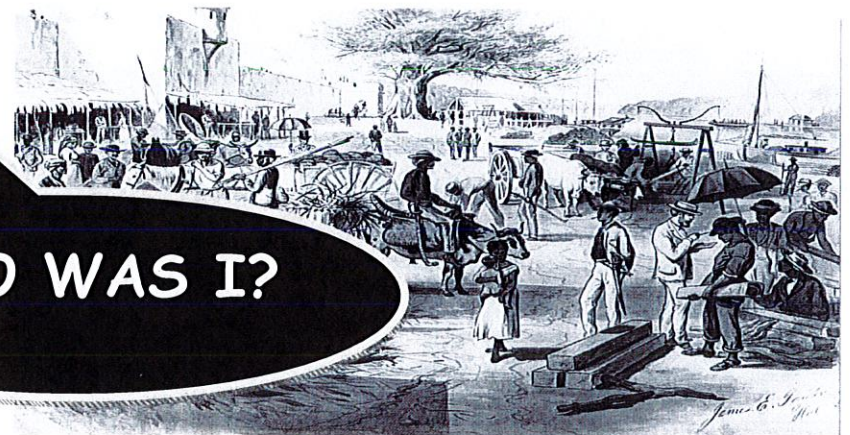
- (global)
- i) e-charge
- ii) p^μ
- iii) $J^{\mu\nu}$
- (asymptotic)
- large $U(1)$
- supertranslations
- superrotations

FAMOUS POLITICAL CIVIC LEADER



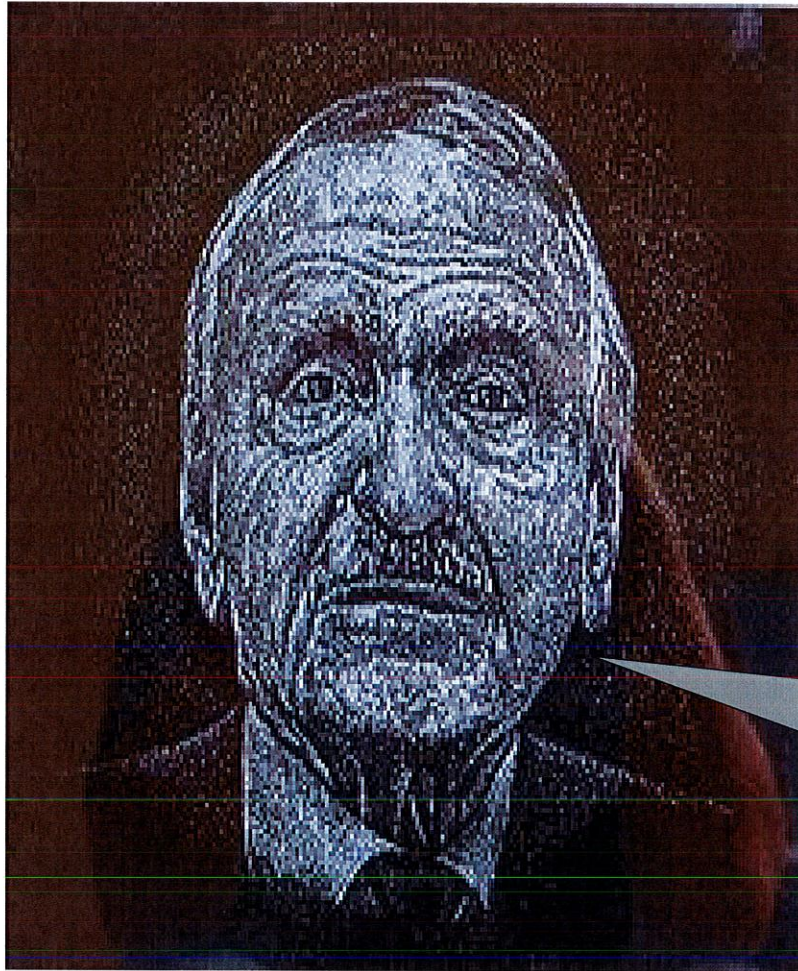
NO. 11

I was born on October 18, 1828 – September 13, 1906. I was a Dominican politician, sociologist and intellectual during the Restoration era. I was credited with being the first Dominican sociologist. You can find out more about this area of study I enjoyed if you read one of my works titled, "Notes Concerning the Dominican Working Classes (1881). I was elected the president of the Senate of the Dominican Republic in 1858. My writings offered a solution to the free-trade economic theories that had destroyed local industries, contributed to annexation attempts, and increased internal regional violence. La "situación geográfica", as I termed it, is the overarching problem for Dominican nation-building. A vital area for imperial interests, Santo Domingo/Haiti was the only independent island at the time as I often reminded my readers. Invoking the war of restoration (1863-1865) as a patriotic referent, I argued in my essays that the solution to La situación geográfica – imperial interests and its effects on local labor politics – lies in the careful study of small-scale work and the Dominican peasantry, "let us meditate on this work, its mechanisms and results, past and present, so that in the end we are persuaded that we are wasting time complaining about a misery that does not exist." I insisted that Santo Domingo as a new nation should be led by actually existing work and not visions of progress that are, "...an enormous giant thrown on top of a sickly dwarf". I wrote a book, "El Montero" (1856), the first Dominican novel.



