# CMC 515 URBAN PLANNING

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# LECTURE 3: HISTORY OF URBAN PLANNING

# HISTORY OF URBAN PLANNING????



# CONTENT

- INTRODUCTION
- ANCIENT CITIES
- ASSIGNMENT 2

# INTRODUCTION

### Formation of Settlement:

#### PALEOLITHIC ERA

#### **MESOLITHIC ERA**

#### **NEOLITHIC ERA**







### Paleolithic Era:

#### The human race appeared on Earth 2.000.000 or 3.000.000 years ago ....Paleolithic

#### Life in prehistory: The fight for survival







Protection

Water

Food

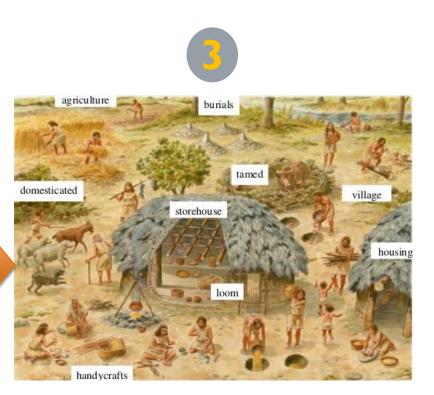
Paleolithic Era:



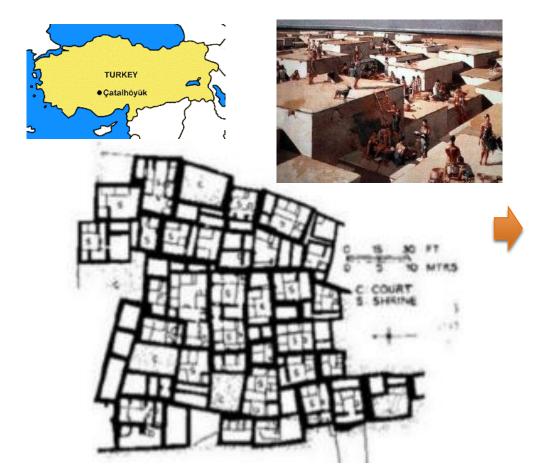








Neolithic Dwelling and Settlement- Catal Huyuk... 6300 B.C. to 5400 B.C :



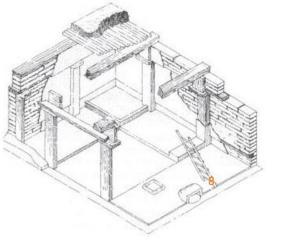
- Supported a population of up to 6000 people
- It was the largest and most cosmopolitan city of its time.
- It had an extensive economy based on specialized craft and commerce.
- The city was a trading center.
- Physically it was highly organized with elaborated architectural features.

### $\succ$ Neolithic Dwelling and Settlement- Catal Huyuk:



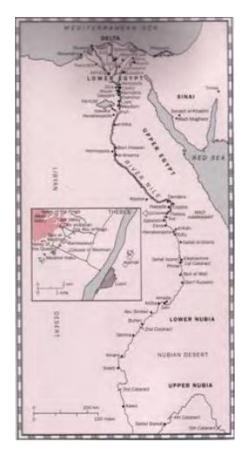








### > ANCIENT EGYPT ...3,000 – 300 BC :



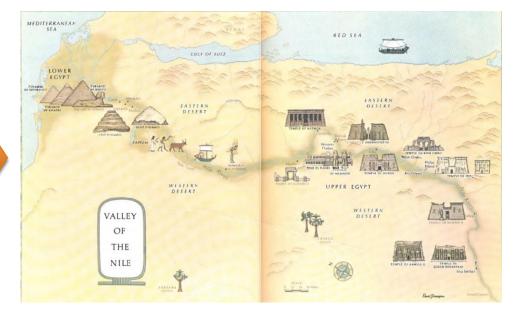
> Nile River:

Cities & towns were

built along the Nile

#### valley

- An important influence
  - in the linearity and
  - axially of ancient
  - Egyptian Architecture.
- Sense of direction.

