#### **QUESTION**

#### HOW WAS ANCIENT EGYPTIAN CIVILIZATION LIKE?

## Technology Mathematical knowledge

- Developed a system of written numbers: used for counting, adding and subtracting.
- Tracked business and taxes.
- Used geometry and trigonometry to build pyramids and large buildings.
- Used for engineering and architecture: accurate calculations and measurements for palaces, pyramids, tombs (1<sup>st</sup> to use stone columns)
- Decimal system:
  - Didn't use numbers 2-9 or 0.
  - Had factors of 10 (1, 10,100...)
  - To write 3, they had to write 1 three times; to write 30, they had to write 10 three times... etc.
- Invented the sundial and water clock; the sundial used in the day, the water clock was used at night.

### **Calendar and Time**

- Priests observed the star (Sirius) when it appeared (for the flooding of the Nile); star rose 365 days apart.
- First to come up with the 365 days a year schedule.
- Had 10 days a week, 3 weeks each month, 4 months in a season, 3 seasons per year, 5 holy days (adds up to 365 days a year)
- Accurate enough to be off by just 6 hours.
- Invented *hieroglyphics* (writing with pictures and symbols)

# **Advances in Writing**

# • Papyrus: made from sheets of parchment from papyrus plant, used to write important documents, information, and religious texts.

#### **Daily Life Inventions**

- Ramp and lever: aided construction process.
- Makeup: dark eye makeup was made from minerals, protected skin from the sun, both men and women wore it.
- Toothpaste: invented toothpaste and toothbrushes to protect teeth from foods that contained grit and sand; used ashes and eggshells to make toothpaste.

## **ART** Architecture

- Medicine: chants, charms, spirits, and spells were in use; and were not always effective; knew to check pulses and perform some surgeries; treatments for wounds and fever were effective.
- Tombs and temples: made of stone (granite, limestone, sandstone)
- Pillars were added for support; decorated from top to bottom.

# **Pyramids**

- Used as tombs for pharaohs and queens (stored mummified bodies)
- 80 known pyramids today in ancient Egypt.
- The three largest pyramids were built in Giza.
- The Great pyramid of Giza: built for Pharaoh Khufu (largest and oldest); 481 ft high, 775 ft long
- Believed to have 30,000 workers for the Giza pyramids.

#### Temples

- It is unknown why the ancient Egyptians chose that specific pyramid shape.
- · Homes of gods and goddesses.
- Walls were covered with bright colored and carved scenes
- Built as palaces for rituals and seasonal festivals
- Not sure who it represents; believed created 4,500 years ago
- Half-lion and half-human; largest statue in the world (241 ft long, 65 ft high)
- Sphinx means strangler; body of a lion, head of a woman; wings of a bird

#### **Art Inside of Tombs**

The Great Sphinx of

Giza

- Still remains a mystery today
- Painting scenes of everyday life, models of people and animals, glass figures, containers, jewelry made of gold and precious stones
- Paints were made of minerals, and paint brushes were made of sticks with wood (frayed ends)
- Pillar art consisted of everyday people baking, fishing, boating and marketing; drawing used to help lead the dead to live forever by giving them instructions.
- Art surrounded mummified bodies to help the spiritual self in solving problems related to life after death.
- Paintings of daily items to represent the real items which the dead will need and use (clothing, food, servants)

## Art Inside of **Temples**

- Sculptures of pharaohs, queens, scribes, gods, goddesses, and animals (non realistic, made sculptures have a stronger image)
- Size based on social order; pharaohs: larger than life size, scribes and officials: life sized, workers and peasants: always shown working.

# Hieroglyphics