WHO WAS I?

FAMOUS POLITICAL CIVIC LEADER



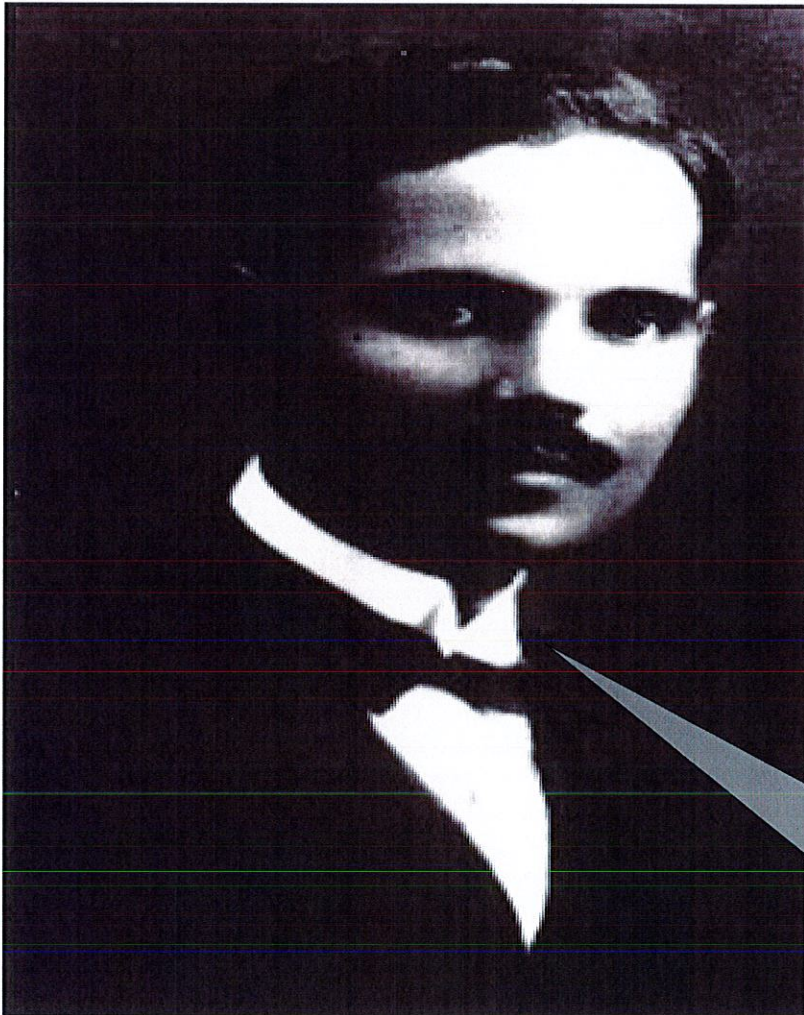
NO. 12

I was born in Ponce, Puerto Rico (February 17, 1904 – October 21, 2003). I was a Puerto Rican engineer, industrialist, politician, philanthropist, and a patron of the arts. I earned my bachelor's degree in science in 1924, and a master in mechanical engineering from MIT in 1925. I was the third Governor of the Commonwealth of Puerto Rico from 1969 to 1973, and the founding father of the New Progressive Party, which advocated for Puerto Rico becoming a state of the United States of America. The goal was to preserve the island's cultural identity within a multiethnic federation, which I viewed the US as having. In my view, Puerto Rico could retain its sovereignty over language and cultural affairs as the 51st state of the American union. However, Congress repeatedly rejected my proposal and others after me. In addition, I was a delegate to the convention that drafted the Commonwealth's Constitution in 1951-52 and I was later elected to the island's House of Representatives from 1953-56.

I love Latino Music. While pursuing advanced piano studies at the New England Conservatory of Music in Boston, I thought, Industry is not a collection of machines and tools and buildings. It is a social entity that has the responsibility of realizing the happiness of those who work in it.

WHO WAS I?

