

PREHISTORIC ARCHITECTURE

Lecture 2



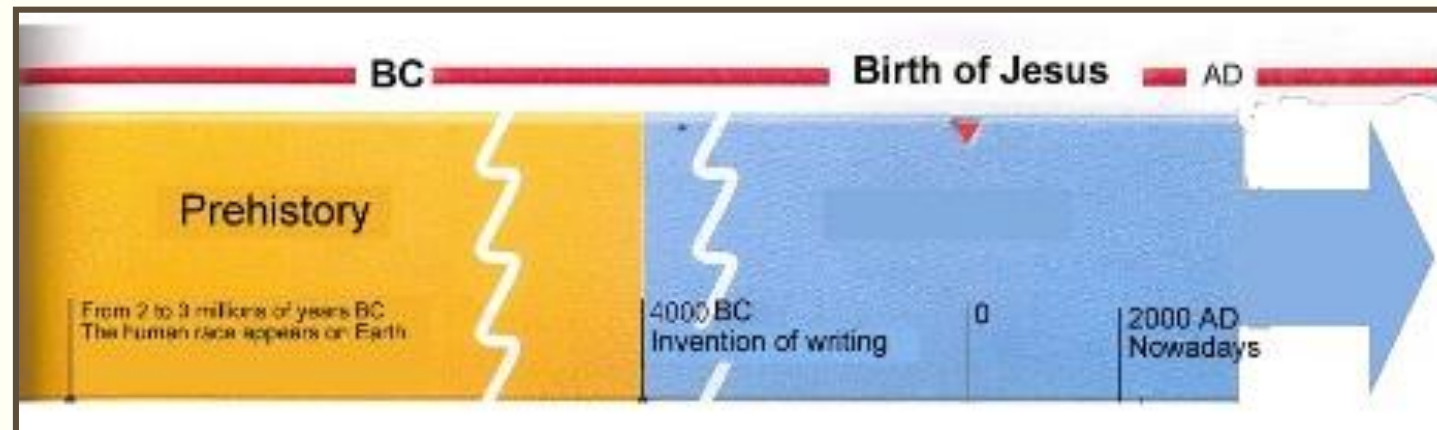
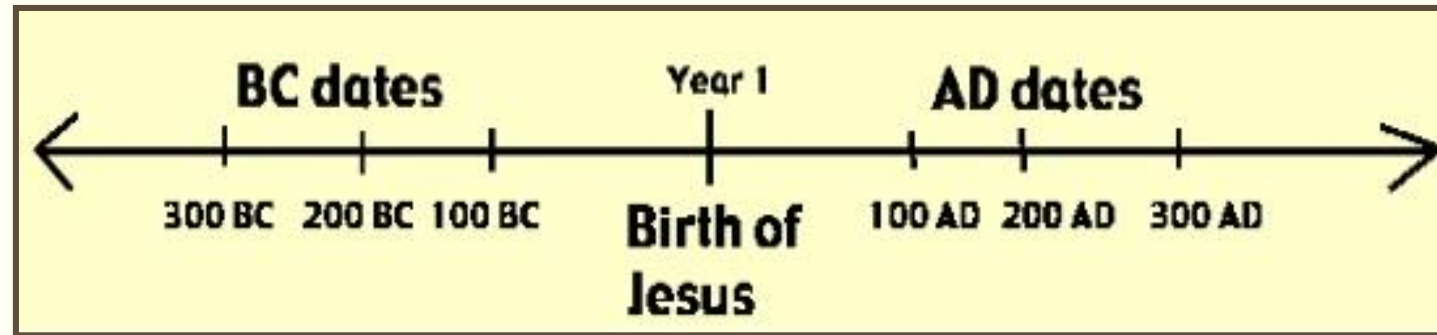
Dr. Mona Yehia
Spring 2017

Lecture Content

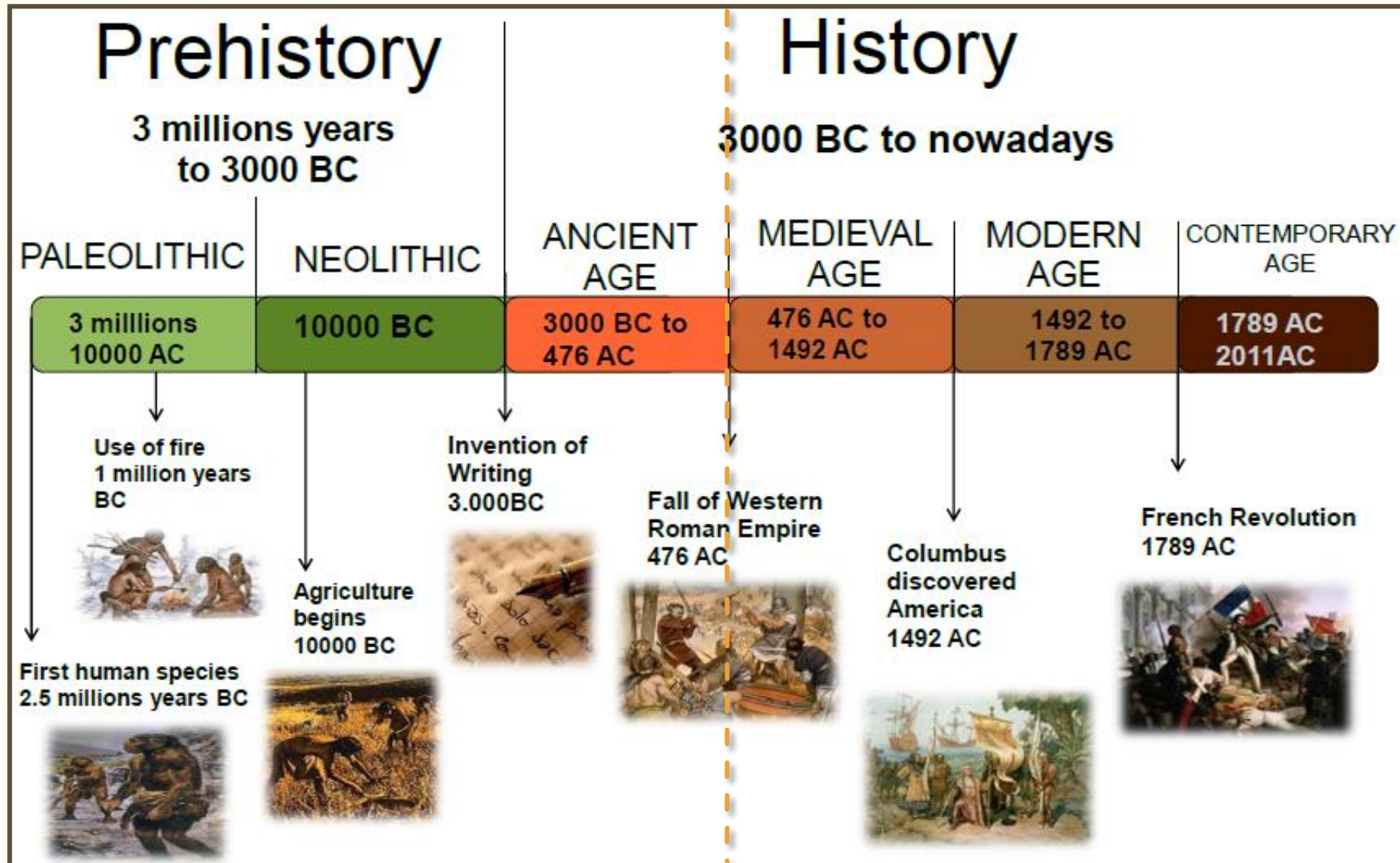
- **Prehistoric Architecture:** Introduction, definition, characteristics, historic ages,....
- **Paleolithic Ages:** Definition, tools, art, dwellings,.....
- **Mesolithic Ages:** Definition, main features, dwellings,.....
- **Neolithic Ages:** Definition, main features, dwellings,.....

Prehistoric Architecture: **Introduction**

- B.C.= Before Christ (the years before the birth of Jesus Christ)
- A.D.= Anno Domini (the years after the birth of Jesus Christ)



Prehistoric Architecture: **Introduction**



Prehistoric Architecture: **Introduction**

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

Life in prehistory: The fight for survival

What do we need to survive???



Protection



Water



Food

Prehistoric Architecture: **Introduction**

For Shelter



For Food



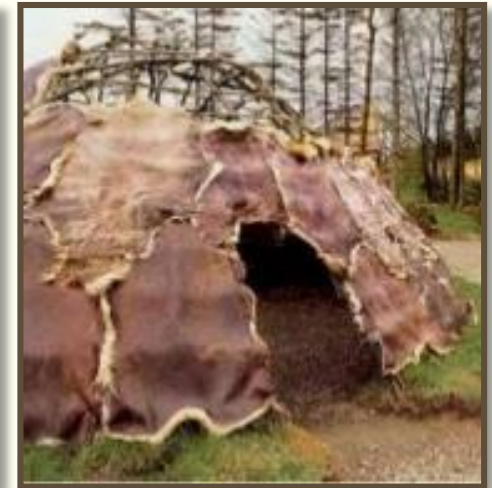
For Dress



Prehistoric Architecture: **Definition**

This was the type of architecture invented by the primeval man to get shelter and protection:

- From variable extreme weather conditions.
- From wild beasts and enemies



Prehistoric Architecture: **Characteristics**

1. Materials:

- Animal Skins
- Wooden frames
- Animal bones

2. Construction System:

- Existing excavated caves
- Megalithic Structures

3. Decorations:

- Caves paintings in Africa, France and Spain
- Sculpture



Prehistoric Architecture: **Historic Ages**

Paleolithic

- Old Stone Age
- 2 million years ago

Mesolithic

- Middle Stone Age
- 20000B.C. to 9500B.C.