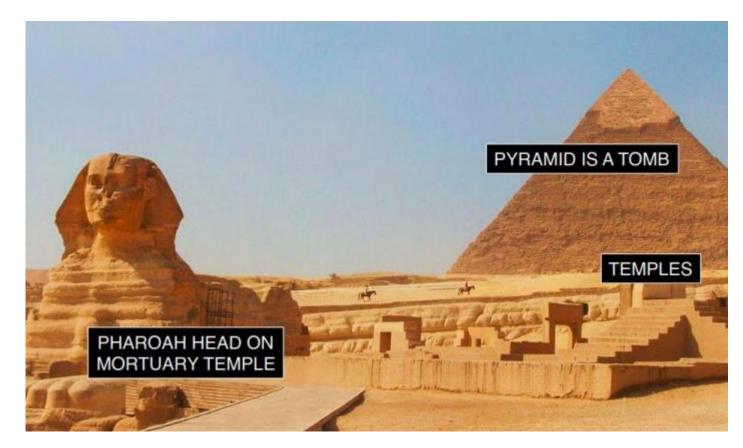


### > ANCIENT EGYPT ... 3,000 – 300 BC :



- > Influence of the Nile:
  - Axially and linearity.
  - ✓ Sense of direction

### > ANCIENT EGYPT ...3,000 – 300 BC:



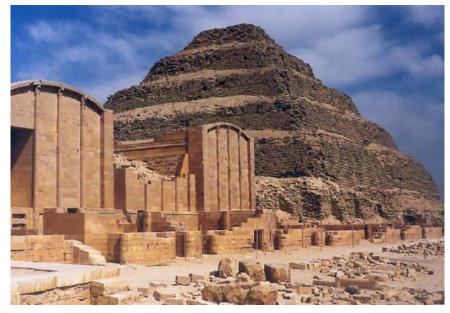
The cities were built around an

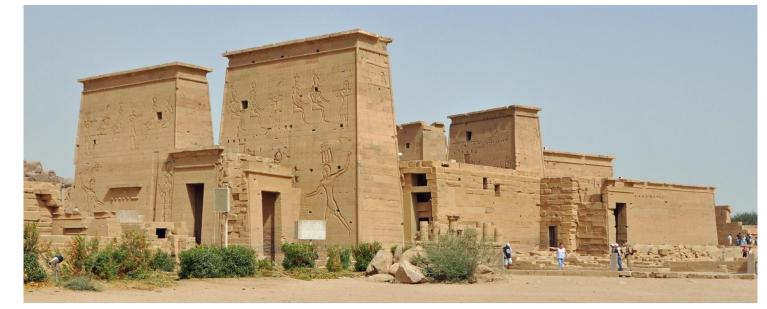
important religious center.

Cities were created as tributes by the Pharaoh to the Gods or as monuments to their greatness.

#### > MESOPOTAMIA.. 10,000 BC - 7 TH CENTURY AD :

#### Main Elements of the city:

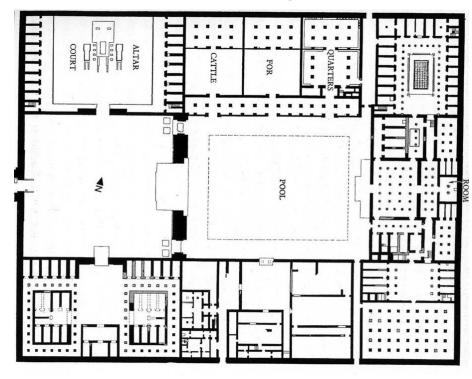


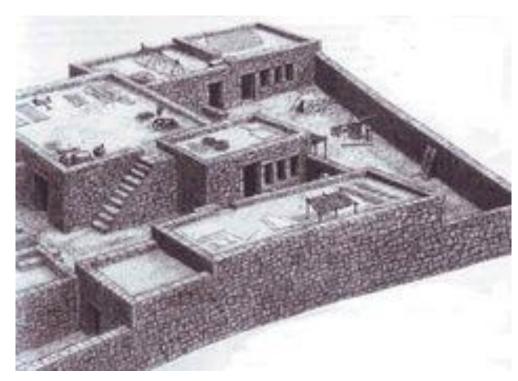


Tomb (Pyramids)

### > MESOPOTAMIA.. 10,000 BC - 7 TH CENTURY AD :

#### Main Elements of the city:

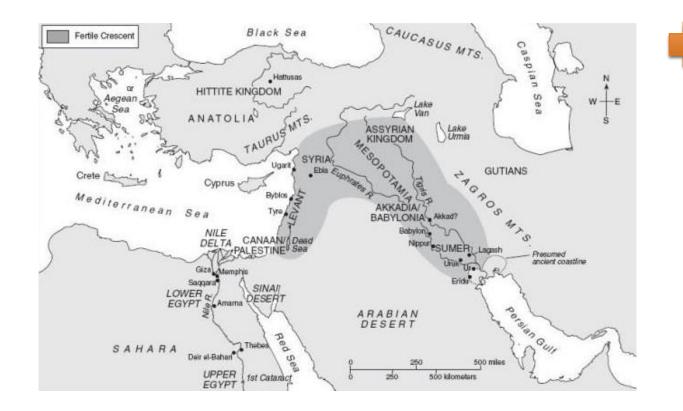




**Residential Buildings** 

**Palaces** 

#### > MESOPOTAMIA.. 10,000 BC – 7 TH CENTURY AD :

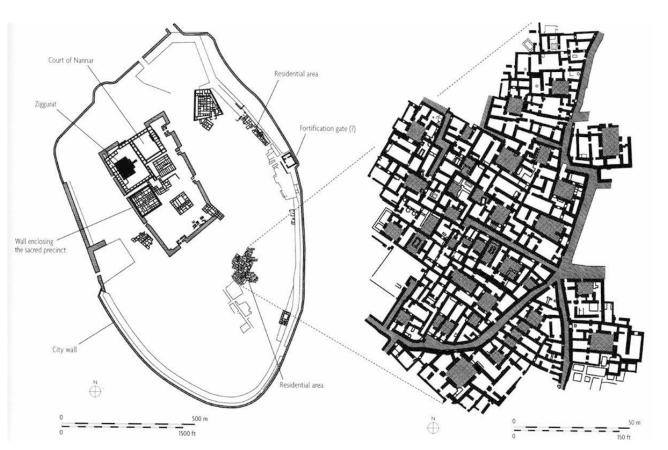


- Located in and around the Valley of Tigris and Euphrates rivers in modern Iraq.
- Area is also known as Mesopotamia or land between two rivers.
- The land stretched from Mediterranean to eastern borders of present Iran.
- Water as a basis of urban development.