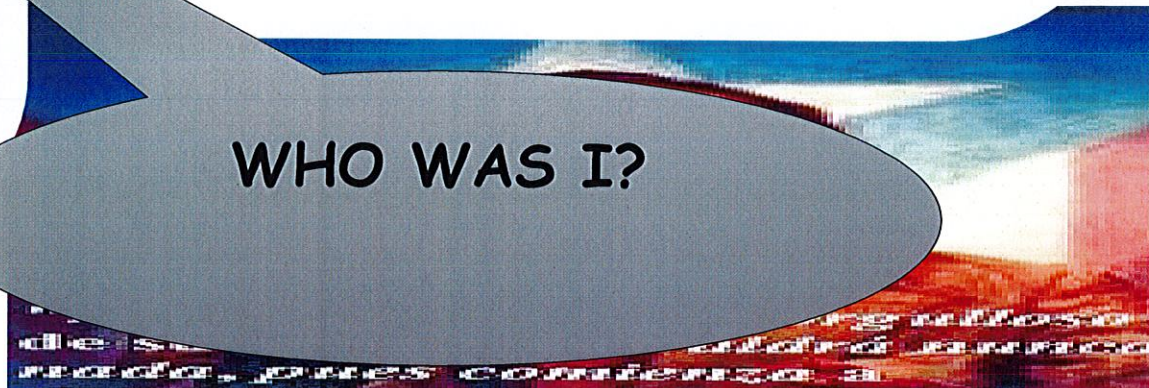
FAMOUS POLITICAL/SOCIAL LEADER



NO. 13

I was born September 12, 1891 in the district of Machuelo Abajo, Puerto Rico. I am the son of Alejandro “El Vizcaíno” Romero, a Basque merchant, and Juliana Romero Campos, a mestiça of Spanish, Arawak American, and African heritage. I was a lawyer and nationalist. After completing high school in Ponce, I received a scholarship from the University of Vermont, where I enrolled in 1912 to study chemistry. In 1913, I transferred to Harvard University and worked as a translator (I was fluent in 8 languages). Find out what languages I spoke. I was the first Puerto Rican who graduated from Harvard Law School. Hostility towards my mixed racial heritage led to my professors delaying two of my final exams in order to keep me from graduating on time. Despite these allegations, they were unfounded. I graduated with the highest grade point average in my class, an achievement that earned me the right to give the valedictorian at my graduation ceremony. At the outbreak of World War I, I volunteered in the United States Infantry. I was commissioned as Second Lieutenant in the Army Reserves and sent to the City of Ponce, where I organized the town’s Home Guard. I was called to serve in the regular Army and sent Camp Las Casas for further training. Upon completing the training, I was assigned to the 375th Infantry Regiment. The United States Army, then segregated, assigned Puerto Ricans of recognizably African or just knowing you were of mixed descent as soldiers to the all-black units, such as the 375th Regiment. I once stated, “For us, race has nothing to do with biology. Nor dusky skin, nor frizzy hair, nor dark eyes. Race is a continuity of characteristic virtues and institutions. We are distinguished by our culture, our courage, our Chivalry, our Catholic sense of civilization.” I passed away on April 21, 1965.

WHO WAS I?