Neolithic

- New Stone Age
- 9000B.C. to 4500 B.C.

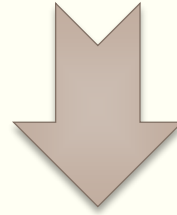
Prehistoric Architecture: **Paleolithic Ages**



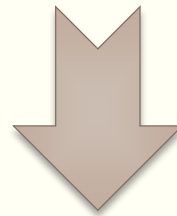
Prehistoric Architecture: **Paleolithic Ages**

In Paleolithic people were **Nomadic**, always on the move from one place to another...

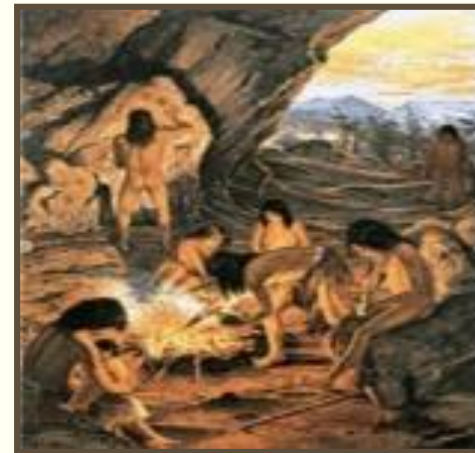
They usually move about in small bands of less than 15 persons



1. Protection from bad weather, dangers,....
2. Search of food



They sheltered in caves



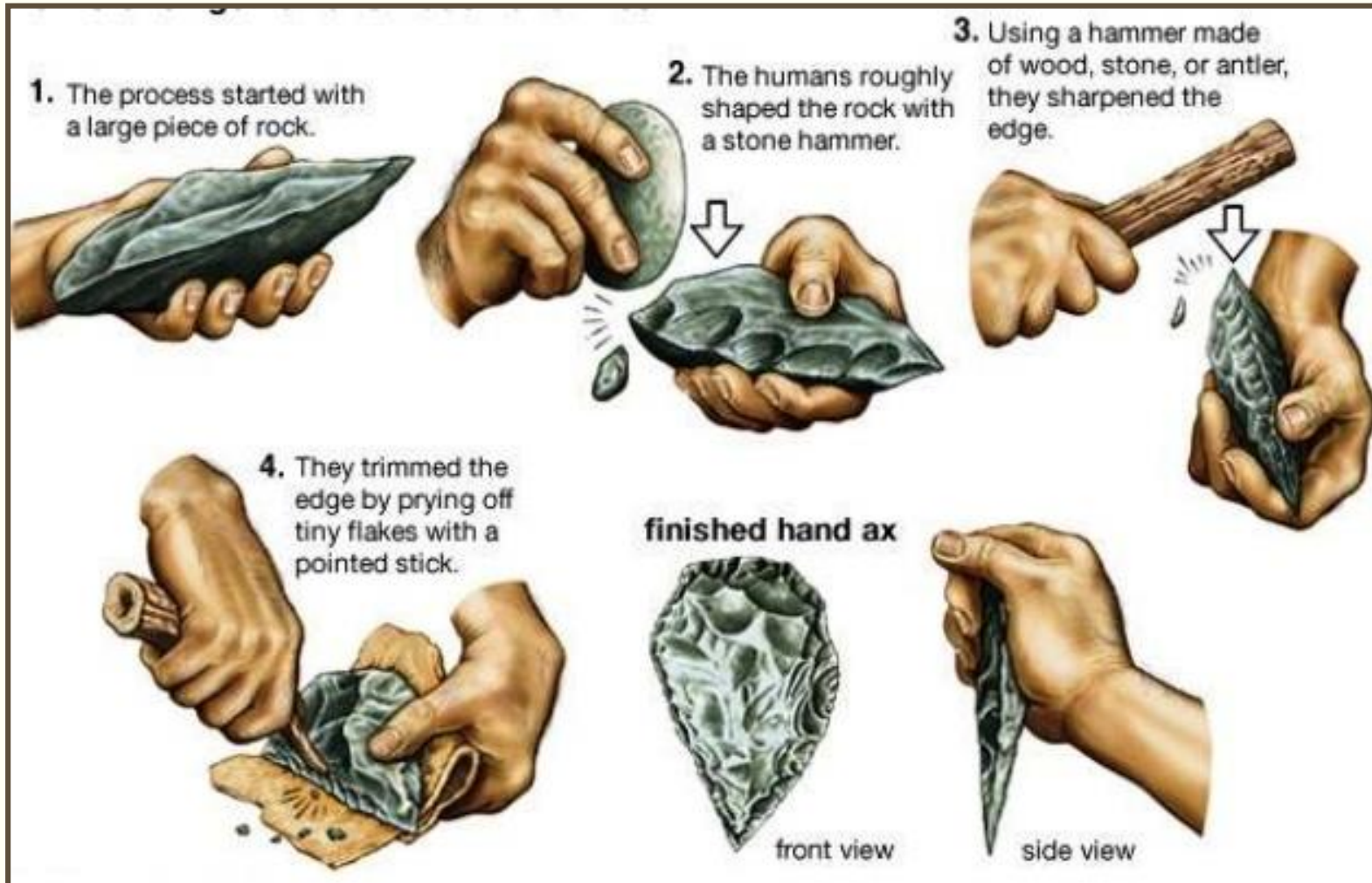
Prehistoric Architecture: **Paleolithic Ages Tools**

- To hunt food, early humans formed spears.
- First by sharpening the ends of sticks, but later by attaching a sharp stone to wood



Prehistoric Architecture: **Paleolithic Ages Tools**

How Stone Age humans made hand axes



Prehistoric Architecture: **Paleolithic Art**

- Representational art depicted everyday events such as food collecting, hunting, ..
- Paintings on the walls and ceiling of caves.



Prehistoric Architecture: **Paleolithic Dwellings**

Dwellings consist of simple shelters.

They created in wood and stone.

Examples:

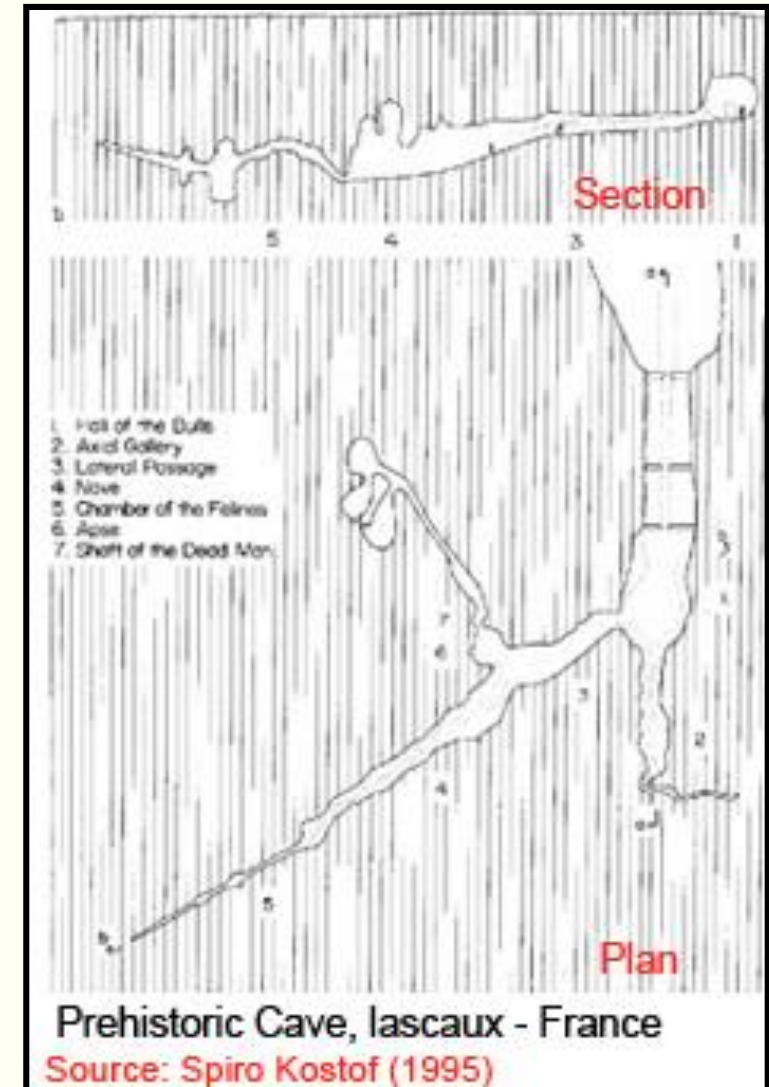
1. Cave Dwelling
2. Rock Shelter
3. Temporary structures of plant and animal materials



