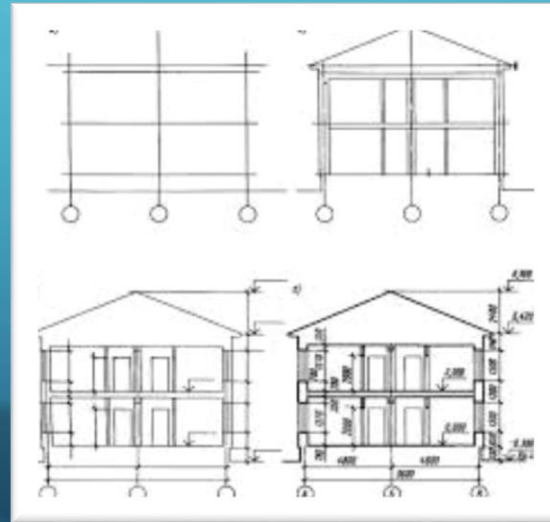


# THE TOPIC: “PARTS OF A BUILDING”



# FIND TRANSCRIPTION FOR EACH WORD AND TRANSLATE

<b>timber</b>	<b>['mo:tə]</b>
<b>concrete</b>	<b>['meisnri]</b>
<b>steel</b>	<b>[sænd]</b>
<b>lime</b>	<b>[brik]</b>
<b>stone</b>	<b>[fain' sænd]</b>
<b>brick</b>	<b>[sti:I]</b>
<b>sand</b>	<b>['konkri:t]</b>
<b>fine sand</b>	<b>['timbə]</b>
<b>masonry</b>	<b>[laim]</b>
<b>mortar</b>	<b>[p'la:stə]</b>
<b>plaster</b>	<b>[stoun]</b>

# **DIVIDE THESE MATERIALS INTO TWO GROUPS ARTIFICIAL AND NATURAL**

Brick, alumina, clay, cement, sand, concrete, stone, lime, steel, limestone, timber, gravel, glass, plastics, crushed stone, reinforced concrete, silica, gypsum.

<b>ARTIFICIAL BUILDING MATERIALS</b>	<b>NATURAL BUILDING MATERIALS</b>

# Match building material with its description

1.It is the first building material. It is cheap, light, easy to work. It burns and decays. It is used for 2 or 3-storied buildings.	A) Stone
2.It is fireproof, mechanical strength, porosity, compactness, has good sound and heat insulation properties.	B) Timber
3.It is very strong in compression, easy to produce at site. It is cheap, fireproof and weatherproof, molds any shape, strong in compression, cracks with temperature changes, weak in tension.	C) Steel
4.It is made of burnt clay, cheap, strong in compression. It is used for walls of early skyscrapers and tunnels, domes.	D) Plastics
5.It is one of the strongest materials used in construction, strong in compression and tension, rusts, loses strength in extremely high temperature. It is used for cables in suspension bridges, buildings.	E) Concrete
6.It is flexible, lightweight, long lasting, strong in compression and tension, expensive, has good insulating properties.	F) Brick