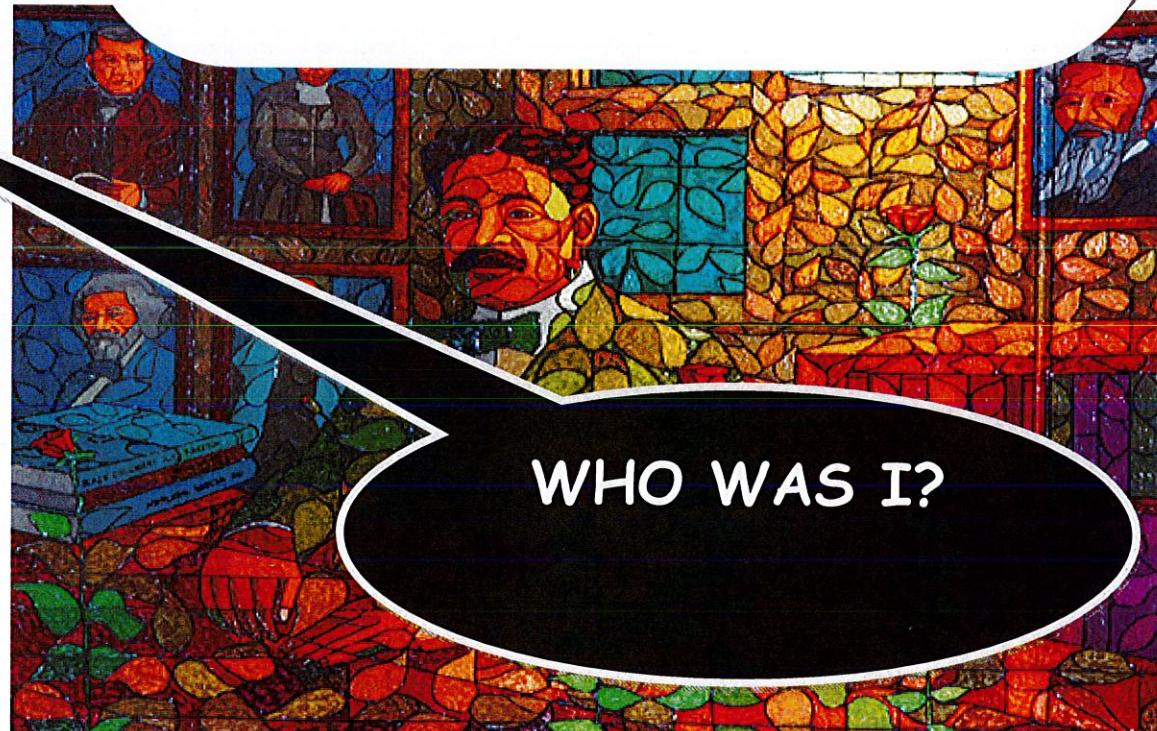


FAMOUS POLITICAL/SOCIAL LEADER



NO. 14

I was born January 24, 1874 in Santurce, Puerto Rico. I passed away in Madison Park Hospital, Brooklyn, New York on June 10, 1938. I believed that **"history must restore what slavery took away."** This led to collecting one of the world's largest libraries of the African diaspora books, prints, and artifacts ever. My private collection became the basis for the 135th Street Branch of the New York Public Library's Division of Negro Literature, History, and Prints, which opened in 1925. In 1940, the division was renamed after me as the Schomburg Center for Research in Black Culture. The Center is recognized today as the world's leading and most prestigious repository for materials and artifacts on black cultural life. Through my work and the contributions of other self-educated historians like me, inspired and spurred outstanding African American leaders like W.E.B. Dubois, John Henrik Clark, C.G. Woodson, and the fields of African and African American studies were established.



WHO WAS I?

Alexci Reyes
Latino Studies Supports Coach

FAMOUS POLITICAL CIVIC LEADER



NO. 15

I was born June 22, 1892-February 21, 1937 in Brownsville, Texas. My father died when I was only 15 years old. I grew up in a poor household, had to quit school to help my mother support a family of eight. I recall when my younger brother, Joe reminisced our younger years growing up in Texas when Mexican American children had to go to a one-room school out in the brush. In the distance, the Mexican American children could see the fine brick Anglo school. I never forgot those early experiences of discrimination, therefore, dedicated my adult life to help improve conditions for Mexican Americans. I was dedicated to fighting the individual and collective battles for the rights of Mexican-Americans and bringing them a richer and more representative life. I was a successful local businessman and recognized statewide as an able and effective leader. I made several attempts to unify various existing Mexican American organizations and was finally successful on February 17, 1929 when the **United League of Latino American Citizens (LULAC)** was established. I was voted first president of **LULAC**. During this time, I argued against Mexican immigration restrictions before the United States House and established local councils throughout the state. After my death, the City Council dedicated the Park in my name.

WHO WAS I?

Latin-American Meeting Planned

Arrangements For Entertaining Convention May 18 and 19 About Ready.

Arrangements for the convention of the United Latin-American Citizens which is to be held in Corpus Christi

FUE UN GRANDIOSO EXITO LA CONVENCION REUNIDA EN CORPUS CHRISTI, TEXAS

Con un entusiasmo desbordante, los "Ciudadanos Unidos de origen Latino" trataron problemas de vital importancia para la raza

La Próxima Convención se Celebrará en Laredo, Tex.

Reporte Especial para LA PRENSA
Corpus Christi, Texas, mayo 19.
—Por acuerdo del Comité Organizador de la Gran Convención, fue suspendida la sesión anunciada para las 2 p. m., del día de ayer, con el objeto de formular, en sesión privada, las cláusulas del Reglamento de la Constitución que deberá adoptarse para regir los destinos de la "Liga de Ciudadanos Americanos de origen Latino".
bro de los delegados y algunos de los particulares presentes en la reunión.
Tan significativa peroración mereció muy calurosos aplausos de la distinguida concurrencia.
En seguida Mr. J. M. Taylor, distinguido abogado de este Puerto, hizo uso de la palabra en representación del mayor de la ciudad, expresando su satisfacción de ver unidos a los ciudadanos

Alexci Reyes
Latino Studies Supports Coach

FAMOUS POLITICAL CIVIC LEADER



NO. 16

I was born August 6, 1902 – May 13, 1989. I crossed many barriers for women, as vice president general of the League of United Latin American Citizens. I was the first woman elected to a national office that wasn't created specifically for a woman. I was a Latina from Laredo, Texas. After graduation, I attempted to study law, but after the death of my father, I remained in Laredo with my mother. For a year, I attended Laredo Business School in the evenings. I eventually became an American civil rights activist. In 1936, I was invited by Esther Machuca to join LULAC (League of United Latin American Citizens), and became the first woman elected in this organization. By 1940 I was the associate editor of the organization's newspaper, the director of Junior LULAC. I had to lead the voice of women at the national level, so I promoted the creation of more ladies council, but also wrote articles in which I denounced the male superiority and pushed for a more active role for women. Finally, in 1940, I decided to leave LULAC. After that, I became a school registrar and retired of it in 1972. Then, I established myself as a folk artist and started painting. My art has become very famous. Why was I so important? Because I showed how to be a wife, a mother, a businesswoman, a middle-class American woman, and at the same time, an independent feminist and a political activist. I did all this at the same time, and my example can still make us be sure that we can also do it if we want.



WHO WAS I?

FAMOUS SCIENTIST CHEMIST



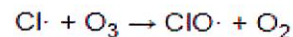
Awarded by President Barack Obama with the
Presidential Medal of Freedom

WHO
AM I?