Prehistoric Architecture: **Paleolithic Dwellings**

1. Caves:

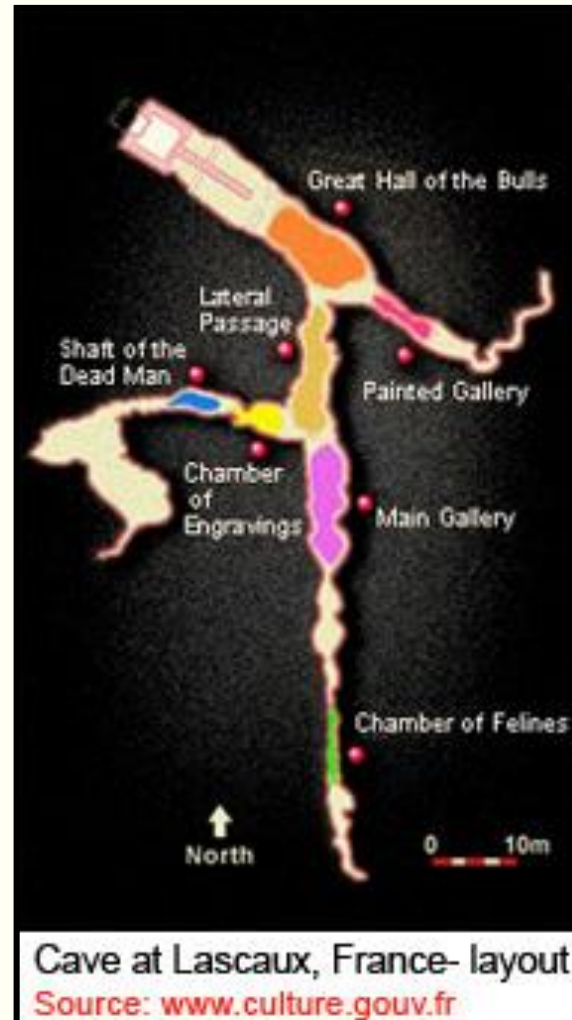
- The oldest and most common types of dwellings.
- Natural underground spaces, large enough for a human.
- Example: Rock shelters Lascaux in France



Prehistoric Architecture: **Paleolithic Dwellings**

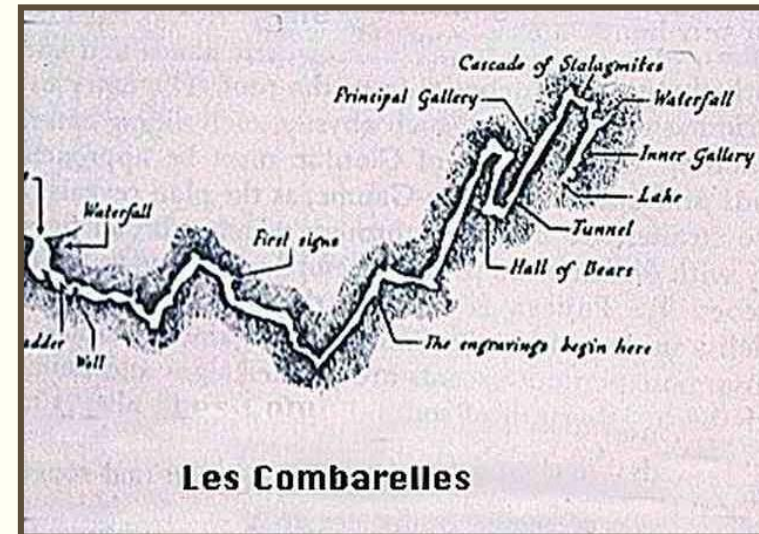
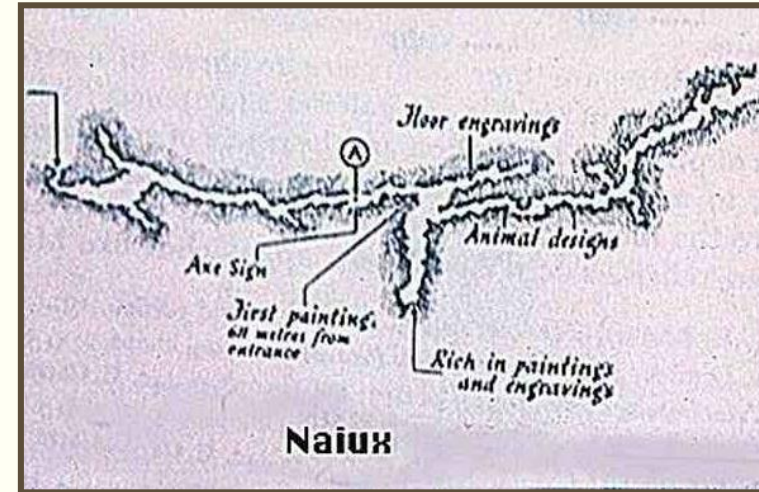
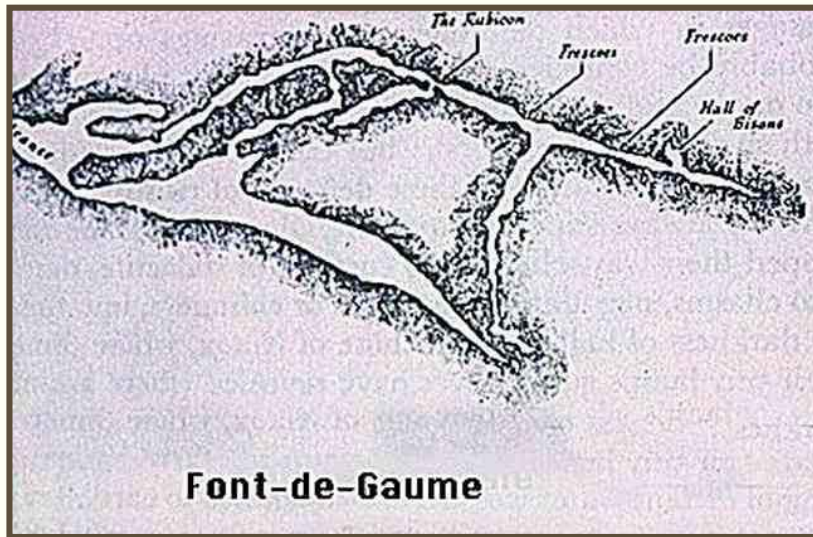
Cave at Lascaux, France:

1. Discovered in 1940
2. Entered through one entry to a large hall.
3. From the hall, cave branches out into other spaces.
4. Interior has elaborate paintings of animals and hunting scenes.
5. The artwork celebrates the hunting life of the early stone age people.



Prehistoric Architecture: **Paleolithic Dwellings**

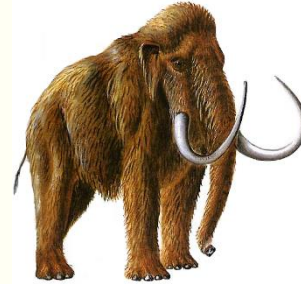
FRANCE: Maps of Other Caves



Prehistoric Architecture: **Paleolithic Dwellings**

2. Molodova:

- A more sophisticated shelter.
- Wood framework covered with skins, held in place by rough oval mammoth bones.



3. Mezhirich

- Consisted of foundation wall of mammoth jaws and long bones, capped with skulls.
- Roofed with tree branches, overlaid by tusks.



Prehistoric Architecture: **Mesolithic Ages**



Prehistoric Architecture: **Mesolithic Ages**

Period during which human began to control fire and develop language

- The name “ Mesolithic” comes from two separate words, **Mesos=Middle** and **Lithos=Stone**
- Is a period of transition from Old Stone Age to the New Stone age.
- **Main Features:**
 - 1- Farming communities began to be established.
 - 2- Began to learn how to domesticate animals and plants.
 - 3- Settled communities.
 - 4- Art is schematic; no realistic figures are present.