#### > MESOPOTAMIA.. 10,000 BC – 7 TH CENTURY AD :

- Cities in ancient Mesopotamia were enclosed by wall fortifications.
- The fabric of the cities are a blend of residential, commercial and industrial buildings.



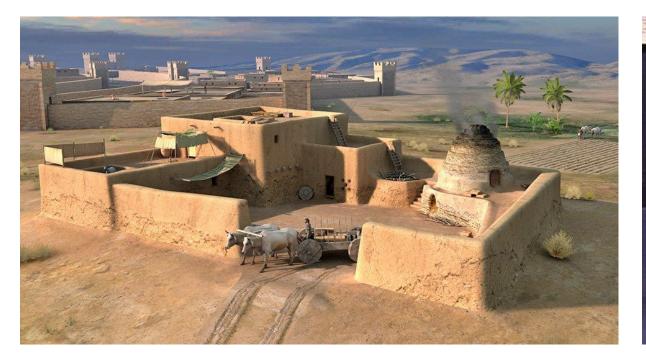
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#### > MESOPOTAMIA.. 10,000 BC – 7 TH CENTURY AD :

Buildings were usually raised on platforms to protect them from the floods.

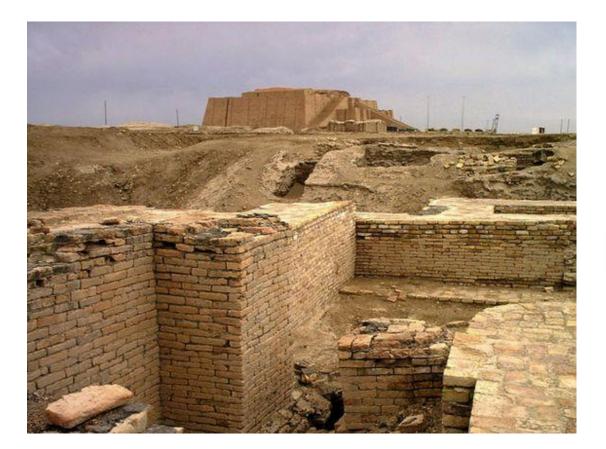


- > MESOPOTAMIA.. 10,000 BC 7 TH CENTURY AD :
- Houses were one story high and mostly of mud brick.
- Rooms were arranged around courtyard.





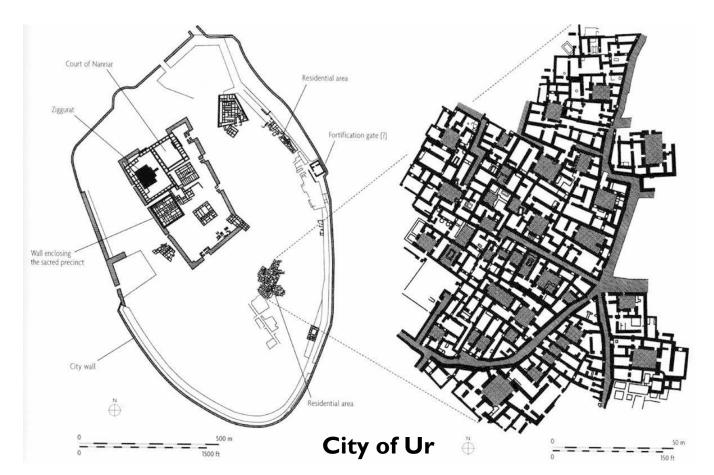
#### > MESOPOTAMIA.. 10,000 BC – 7 TH CENTURY AD :



- Mud was their building material.
- Mud was formed into brick, sun dried and built into massive walls

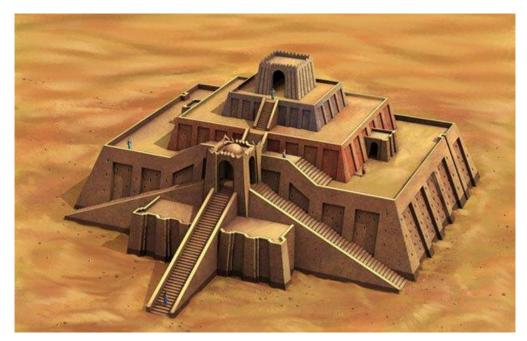


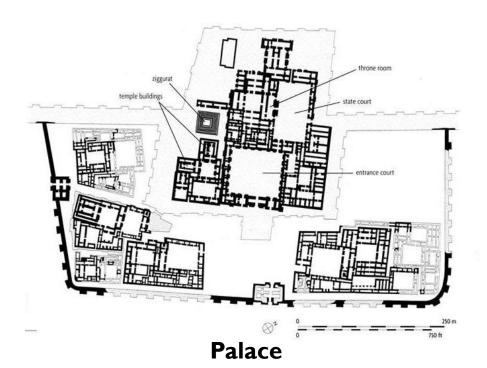
#### > MESOPOTAMIA.. 10,000 BC - 7 TH CENTURY AD :