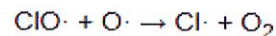


NO. 17

I was born on March 19, 1943 and raised in Mexico City. The only scientist in the family was my aunt, Ester, a chemist who encouraged me to love the sciences. When I encountered my first microscope, I was thrilled to observe the organisms living in a drop of ordinary pond water. My father was a prominent attorney who eventually would serve his country as Ambassador to Ethiopia, Australia and the Philippines. I acquired chemistry sets and built my own laboratory in an unused bathroom in my family home. Before I came to the United States, I studied in Germany and Mexico. I looked at the effects that mad-made compounds have on the ozone layer. After finishing my studies, I went on to get a degree in physical chemistry at the University of California, Berkley. I worked at the Jet Propulsion Laboratory before joining MIT's (Massachusetts institute of Technology) faculty. I earned the Nobel Prize in Chemistry in 1995 based on my research on the predictions of the ozone's depletion due to certain industrial gases being emitted from chlorofluorocarbons. This was called the theory of CFC-ozone depletion theory". Molina theorized that photons from ultraviolet light, known to break down oxygen molecules, could also break down CFCs, releasing a number of products including chlorine atoms into the stratosphere. Chlorine atoms (Cl) are radicals: they have an unpaired electron and are very reactive. Chlorine atoms react easily with ozone molecules (O_3), removing one oxygen atom to leave O_2 and chlorine monoxide (ClO).



ClO is also a radical, which reacts with ozone to release two O_2 molecules and a Cl atom. The radical Cl atom is not consumed in these reactions, so it remains in the system.



Alexci Reyes
Latino Studies Supports Coach

FAMOUS SCIENTIST MARINE BIOLOGIST



WHO
WAS
I?

NO. 18

I was born on September 10, 1931 in Santiago de los Caballeros, Dominican Republic. I moved to New York and completed my bachelor's degree at Columbia University in 1956. In 1961, I completed my Master's degree at New York University, during which I worked with Dr. Ross Nigrelli, the director of the New York Aquarium Research Laboratory. I am a marine biologist who is considered the "mother of marine conservation in the Caribbean". I was the founder of the study of biology in the Dominican Republic, as well as the founder of the Institute of Marine Biology and the Dominican Foundation for Marine Research. I have been honored with numerous awards, including induction into the UNEP's Global 500 Roll Honor, Unesco's Marie Curie Medal and the Order of Merit of Duarte, Sánchez and Mella. The BBC has called me one of the most important women scientists in Latin America. In 1974, I founded the Academy of Sciences of the Dominican Republic and began publishing works which became widely influential for those managing and concerned with conservation of marine resources. In 1986, I was instrumental in the creation of the first protected area for the humpback whale of the North Atlantic, originally called the Humpback Whale Sanctuary on the Silver Bank (In Spanish: *Santuario de Ballenas Jorobadas del Banco de la Plata*), but today it is known as Santuario de los Bancos de la Plata y la Navidad [es]. For my contribution, I was awarded the Medal of Merit of Dominican Women in Science by the Government of the Dominican Republic (1986). I am humbled by the work I and my colleagues have been able to work on these past decades. The Caribbean is a beautiful place and has been my place of awe and inspiration into science. I hope you look further into marine biology.



Alexci Reyes
Latino Studies Supports Coach

FAMOUS CIVIC LEADER/SUPREME COURT JUSTICE



WHO AM
I?

NO. 19

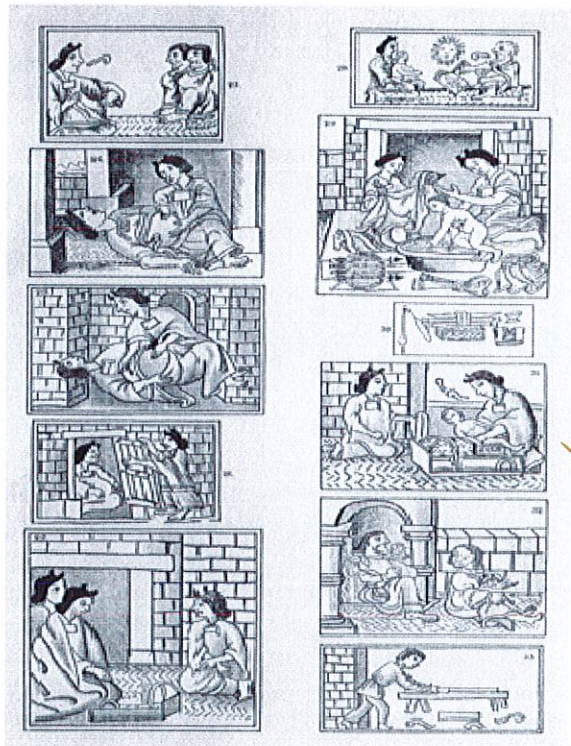
I was born in The Bronx, New York City, to Puerto Rican-born parents. My father, Juan Sotomayor from Santurce, Puerto Rico died when I was nine, and subsequently raised by my mother, Celina Báez from Santa Rosa in Lajas. I graduated *summa cum laude* from Princeton University in 1976 and received my J.D. from Yale Law School in 1979, where I was an editor at the *Yale Law Journal*. I worked as an assistant district attorney in New York for four-and-a-half years before entering private practice in 1984. I played an active role on the boards of directors for the Puerto Rican Legal Defense and Education Fund, the State of New York Mortgage Agency, and the New York City Campaign Finance Board.