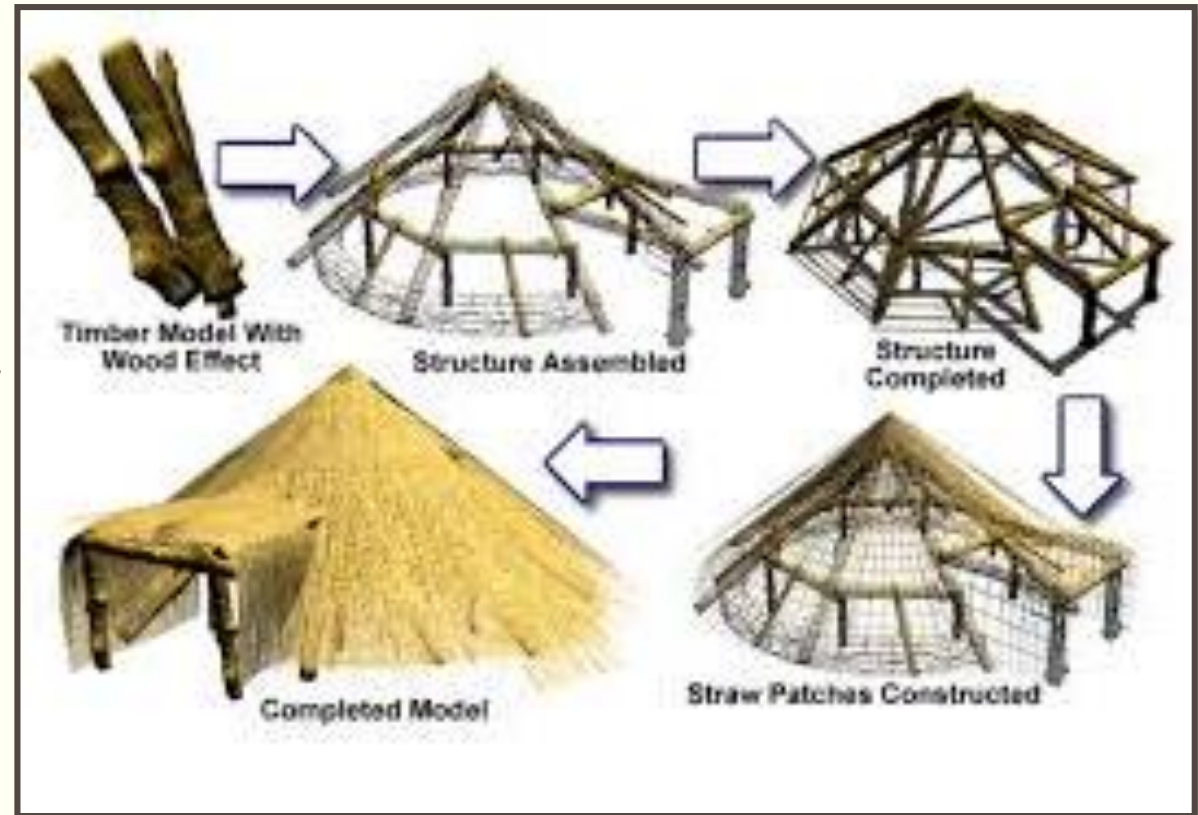
Prehistoric Architecture: **Mesolithic Dwellings**

Villages arranged systematically:

1. Houses aligned in rows.
2. More regular in plan.
3. Artifacts came into existence.
4. Settlements began around water bodies.
5. Dwellings more durable.

Examples:

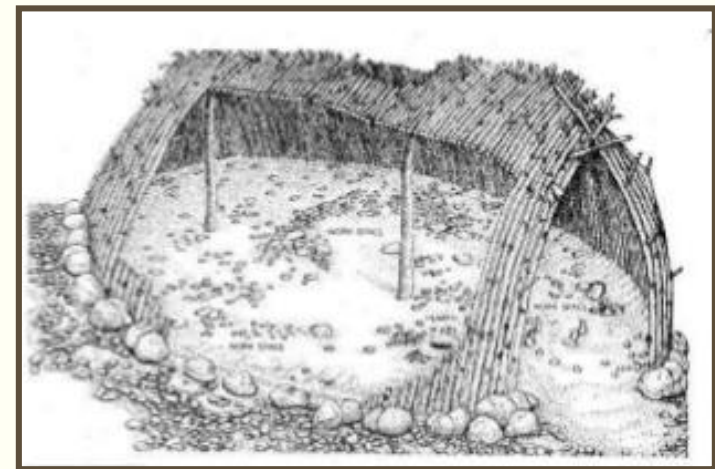
1. Huts
2. Pit Houses



Prehistoric Architecture: **Mesolithic Dwellings**

1. Huts:

- Is a temporary structures
- Located in southern French cities.
- It is left to collapse after use and new huts built over by the next years hunting season
- Oval in shape.
- Built close to sea shores.
- Built using with stones as supports.
- Floor made of organic ash.



Prehistoric Architecture: **Mesolithic Dwellings**

2. Pit Houses:

- More common in eastern Europe.
- Oval trapezoidal, pear shaped size.
- Central post holes indicating existence of roof.
- Constructed by making shallow depressions in the ground surrounded by a ring of mammoth bones .



Prehistoric Architecture: **Neolithic Ages**



Prehistoric Architecture: **Neolithic Ages**

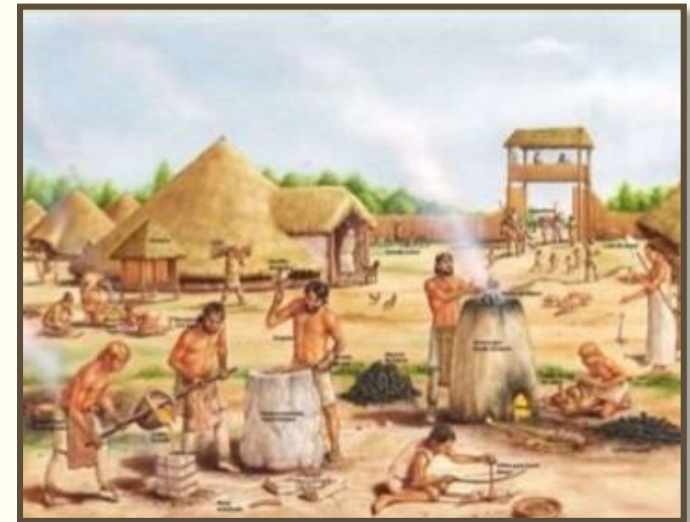
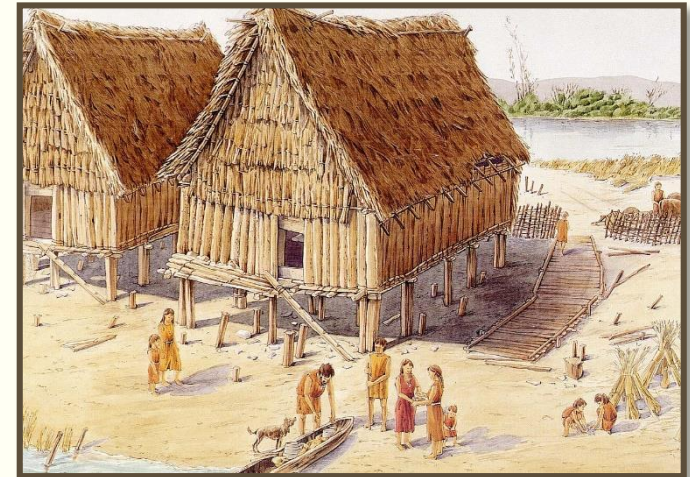
The period of human culture began around 10,000 years ago.

Also called New **Stone age**.

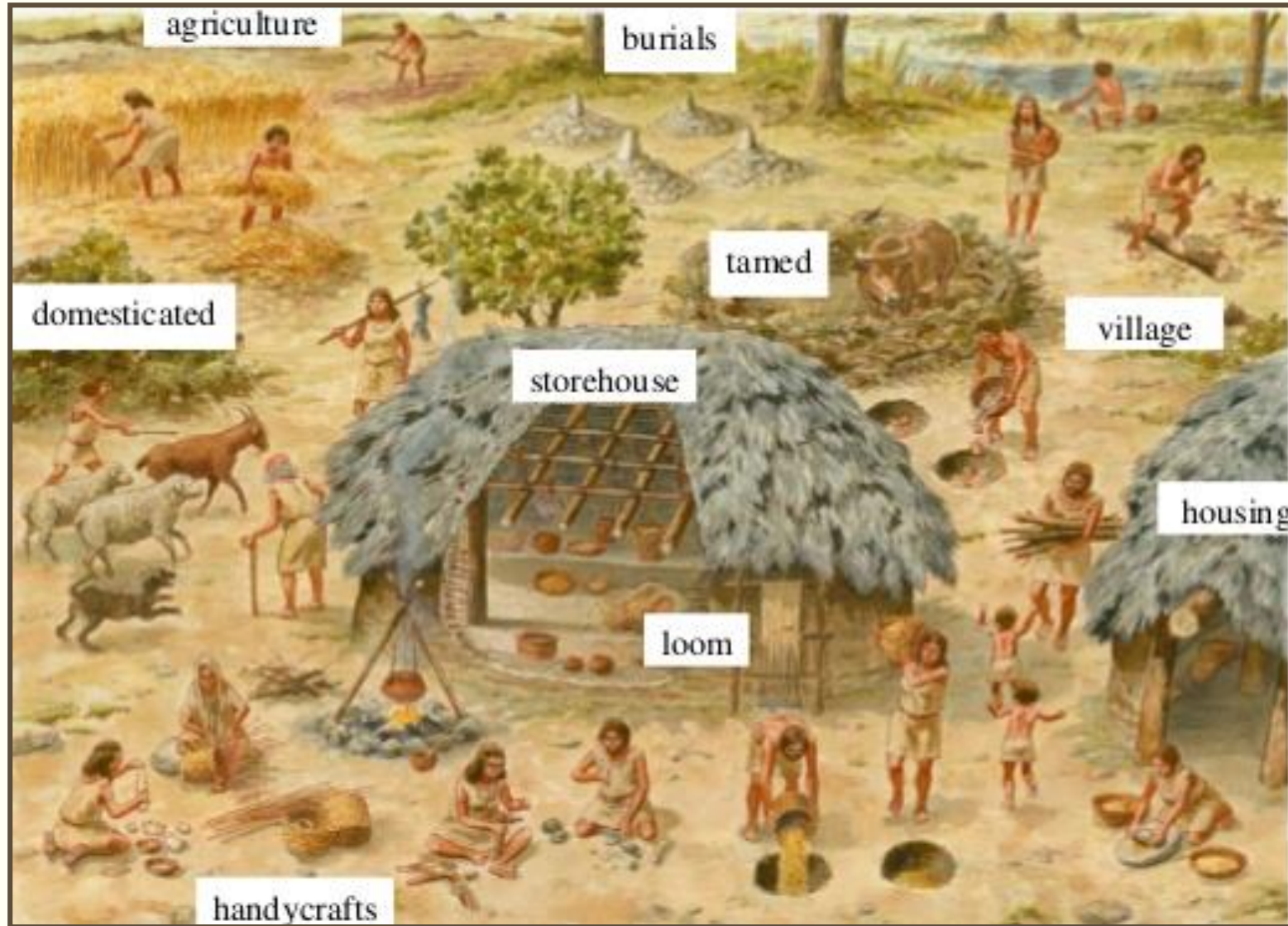
Began when humans invented agriculture and started making tools out of metal instead of stone.