#### > MESOPOTAMIA.. 10,000 BC - 7 TH CENTURY AD :

#### Main Elements of the city:





### > MESOPOTAMIA.. 10,000 BC - 7 TH CENTURY AD :

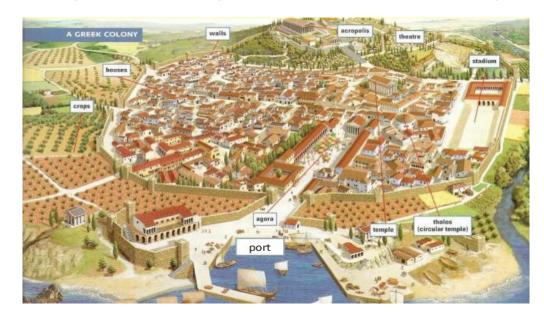
#### Main Elements of the city:



### Ancient Greek:



- Greece is a peninsula in the Mediterranean Sea.
- Greece is a very mountainous country.
- Because of the mountains, Greek communities developed independently different city states, each known as a polis.



#### Ancient Greek:



### > Ancient Greek:

#### ✓ City planning and urban design

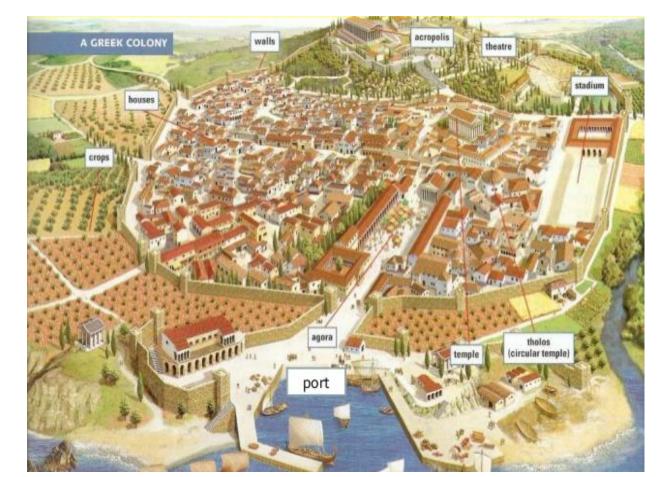
- The ancient Greek city states developed a standard plan of the city consisting of three defined elements:
  - I. The Town
  - 2. The Acropolis
  - 3. The Agora
- Principles were developed for organizing each element of the city **based on activities and its**

#### <u>symbolism.</u>

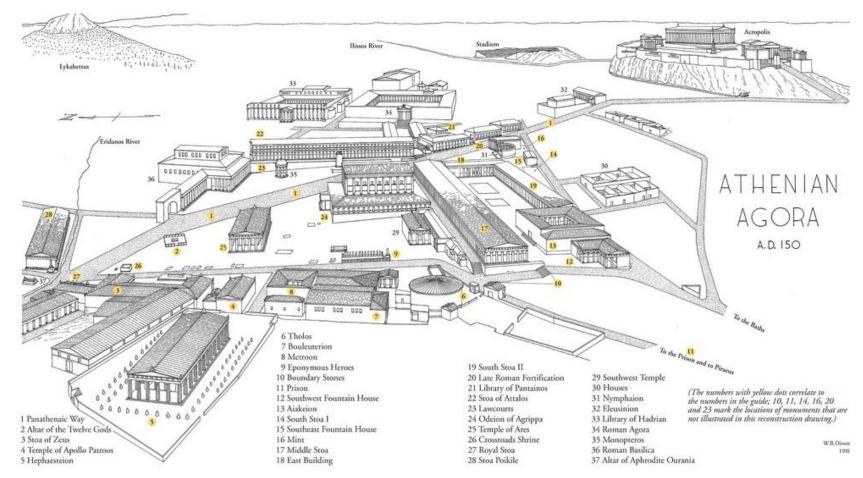
> Ancient Greek:

### Parts of the Greek Polis:

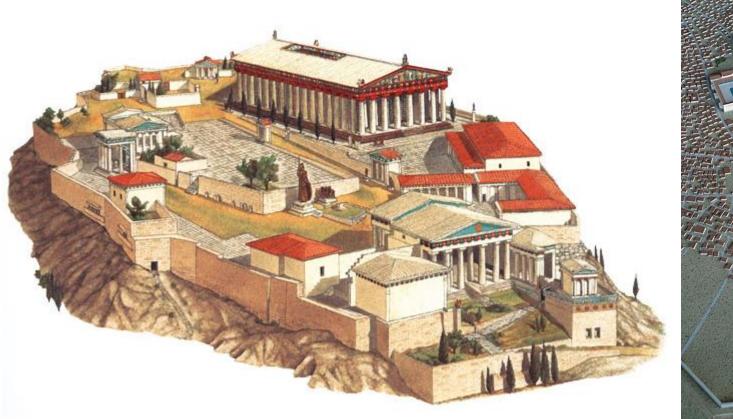
- I. <u>In the upper part</u> of the city, the acropolis was located.
- 2. <u>In the center of the city stood the</u> temple of the local god.
- 3. <u>At the foot</u> of the acropolis is the agora.
- 4. <u>In the lower</u> section of the city there were houses and other buildings (Town).



### Ancient Greek: AGORA



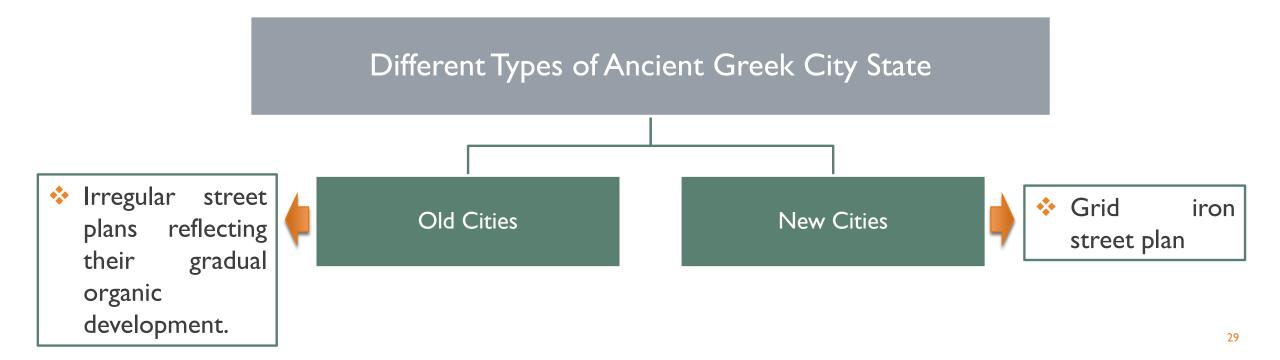
### Ancient Greek: ACROPOLIS



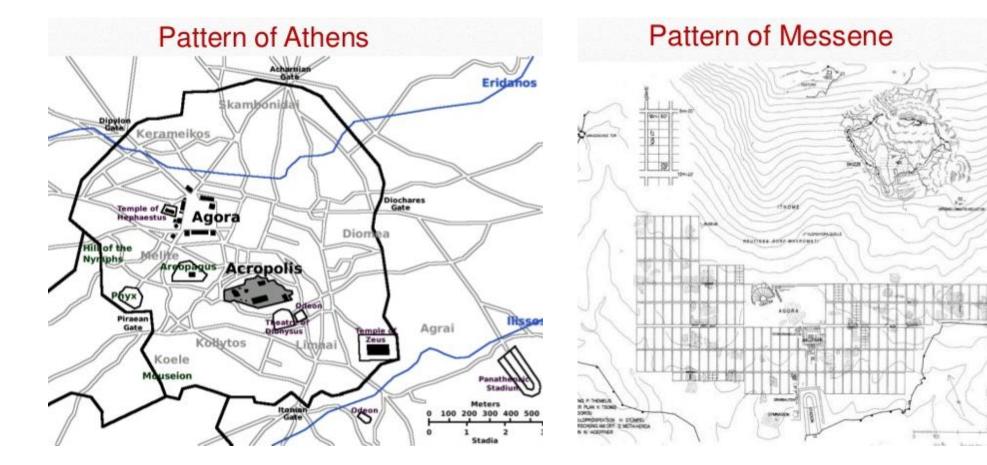


### Ancient Greek:

\* The ancient Greek civilization had established principles for planning and designing cities.

