- B. Other Areas of Ancient Music
 - 1. Ancient Egypt
 - a. Their instruments
 - i. The Egyptians are credited with developing early stringed instruments, such as the *lute* and the *harp* in its primitive form.
 - ii. Other instruments include a straight trumpet and a type of *flute* that was blown through the end, much like a recorder.³
 - The evidence of Egyptian musical instruments is noted from tomb paintings dating back to the Old Kingdom (c. 2575-2134BC), when harps, end-blown flutes (held diagonally), and single and double pipes of the clarinet type (single reeds) were played.⁴
 - iv. Percussion instruments and lutes were added to orchestras by the Middle Kingdom, and bronze cymbals dating from around the Roman period were found in a tomb on a site near Naucratis⁵
 - b. Music Notation⁶
 - One Terracotta found by archaeologists has thought to depict music notation, but there are not much more than a few horizontal lines crossed by vertical strokes.
 - It is not until the Greek Period that a papyrus with musical notations was discovered, but the music and notes are Greek, not Egyptian.
 - c. Facts on Ancient Egyptian Music
 - i. Songs were played during religious ceremonies
 - ii. Songs were played in the tombs after people died
 - iii. Music was heard while people worked, for royal events and on the battlefield

³ https://www.musicedmagic.com/music-history/brief-history-of-ancient-music.html

⁴ https://en.wikipedia.org/wiki/Ancient_music

⁵ A city of Ancient Egypt, on the Canopic branch of the Nile River, southeast of the open sea and Alexandria ⁶ https://www.ancient-egypt-online.com/egyptian-music.html

- Egyptian music, based on the holes found in flutes of the time, was a minor pentatonic (5 notes per octave) scale without half-notes.
- 2. Mesopotamia
 - a. Their Instruments
 - i. The Harps of Ur
 - a) In 1929 Leonard Woolley discovered pieces of four harps while excavating in the ruins of the ancient city of Ur, located in what was Ancient Mesopotamia, modern day Iraq.
 - b) Some of the fragments, from the harps, are now located at the University of Pennsylvania, the British Museum in London, England, and in Baghdad, Iraq. They have been dated to 2750 BC.
 - ii. Ur Grave Sites
 - a) Ur graves have yielded pairs of silver wind instruments and a small number of other types of instruments. The original wooden stringed instruments found at Ur were richly decorated or overlaid with gold, silver, copper, mother of pearl, and other non-wood materials that did not deteriorate in the earth.⁷
 - b. Music Notation
 - i. Hurrian texts
 - a) Hurrian texts from Ugarit, modern day Syria, are some of the oldest known instances of written music.
 - b) These texts were written on clay tablets
 - c) These tablets date to c. 1400 BC.
 - ii. The arrangement of notation
 - a) The arrangement of the texts on the tablets found in Ugrait are of the following: the Hurrian words of the

⁷ Draffkorn Kilmer, .Anne"The Musical Instruments from Ur and Ancient Mesopotamian Music" Expedition Magazine 40.2 (1998): n. pag. Expedition Magazine. Penn Museum, 1998 Web. 18 Oct 2019 <http://www.penn.museum/sites/expedition/?p=5425>

hymn are placed at the top, with a double division line below.

- b) Under this double line is found Akkadian (language of ancient Mesopotamia) musical instructions, consisting of interval names followed by number signs.
- c. Facts on Mesopotamian Music
 - Scientists and archaeologists have identified Mesopotamian tablets that contain technical information about ancient musical scales.
 - ii. By the Old Babylonian period (i.e. c. 1800BC), there existed standardized tuning procedures that operated within a heptatonic, diatonic system consisting of seven different and interrelated scales. These scales could be equated with seven ancient Greek scales (dating some 1400 years later). One of the scales in common use was equivalent to our own modern major scale (do-re-mi...).
 - iii. The Sumero-Babylonian musical system was exported at least far away as the Mediterranean coast, for the same Akkadian corpus of terms was used for instructions to instrumentalists performing in ancient Ugarit. It is not a stretch to assume that ancient Greeks learned Mesopotamian music theory-together with their mathematics-in the near east.
- 3. Ancient Greece
 - a. Their Instruments⁸
 - i. The Greeks discovered the importance of numbers in music in which they based much of their theory of music on.
 - ii. Stringed

a) The *Lyre;* a strummed and occasionally plucked stringed instrument, built many times on a tortoiseshell frame, generally with seven or more strings tuned to the notes of one of the modes.