After starting agriculture Neolithic people began to focus on making their lives comfortable and beautiful: Decorating clothing, pottery, jewelry,...

They began to trade for things they wanted, so people traders.



Prehistoric Architecture: **Neolithic Ages**



Prehistoric Architecture: **Neolithic Ages**

Main features:

1- Establishing communities

- Farming allowed people to settle down near their farms.
- This created early towns and villages.
- Ability to divide work together.
- Shared defense.



Prehistoric Architecture: **Neolithic Ages**

Main features:

2- Permanent Shelter

<p>Protection from weather</p> 	<p>Protection from wild animals</p> 	<p>More comfortable</p> 	<p>Ability to form communities</p> 
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Prehistoric Architecture: **Neolithic Ages**

Main features:

3- Developing new jobs

<p>Farmers</p> 	<p>Weavers</p> 	<p>Tool Makers</p> 	<p>Traders</p> 	<p>Builders</p> 
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Prehistoric Architecture: **Neolithic Dwellings**

- Architecture evolved when early Stone Age man became settled.
- Once settled, he learned to build permanent structures.
- Dwellings became more sustainable.
- Early villages were simple with no palaces, rich houses or non-residential buildings
- Houses were built with square, rectangular plans with sections divided with animal skins.



Prehistoric Architecture: **Neolithic Dwellings**

Examples:

1- Houses:

A) Timber framed houses

- Tripartite
- Bipartite
- Single Bay Houses

B) Dry Stone Houses

C) Mud brick houses

Examples:

2- Tombs:

- Dolmen

3- Megalithic Monuments:

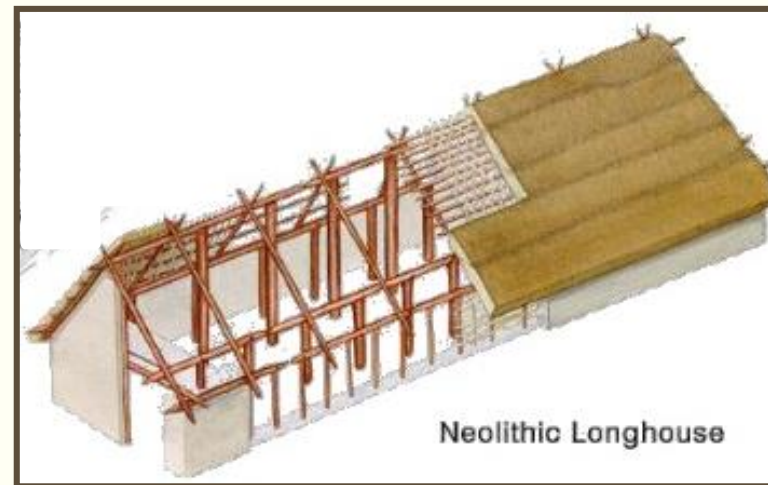
- Monolith
- Stonehenge, England

4- Neolithic Dwelling and Settlement- Catal Huyuk

Prehistoric Architecture: **Neolithic Dwellings**

1- Houses: A) Timber framed houses:

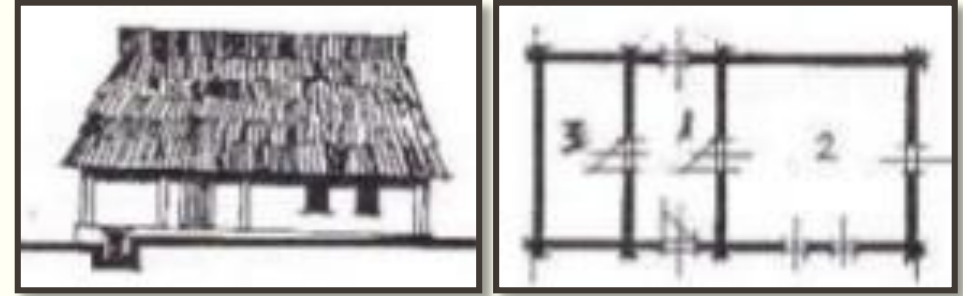
- Square plans.
- Mud wall with footings.
- These were more durable as compared to the earlier ones.
- Pitched roofs.
- Interiors raised, plastered with sunken hearths.



Prehistoric Architecture: **Neolithic Dwellings**

A-1) Tripartite:

- Entrance facing the east.
- Central part being the living room.
- The third part containing deep storage area.



A-2) Bipartite:

- Entrance.
- Living room combined with storage.



A-3) Single Bay Houses:

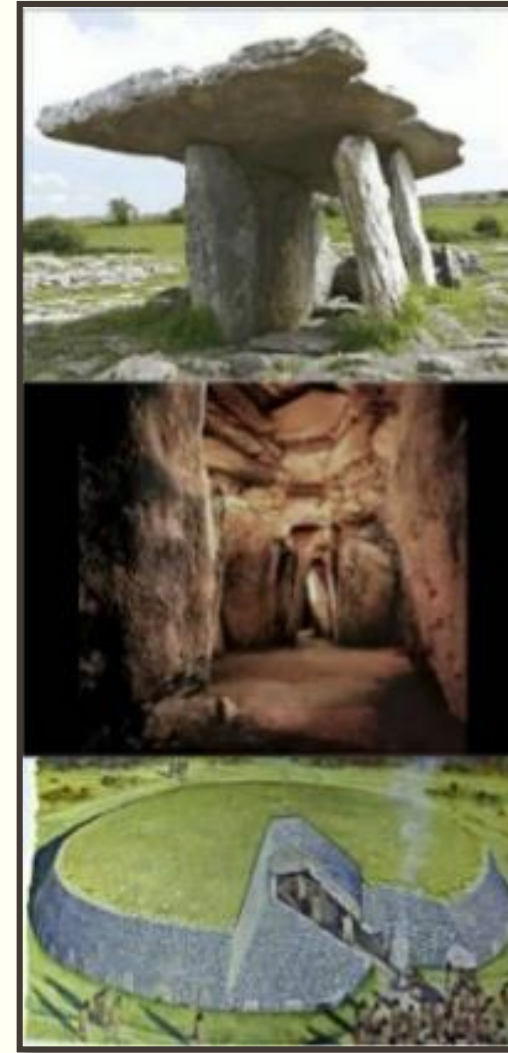
Having living rooms only.



Prehistoric Architecture: **Neolithic Dwellings**

2- Tombs: Dolmen

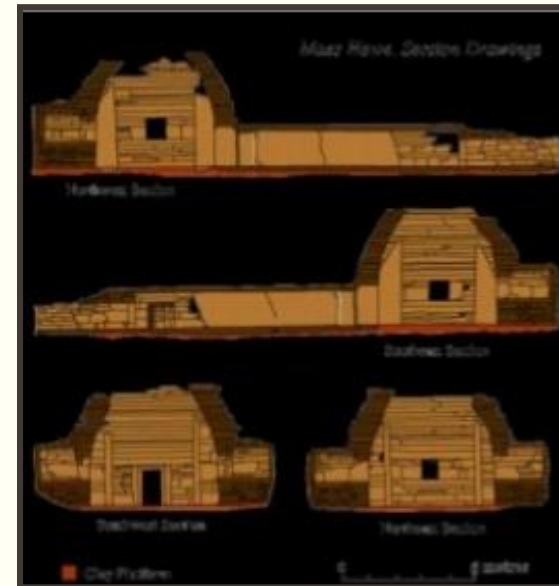
- Dol = table + maen stone
- Are two or more upright stones supporting a horizontal slab.
- All are held together by their weight.
- Burial features.
- Settlements lead to building of monumental architecture.
- There were mainly collective tombs:
- Passage graves
- Gallery Graves



Prehistoric Architecture: **Neolithic Dwellings**

A - Passage graves:

- Covering mound surrounded by wide space with wide space with wide ditch beyond.
- Entrance passage 1m wide and 1.5m high.
- The entrance lead to burial chamber.
- Burial Chamber:
 - ✓ Smooth walls built with rectangular blocks and fine joints.
 - ✓ Three cells at tree sides of the chamber.
 - ✓ Built mainly with masoned walls and corbelled roof.