I was nominated to the U.S. District Court for the Southern District of New York by President George H. W. Bush in 1991; my confirmation followed in 1992. In 1997, I was nominated by President Bill Clinton to the U.S. Court of Appeals for the Second Circuit. This nomination was slowed by the Republican majority in the United States Senate, but I was eventually confirmed in 1998. On the Second Circuit, I would hear appeals in more than 3,000 cases and wrote about 380 opinions. I have taught at the New York University School of Law and Columbia Law School.

In May 2009, President Barack Obama nominated me to the Supreme Court (Highest Court of the Land) following the retirement of Justice David Souter. My nomination was confirmed by the Senate in August 2009 by a vote of 68–31. While on the court, I have supported the informal liberal bloc of justices when they divide along the commonly perceived ideological lines. During my tenure on the Supreme Court, I was identified with concern for the rights of defendants, calls for reform of the criminal justice system, and making impassioned dissents on issues of race, gender and ethnic identity, including *Schuette v. BAMN*, *Utah v. Strieff*, and *Trump v. Hawaii*.

culture
leadership
empowerment power
revolution
equity
evolution
developing
hegemony
progressivism
frustrating
justice
advocacy
fairness
fair
access
imagination
voice
idea

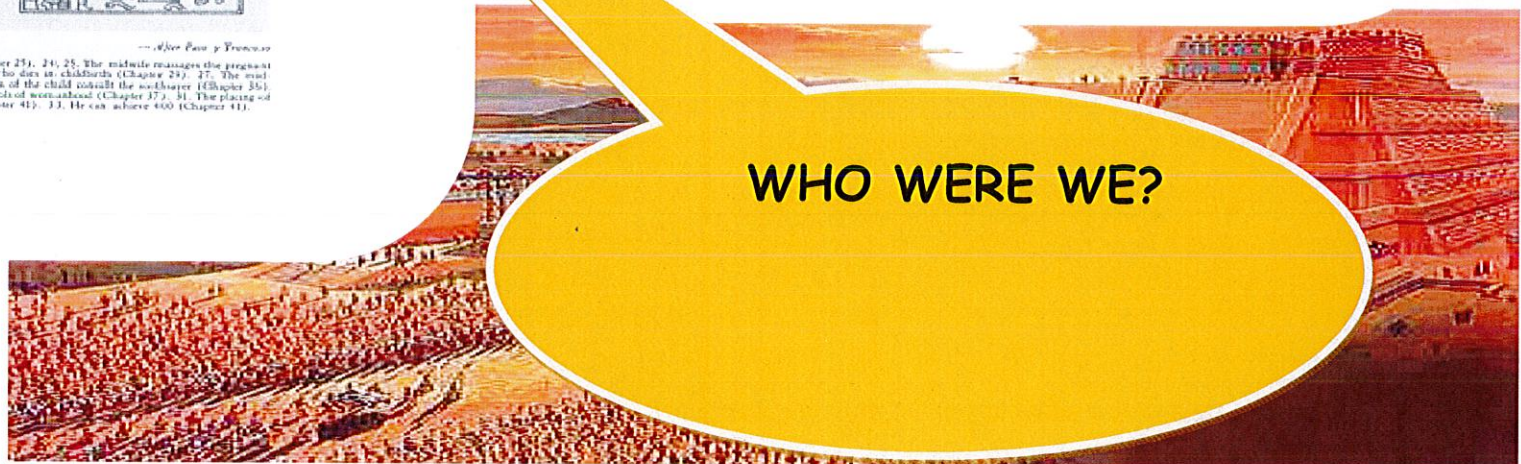
ANCIENT/ADVANCED CIVILIZATIONS



—After Paso y Troncoso
23. The pregnant one responds to the statue (Chapter 23). 24, 25. The midwife massages the pregnant one (Chapter 27). 26. The enclosing of the woman who dies in childbirth (Chapter 28). 27. The midwife administers the baby (Chapter 30). 28. The parents of the child consult the doctor (Chapter 35). 29. The holding of the boy (Chapter 37). 30. The midwife of womanhood (Chapter 37). 31. The placing of the baby in the cradle (Chapter 38). 32. A fool (Chapter 41). 33. He can achieve 400 (Chapter 41).