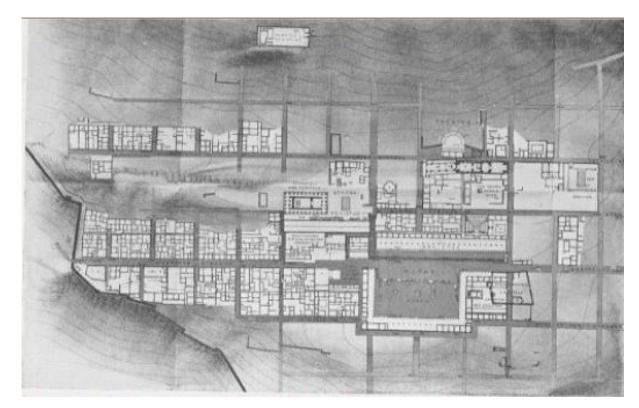


### Ancient Greek:

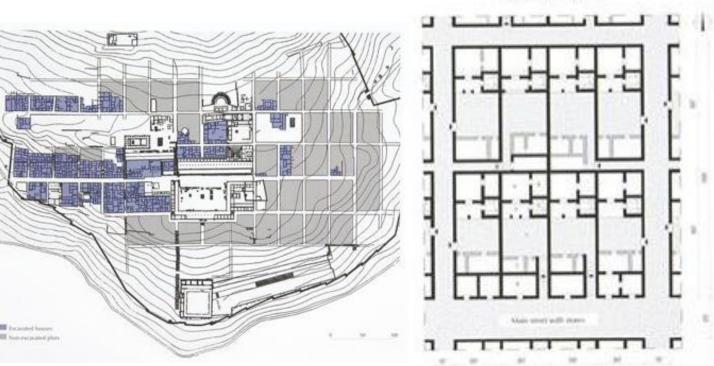


### Ancient Greek: HIPPODAMUS OF MILETUS .. 498-408 BC

- Inventor / father of formal city planning.
- Made the Hippodamian Plan or the grid city to maximize winds in the summer and minimize them in winter.
- Has a geometric, arranged style in design
- Also worked on Alexandria.



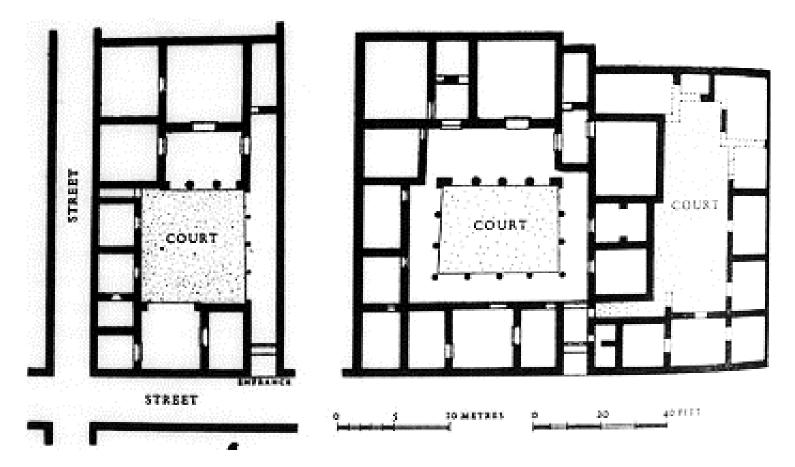
- > Ancient Greek: HIPPODAMUS OF MILETUS .. 498-408 BC
- ✓ The City of Priene:
- ✤ Grid- iron pattern of street system.
- Agora is at the center of the town, surrounded by temples shrines, public buildings and shops.
- Recreation and entertainment
  facilities are provided in gymnasia,
  stadia and theatre.



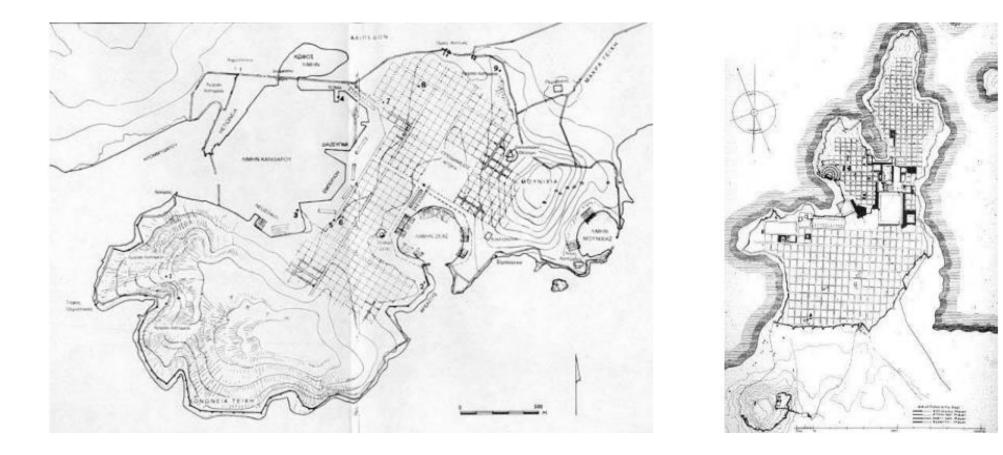
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Residential Block

### Ancient Greek: HIPPODAMUS OF MILETUS .. 498-408 BC



### Ancient Greek: HIPPODAMUS OF MILETUS .. 498-408 BC



> The Roman Empire...29 BC – 393 AD:

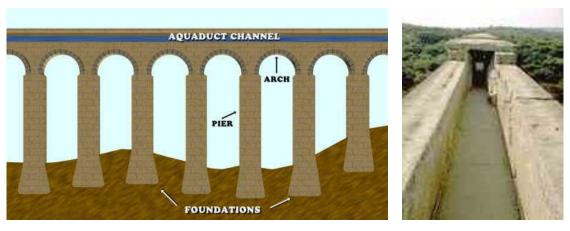
Cities were the center of Roman life.