Prehistoric Architecture: **Neolithic Dwellings**

3- Megalithic Monuments:

- Megalithic means large stone.
- Megalithic construction involves setting up large stone blocks alone or leaning against each other.
- Sometimes post and lintel construction is used.
- Very similar to the Egyptian pyramids.
- Stone is quarried from rocks, transported by rollers pulled by people.

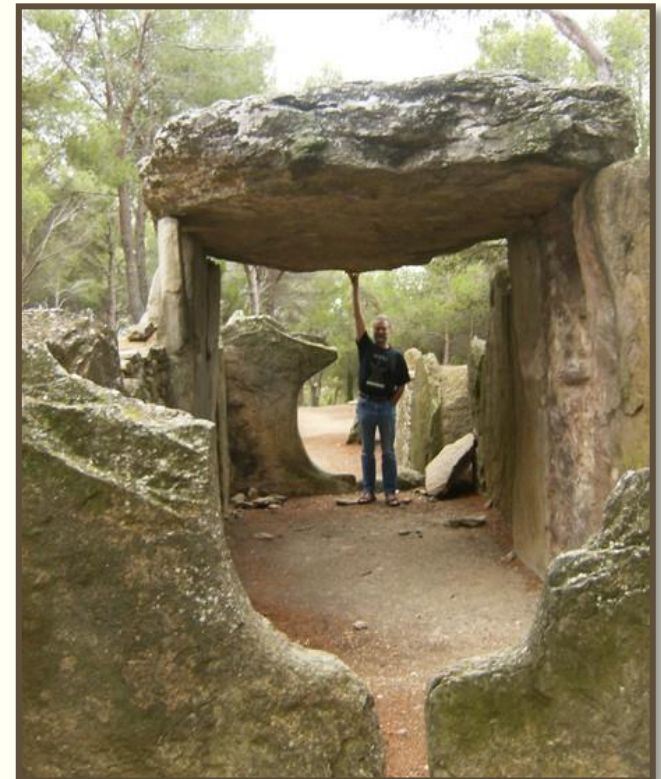


Prehistoric Architecture: **Neolithic Dwellings**

Categorization of Megalithic Monuments:

Among prehistoric remains of archaeological interest, but of little architectural value, are:

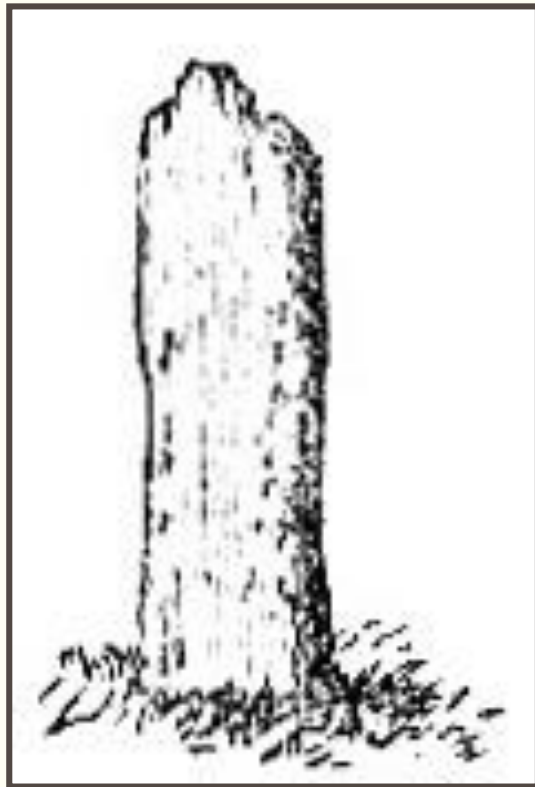
- 1- Monoliths
- 2- Stonehenge



Prehistoric Architecture: **Neolithic Dwellings**

1- Monoliths :

Are single upright stones, known in Western France as "menhirs," (*Maen*, a stone, *hir*, high),



Prehistoric Architecture: **Neolithic Dwellings**

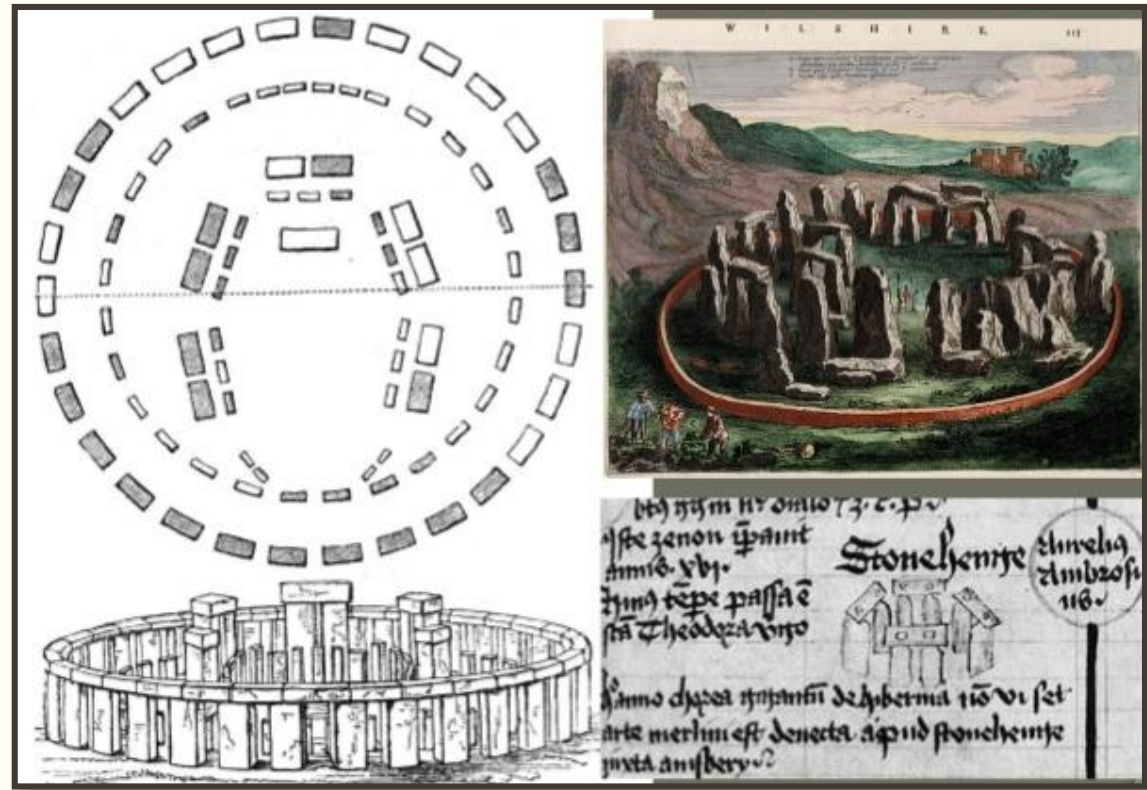
2- Stonehenge:

- The actual function of the structure is still not clear.
- The Stonehenge is a remarkable monument.