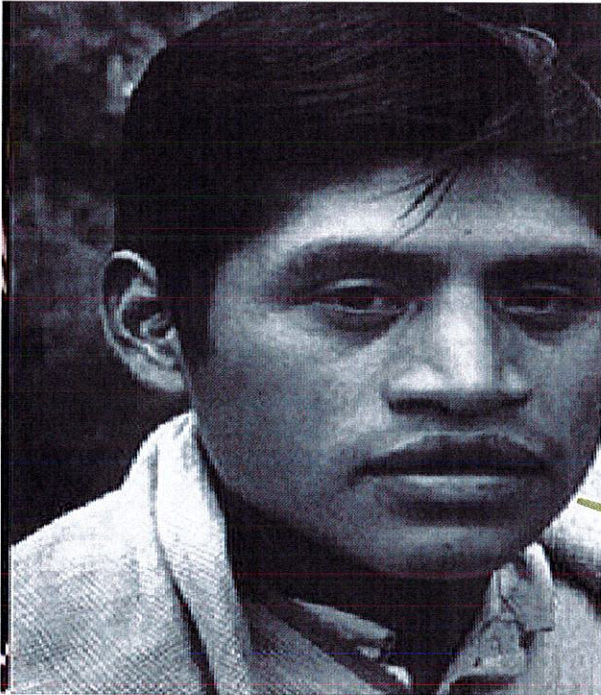
BONUS 1 Our civilization thrived in present-day central Mexico from 1325 to 1521 CE. As the last in a series of complex urban civilizations in Mesoamerica, we adopted many traits and institutions from our predecessors such as the Maya and Teotihuacan. We also devised many innovations, particularly in the realms of economics and politics. Our civilization was destroyed at its height by the invasion of Spanish conquerors under Hernando Cortés in 1519. We spoke the *Nahuatl* language, survived and intermarried with the Spaniards; today there are still over one million speakers of Nahuatl in rural areas of central Mexico. Most of our science served practical ends. Technological knowledge contributed to advancements in areas such as obsidian tools, agricultural methods, and building practices. Our writing system was a form of pictographic representation whose use was limited to a narrow range of ritual, historical, and economic works. Astronomical observations led to accurate descriptions of the heavens and the development of several calendars. Although our concepts of health and medicine were based on religious and magical beliefs, medical practice was based upon empirical knowledge. Treatments for wounds, many diseases, and broken bones were highly effective and the early Spanish invaders quickly abandoned Spanish doctors for Aztec medical specialists who were seen as having superior methods. Ask your teacher about other accomplishments we are known for.

WHO WERE WE?



Alexci Reyes
Latino Studies Supports Coach

ANCIENT/ADVANCED CIVILIZATIONS

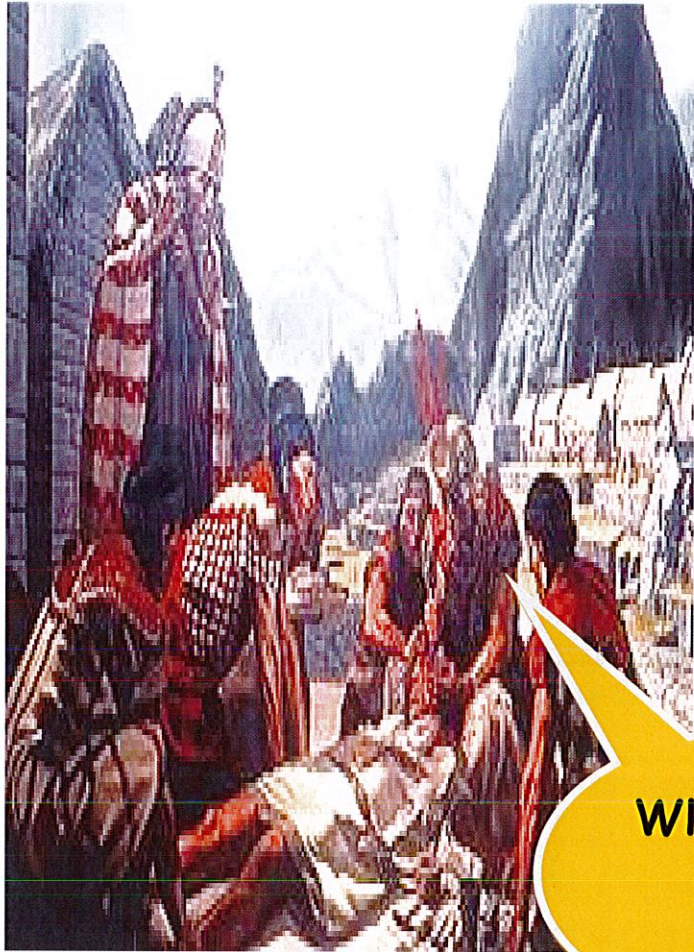


BONUS 2 We predominated in the Mexico geographical region from about 1200 B.C. to about 400 B.C. and are considered to be the Mother culture of Mesoamerican civilizations. Our name means “rubber people” in the Aztec language, since we were the discoverers of rubber trees. We established grand cities with centers of worship, market places temples and developed trade routes; were able to navigate the waterways of Mexico to move large stone heads to various regions of our kingdom. The centers that flourished during our era were: La Venta, San Lorenzo, Laguna de los Cerros, Chalcatzingo, La Mojarra, Tenochtitlán and Tres Zapotes. These centers were supported by a fully developed agricultural system, based on corn (maize), beans (frijoles) and squash (calabaza). We designed remarkable city plans, a solid architecture with use of caryatids; the introduction of bow and arrow for hunting and combat; the adaptation of nets for individual transport of goods in the absence of beasts of burden; copper metallurgy and a variety of other contributions, from the ring used in the Mexican ball game to the warriors' fraternities. We encourage you to do more research on our culture and contributions.