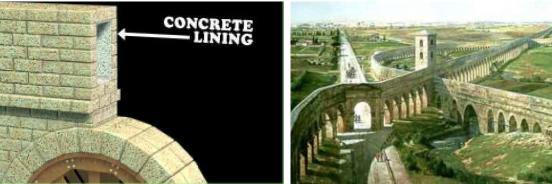
- I. Need for infrastructures.
- 2. Water and sewer systems.
- 3. Transport and defense.
- 4. Paved roads.
- 5. Public spaces and markets.



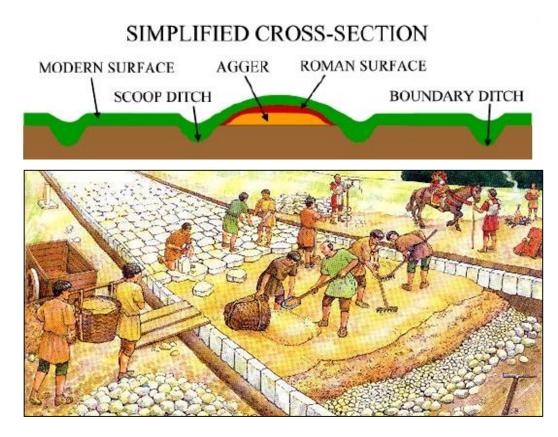
> The Roman Empire...29 BC – 393 AD:

- Cities were the center of Roman life.
  - I. Water and sewer systems.
    - There wasn't enough water in the city of Rome.
    - The Romans brought water in from the surrounding countryside.
    - The water was brought in by tubes called Aqueducts.
    - The water was transported in concrete tunnels.
    - The tunnels were underground if possible.
    - Sometimes the tunnel had to go above ground.





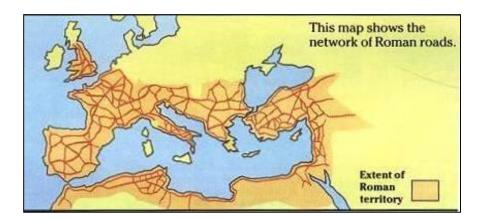
- > The Roman Empire...29 BC 393 AD:
- Cities were the center of Roman life.
  - 2. Paved roads.
  - The roads were not completely flat.
  - They consisted of several parts.
  - The central and highest was the most important, it was convex to conduct the water in the sides.
  - Ditches that were built in the sides,



- Initially, the roads were built to move soldiers quickly
- Eventually, the roads served people for many purposes, especially as trade routes

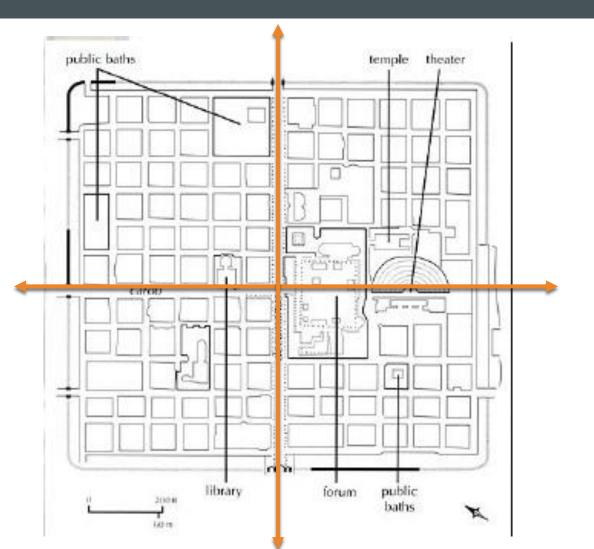
> The Roman Empire...29 BC – 393 AD:

- Cities were the center of Roman life.
  - 2. Paved roads.
  - Romans built the largest and most durable network of roads in the Ancient World
  - Roman roads stretched for 56,000 miles and included 29 major highways



> The Roman Empire...29 BC – 393 AD:

- The plan of the city had two main axes.
- Where the two converged was the forum.
- The rest of the space was divided into squares in which blocks of flats were built.



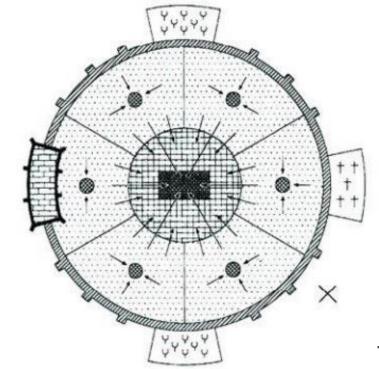
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> The Roman Empire...29 BC – 393 AD:

- The most important part of the city was the forum, where political, economic, administrative, social and religious activity were centered.
- Main buildings were in this forum.
- In big cities there were theaters, circuses, stadiums,...etc.



#### > ISLAMIC CITIES:





Typical model of Islamic city associated to the Iranian cities

#### > RENAISSANCE .. 14 TH TO 17 TH CENTURY AD:

City planning during the Renaissance era, which spanned from the 14th to the 17th century, was characterized by a revival of interest in the classical principles of urban design and a focus on creating harmonious and aesthetically pleasing cities.



