Achievements in Astronomy & Architecture in the Early Civilizations of America

1. The Mayan civilization designed and constructed massive stone ____ and temples, all without the aid of _____ tools.
   a) Mosques, wooden
   b) Pyramids, metal
   c) Figures, plastic

2. The Maya made huge astronomical and mathematical advancements with the concept of _____.
   a) Numbers
   b) Addition
   c) Zero

3. The use of zero allowed Mayan mathematicians to perform large and complex _____.
   a) Equations
   b) Solutions
   c) Products

4. Instead of 10 digits, they used a base number of _____.
   a) 30
   b) 15
   c) 20

5. _____ and _____ were used as shorthand for counting.
   a) Bars, dots
   b) Circles, squares
   c) Diamonds, hearts

6. A dot represented the number ___, a bar represented the number ___. A _____ was used to represent zero.
   a) 5, 8, clover
   b) 1, 5, seashell
   c) 3, 4, circle

7. The Maya used their mathematical system to make highly detailed astronomical observations, such as the movement of the _____, annual winter and summer _____, and fall and spring _____.
   a) Sun, solstices, equinox
   b) Moon, coordinates, equator
   c) Planets, seasons, time zones

8. The Maya also learned how to predict _____. They kept a close watch of the position of the _____.
   a) New moons, sun
   b) Solar eclipses, moon
   c) Changes in tides, planets

9. One of the Mayan's biggest achievements was the development of the _____ day calendar.
   a) 200
   b) 150
   c) 365

10. The Mayas built towering pyramids, expansive palaces, and temples, all without the benefit of _____.
    a) Currency
    b) Gold
    c) Modern machinery

11. They Mayas built observatories as maps, aligning their structures with the _____ and planets.
    a) Sun
    b) Stars
    c) Moon

12. The Mayas charted the movements of the _____, _____, and _____. They were so precise that they predicted solar and lunar _____ centuries in advance.
    a) Sun, moon, planets, eclipses
    b) Stars, moon, meteorites, phases
    c) Oceans, tides, time zones, days

13. The Maya's astronomical knowledge also played a vital role in their _____ as they relied on the stars to guide their _____ and _____ cycles.
    a) Trade, selling and buying
    b) Agriculture, planting, harvesting
    c) Sleep cycles, bedtimes, wake times

14. The Mayas Numeral System was based on the Number ____, which is unlike any modern decimal system which is based on the Number 10.
    a) 60
    b) 20
    c) 19

15. Three Symbols of the Mayan Calendar:

Shell – _____	Dot – _____	Bar – _____
a) five	a) two	a) one
b) three	b) one	b) three
c) zero	c) ten	c) five

16. The Mayan civilization was the first in the world to understand and use the concept of _____.
    a) Zero
    b) Numbers
    c) Addition

17. Their Vagecimal system allowed them to record _____.
    a) Multiple quantities
    b) Small amounts
    c) Large numbers