WHO ARE WE?

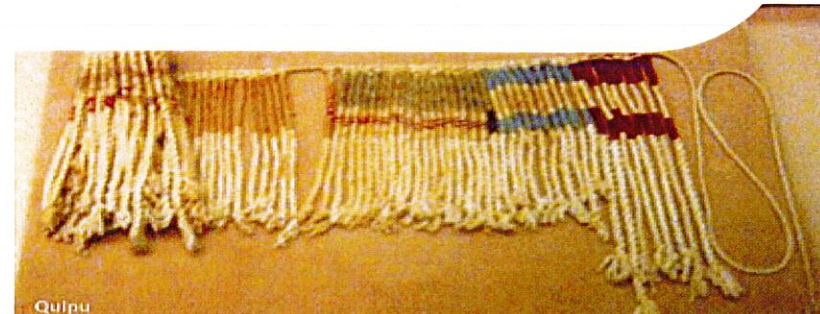
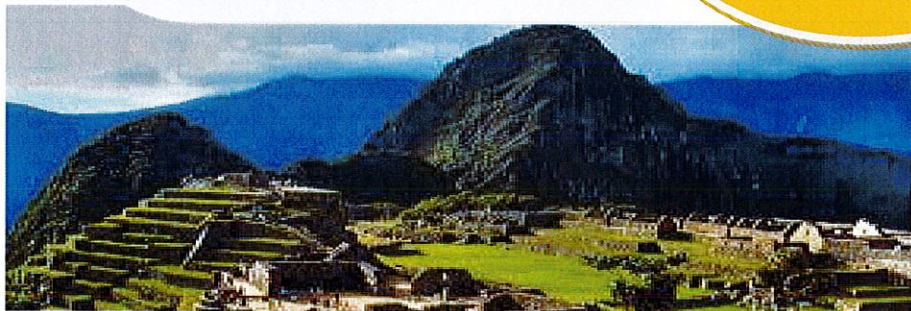


ANCIENT/ADVANCED CIVILIZATIONS



WHO ARE
WE?

BONUS 3 1300s-1500s. Ruled along the Pacific coast of South America. We inherited a road system from previous Andean societies, particularly the Wari, and built it up to traverse (run across) the entire empire—about 14,000 miles (22,526 kilometers) of roadway in all. We built excellent bridges, mainly of rope and fiber, providing access to remote areas. We also had advanced skills in medicine. We had a fairly sophisticated understanding of the medicinal properties of herbs and plants. The bark of one tree, for example, produced quinine, which we used to cure cramps, chills, and many other ailments. Our people used the leaves of the coca plant to numb people who were in pain. Our hunters dipped their arrows in a drug called curare that they extracted from a tropical vine; the substance instantly paralyzed the muscles of their prey. With the animal paralyzed, hunters could easily get their arrows back. (Modern doctors use curare as an anesthetic (a drug that causes a patient to temporarily lose feeling in a particular part of the body or to temporarily lose consciousness). Our surgeons apparently performed amputations for medical purposes, and their patients survived in good health. We used an ingenious tool that had been developed by an earlier civilization in the region for keeping track of all kinds of information. The object, called a **quipu**, is simply a long string held horizontally with shorter strings of many colors tied to it. Each of these threads can have other threads tied to it. The threads have different types of knots to represent the numbers 0 to 9. For example, a knot representing the number 6 tied at four inches on a 10-inch string could represent 6,000 (its position at four inches from the main string would be read as the thousandths column). Quipus could not be used to add, subtract or multiply. Specially trained administrators called quipu-camayocs learned to “read” the quipus. They used stones and counting trays similar to the abacus for doing calculations, and then transferred the information back to the quipu. Learn more about us.



ANSWER KEY

- NO. 0 MAYANS**
NO. 1 TAÍNOS
No. 2 Augustus Rodríguez
NO. 3 France Anne-Dominic Córdova, Ph.D.
NO. 4 VICTOR NEUMAN-LARA
NO. 5 JOSÉ ÁDEM
NO. 6 JOSÉ CELSO BARBOSA ALCALA, M.D.
NO. 7 INÉZ MEXÍA
NO. 8 CARLOS JUAN FINLAY DE BARRÉ, M.D.
NO. 9 JUAN MANUEL TAVERAS RODRIGUEZ
NO. 10 SABRINA GONZALEZ PASTERSKI, PHD STUDENT
NO. 11 PEDRO FRANCISCO BONÓ
NO. 12 LUIS A. FERRÉ
NO. 13 PEDRO ALBIZÚ CAMPOS
NO. 14 ARTURO ALFONSO SCHOMBURG
NO. 15: BEN GARZA
No. 16: ALICIA DICKERSON MONTEMAYOR
No. 17: Dr. MARIO JOSÉ MOLINA HENRÍQUEZ
No. 18 IDELIS BONNELLY DE CALVENTI
No. 19: SONIA SOTOMAYOR, J.D.
BONUS 1: AZTEC
BONUS 2: OLMEC
BONUS 3: INCA