#### RENAISSANCE .. 14 TH TO 17 TH CENTURY AD:

- Key aspects of city planning during the Renaissance:
- I. <u>Street Layout</u>: Renaissance city planners aimed to create an ordered and symmetrical street layout. The main streets were often wide and straight, intersecting at right angles to form a grid pattern. This grid pattern provided a sense of order and facilitated easy navigation.



#### RENAISSANCE .. 14 TH TO 17 TH CENTURY AD:

- Key aspects of city planning during the Renaissance:
- 2. <u>Central Plazas and Squares:</u> Cities were often designed with central plazas or squares, which served as social and commercial hubs. These public spaces were surrounded by important buildings such as churches, government offices, and markets. They were designed to be visually impressive, with grand architecture and fountains, and functioned as gathering places for festivals, markets, and other civic

activities.



#### > RENAISSANCE .. 14 TH TO 17 TH CENTURY AD:

Key aspects of city planning during the Renaissance:

3. <u>Prominent Landmarks</u>: Renaissance cities were characterized by the inclusion of prominent landmarks such as churches, palaces, and civic buildings. These structures often featured impressive architecture and were strategically placed to create a sense of grandeur and order in the urban landscape.



#### > RENAISSANCE .. 14 TH TO 17 TH CENTURY AD:

- Key aspects of city planning during the Renaissance:
- 4. <u>Fortifications</u>: Defensive walls and fortifications were a common feature of Renaissance cities, as they were necessary for protection against attacks.
- 5. Gardens and Green Spaces





#### RENAISSANCE .. 14 TH TO 17 TH CENTURY AD:

- Key aspects of city planning during the Renaissance:
- 7. <u>Water Management</u>: Renaissance cities often featured advanced systems for water management. These included fountains, aqueducts, and canals for the supply of clean water, as well as drainage systems to prevent flooding and maintain cleanliness.
- 8. <u>Perspective and Aesthetics</u>: Renaissance city planners applied the principles of perspective and aesthetics to create visually appealing urban spaces. This involved using symmetry, proportion, and harmonious architectural design to create a sense of beauty and order.

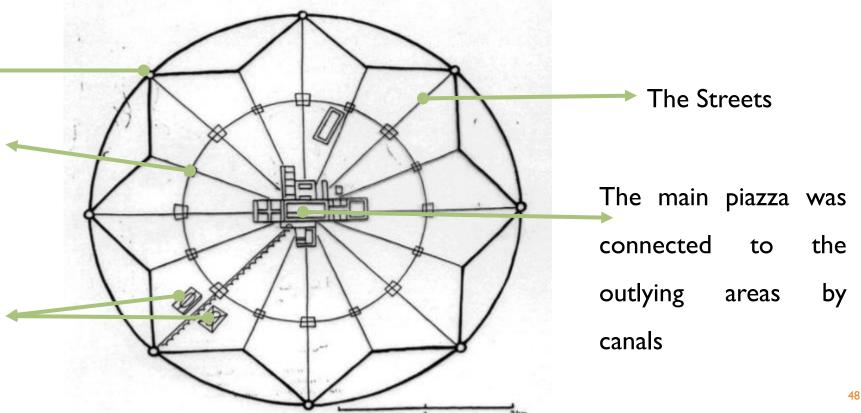
#### RENAISSANCE .. 14 TH TO 17 TH CENTURY AD:

#### DIFFERENT PARTS OF THE IDEAL CITY



16 small squares serving churches & markets

Rectangular main square with two piazzas, one with the cathedral, & other with the bank





#### ASSIGNMENT 2

Each group should discuss and analyze only one project of the following town planning theories:

I. Modern Movement (Le Corbusier)

The following points must also be discussed in your research:

- I. Introduction
- 2. Project concept
- 3. Different parts of the project

Assignment #2 submission is next week in a <u>Hard-copy (A4) format as well as Soft copy.</u>

#### QUESTION EXAMPLES

- I. How did the formation and evolution of shelters in the prehistoric era develop?
- 2. Explain the urban planning of the first settlement in history.
- 3. What were the architectural and urban planning features available in Catal Huyuk?
- 4. What were the main design principles that ruled the ancient Egyptian cities?
- 5. What were the basic elements that ruled the urban planning of the ancient Egyptian (Mesopotian, ancient Greek, Islamic,...) cities? Use sketches.

#### QUESTION EXAMPLES

- 6. Compare old cities and new cities in ancient Greece.
- 7. Compare Agora and Acropolis in the ancient Greek cities.
- 8. Define the following terms: Town, Acropolis, Agora, the three magnet, Forum & Hippodamus theory.
- 9. Analyze the main parts of the following ancient Greek city and determine it's type.
- 10. Compare the Garden City and Radiant City theory.
- 11. Compare the different parts of the Garden City and Ideal City.
- 12. Explain the Garden City theory and determine an example of a city that was built upon said theory

# ANY QUESTIONS?????

## THANK YOU....

The references to multiple sources are text & figures (sketches, drawings, pictures, photos,...etc.)

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