⁸ https://www.musicedmagic.com/music-history/brief-history-of-ancient-music.html

- b) The *Kithara;* also a strummed instrument, more complicated than a lyre. It had a box-type frame with strings stretched from the cross-bar at the top to the sounding box at the bottom.
- c) The *Barbitos;* a taller lyre considered to be the least complicated.
- d) The *Kanonaki;* a trapezoidal psaltery, invented by the Greeks in the 6th century BC. It was held on the thighs of the player, and plucked with both hands with a bone pick.
- iii. Wind
 - a) The Aulos; usually double, consisting of two doublereed (like an oboe) pipes, not joined but generally played with a mouth-band to hold both pipes steadily between the players lips. Modern reconstruction indicate that they produced a low, clarinet-like sound.
 - b) The Pan Pipes; also known as panflute is an ancient musical instrument based on the principles of the stopped pipe, consisting of a series of such pipes of gradually increasing length, tuned (by cutting) to a desired scale. Sound is produced by blowing across the top of the open pipe.
 - c) The *Hydraulis;* a keyboard instrument, the forerunner of the modern organ. As the name indicates, the instrument used water to supply a constant flow of pressure to the pipes.
 - d) The Salpinx; the salpinx was a brass trumpet used for military calls

Note: The *lyre, kithara, aulos, hydraulis,* and *salpinx* all found their way into the music of ancient Rome.

- iv. Percussion
 - a) The *Tympanum;* was a type of frame drum or tambourine. It was circular, shallow, and beaten with the palm of the hand or a stick.
 - b) The *Crotala;* a kind of clapper used on religious dances and by groups.
 - c) The *Koudounia;* a bell-like instrument made of copper.
- v. Archaeologists have found some little pieces, probably written around 100 to 130BC. The most common Greek instruments included the *aulos*, a double reed instrument; the *cithera*, a stringed instrument; and the *syrinx*, often called the panpipes.
- b. Music Notation
 - i. The Ancient Greek musicians developed their own robust system of music notation. The epics of Homer were originally sung with instrumental accompaniment, but no notated melodies from Homer are known. Several complete songs exist in ancient Greek music notation.
 - In addition, fragments of Greek music texts are extant, among these is a choral song by Euripides (a Greek play writer) for his play *Orestes*.
- c. Facts on Ancient Greek Music
 - i. The music of ancient Greece was almost universally present in Greek society, from marriages, funerals, and religious ceremonies to theatre, folk music, and the balladlike reciting of epic poetry. It played an integral role in the lives of the ancient Greeks.
 - ii. The history of music in ancient Greece is closely connected to that of Greek mythology and legend that it is often difficult to surmise what is historically true and what is myth.
 - iii. The music and music theory of ancient Greece laid the foundation for western music and western music theory,

as it would go on to influence the ancient Romans, the early Christian church and the medieval composers.

- iv. The study of music was included in the studies of great philosophers.
- v. Instrumental music served a religious and entertaining role in ancient Greece.
- 4. Ancient Rome
 - a. Their Instruments
 - i. Stringed
 - a) The Roman *Lyre,* borrowed from the Greeks, not a harp, instead had a sounding body of wood or tortoise shell covered with skin, and arms made from wood or animal bone, with strings stretched across the bar to the sounding body.
 - b) The *Cithara* was the premier instrument of ancient Rome and was played both in popular and elevated forms of music. Heavier and larger than a lyre, the cithara was a loud, sweet, piercing instrument that had precise tuning abilities.
 - c) The *Lute* was known by several names among the Greeks and Romans. The lute differs from the lyre in having fewer strings stretched over a solid neck or fret-board, on which the strings can be stopped to produce graduated notes. Each lute string can produce a greater range of notes than a lyre string.
 - ii. Wind
 - a) The Roman *tuba* was a long, straight bronze "trumpet" with a detachable mouthpiece, like that of a French horn. It had a cylindrical bore from the mouthpiece to the point where the bell flared out abruptly, similar to the modern straight trumpet seen in presentations of 'period music'. In the military, it was used for "bugle calls".
 - b) The *Cornu* (Latin "horn") was a long tubular metal wind instrument that curved around the musician's body, rather like an uppercase G. It had a conical

bore (again much like a French horn) and conical mouthpiece.

- c) The *Tibia* (Greek *aulos)* usually double, had two double-reed (as in a modern oboe) pipes (see notes under Greek *aulos)*.
- d) The Askaules— a bagpipe.
- iii. Percussion
 - a) The Scabellum (a "clapper") used to beat time.
 - b) Drums and percussion instruments like that of the timpani (kettle drums), the Egyptian *sistrum*, and brazen pans, served various musical and military purposes in ancient Rome.
 - c) The *Cymbala* were small cymbals: metal discs with concave centers and turned rims, used in pairs which were clashed together.
- b. Music Notation
 - i. The Romans likely borrowed the Greek method to record their music.
 - ii. The Romans may have tuned their instruments to Greek modes.
- c. Facts on Ancient Roman Music
 - i. One of the attributes of the Romans were their ability to assimilate ideas and customs from the cultures and societies which they encountered and conquered. Roman music was no different. Roman music and the instruments they used were highly influenced by the Greeks.
 - Roman music was used at a variety of occasions.
 Processions, weddings, funerals, public events, religious ceremonies.
 - iii. The Romans cultivated music as a sign of education. In fact, music contests were quite common and attracted a wide range of competition.