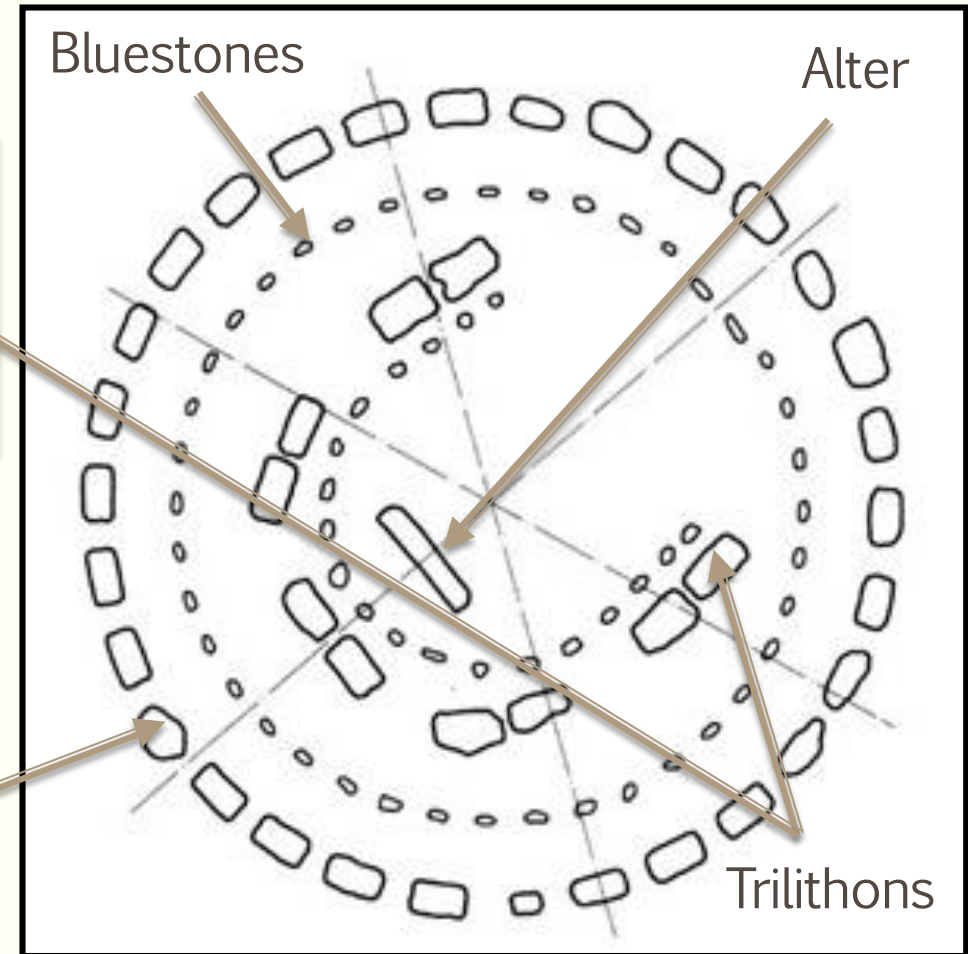
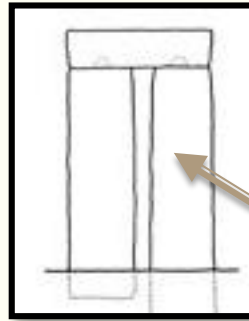
Prehistoric Architecture: **Neolithic Dwellings**

- Outer ring, inner ring, innermost horseshoe-shaped ring with open and facing east.
- Largest stones weigh 45 to 50 tons.
- Stones transported by sea or river then hauled on land with sledges and rollers by hundreds of people.



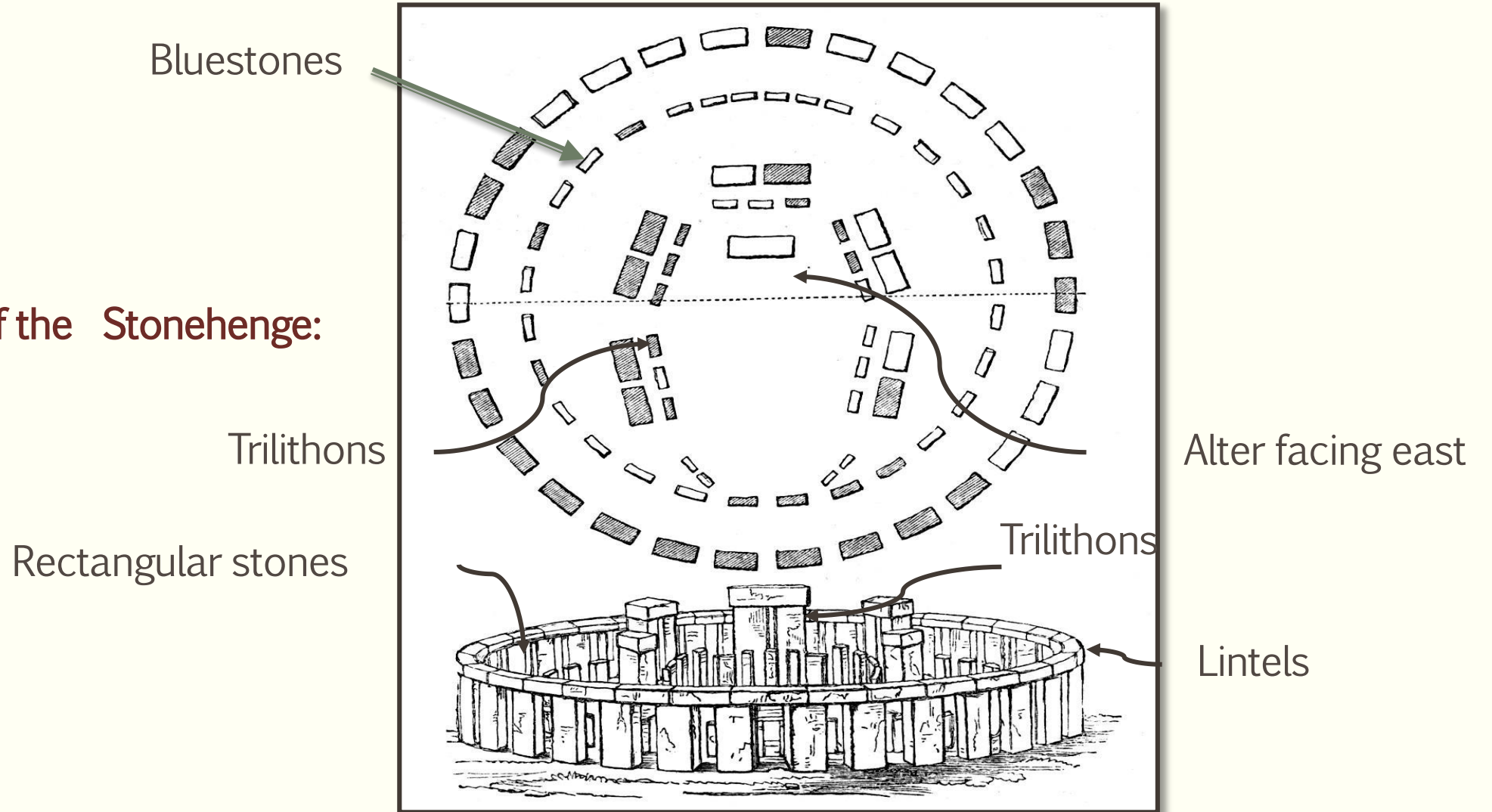
Prehistoric Architecture: **Neolithic Dwellings**

- The plan of Stonehenge is arranged in the form of concentric circles
- At the center is an alter
- Around it five trilithons
- Beyond trilithons a circle of blue stones from Wales
- Beyond blue stones, an outer monumental circle of large rectangular blocks capped by continuous lintel



Prehistoric Architecture: **Neolithic Dwellings**

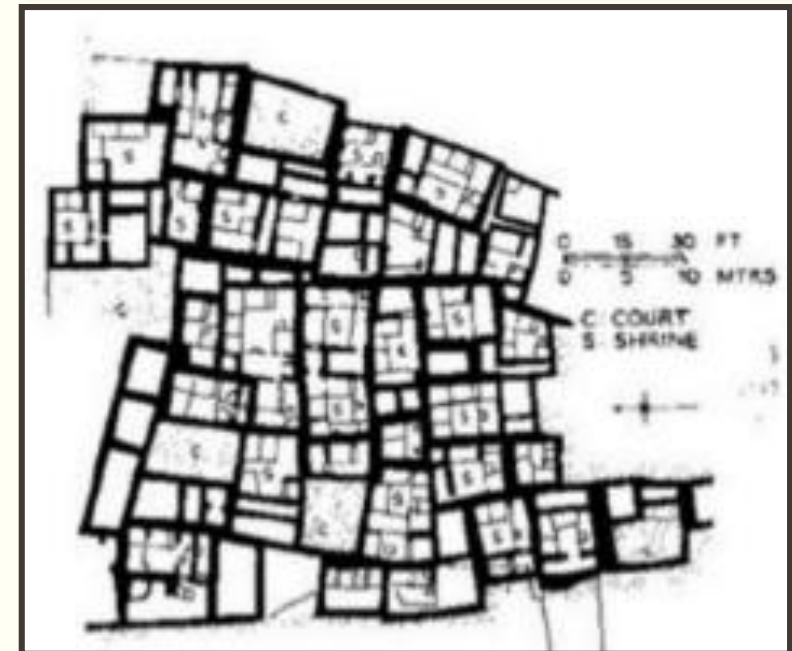
Parts of the Stonehenge:



Prehistoric Architecture: **Neolithic Dwellings**

4- Neolithic Dwelling and Settlement- Catal Huyuk

- Occupied between 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.

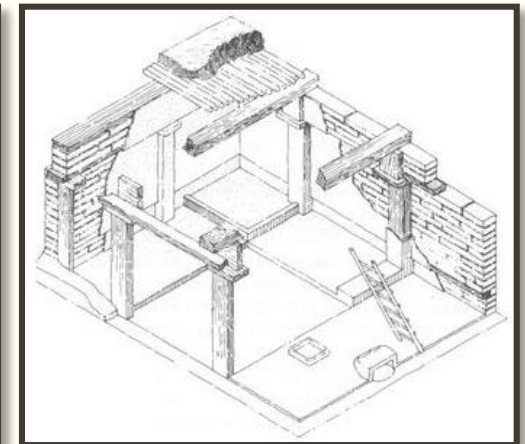
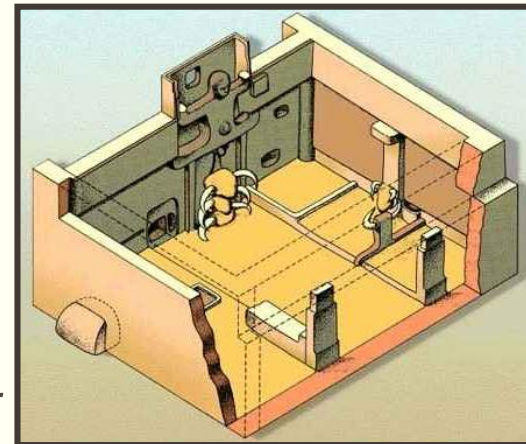


Prehistoric Architecture: **Neolithic Dwellings**

Architectural features:

1- Houses:

- Were packed in one continuous block.
- Houses were made of one story mud construction.
- Many houses have cult rooms decorated with bull heads.
- Some houses appear to be shrine.
- Houses had main rooms with in built clay furniture, fire places, and ladder to the roof.

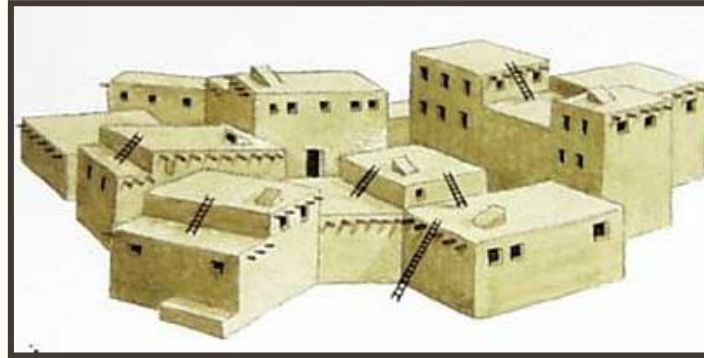


Prehistoric Architecture: **Neolithic Dwellings**

Architectural features:

2- Courtyards:

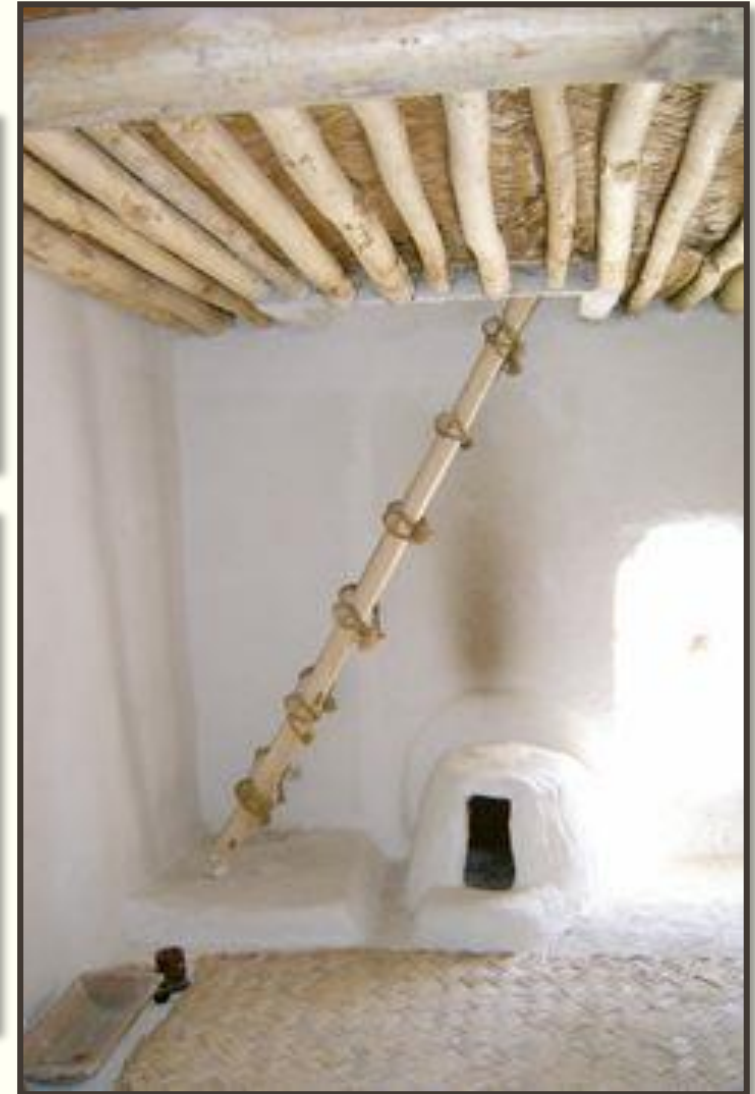
- Houses were punctuated by courtyards.



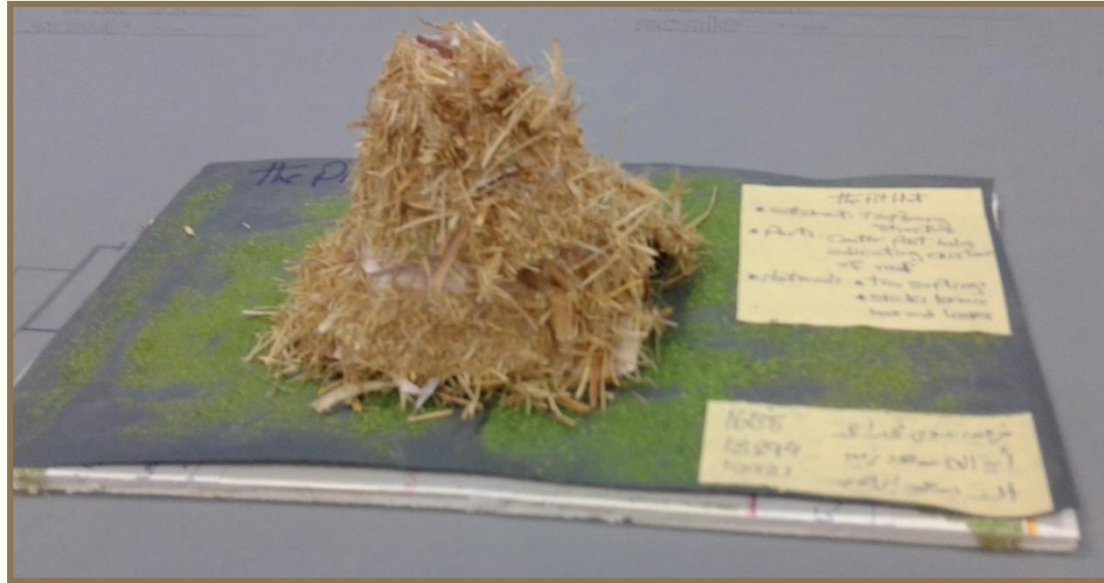
3- Ladders

4- Shrine

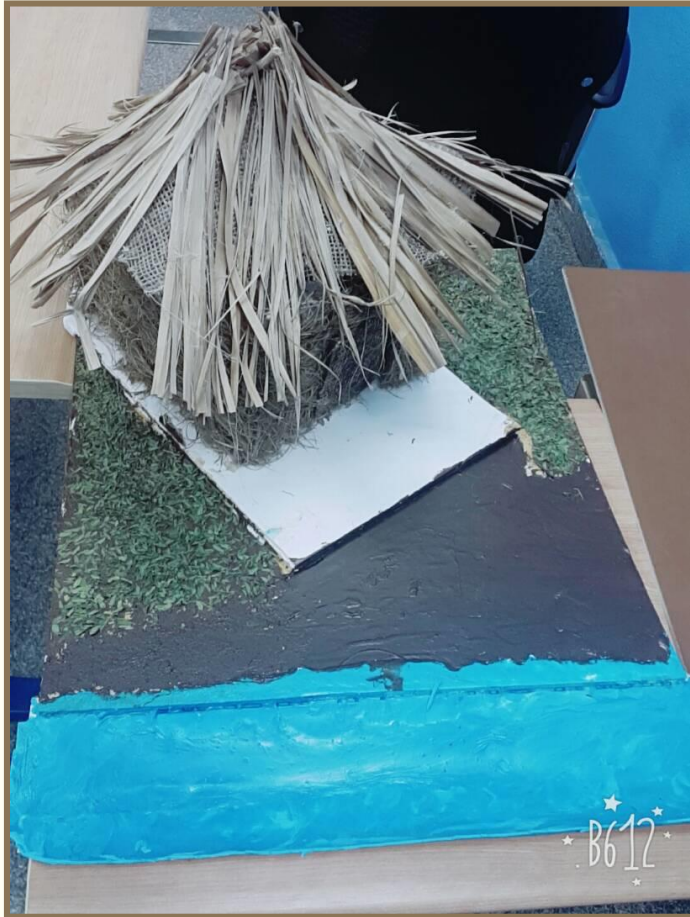
No Streets in settlement
and access to houses
was through the roof



Research (1): **3D Model**



Research (1): **3D Model**



Thank you