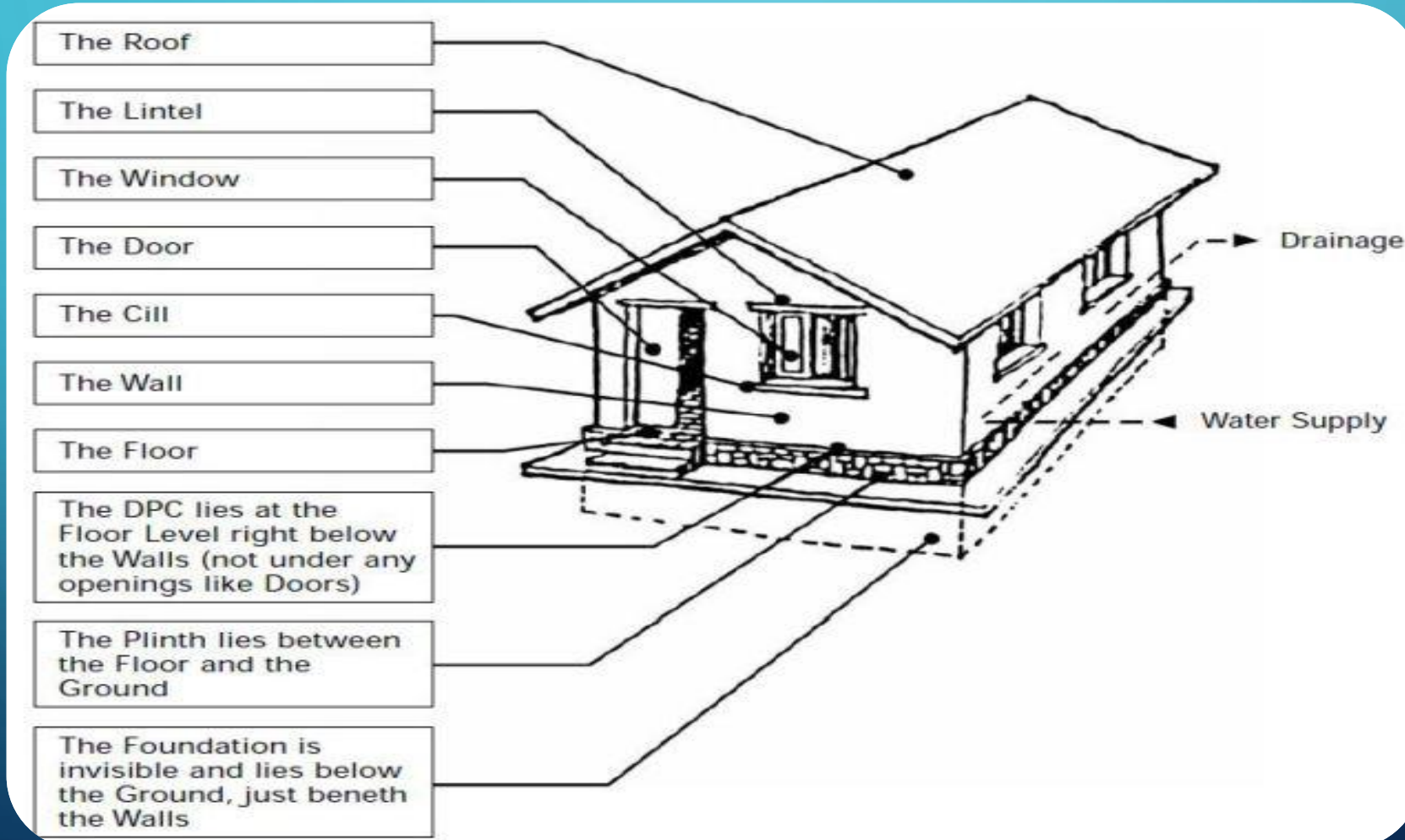
# READ WORDS, TRY TO MATCH ENGLISH AND UKRAINIAN WORDS

1. Floor	a) Двері
2. Framework	b) Фундамент
3. Ceiling	c) Дах
4. Roof	d) Стіна
5. Wall	e) Каркас
6. Foundation	f) Підлога
7. Footing	g) Стеля
8. Window	h) Сходи
9. Stairs	i) Підвал
10. Door	j) Підлога
11. Basement	k) Вікно



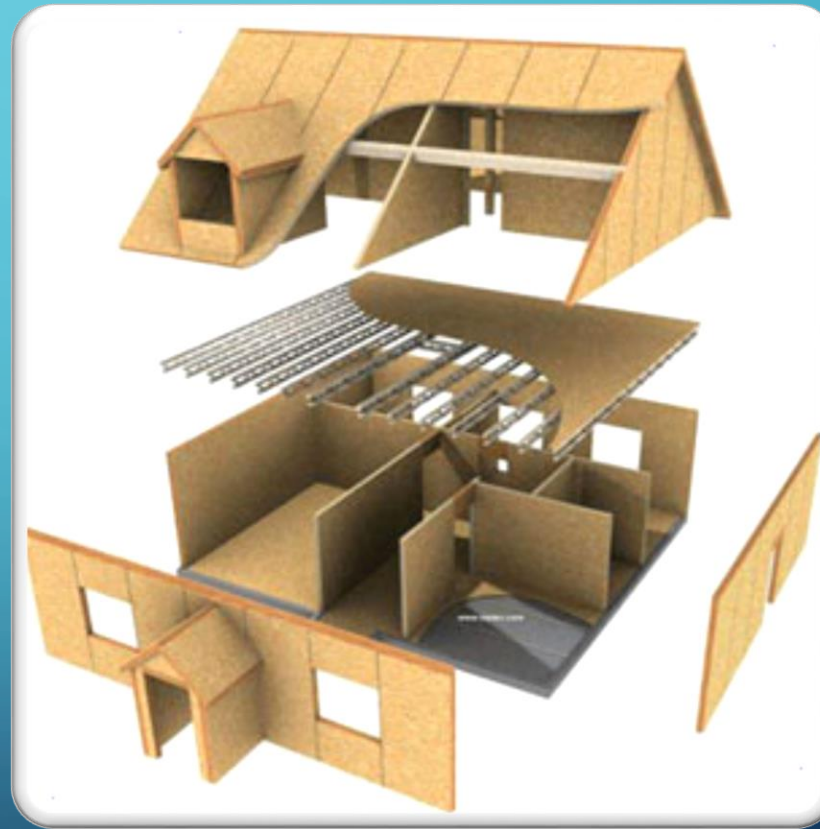
# BASIC COMPONENTS OF A BUILDING.

## A BUILDING CONSISTS OF FOLLOWING BASIC COMPONENTS:



# THE ORDER IN WHICH THEY ARE CONSTRUCTED:

- Footing
- Foundation
- Floor
- Walls
- Ceiling
- Roof



# FOOTINGS

- The Footings are where the building meets the ground. Everything is supported by the footings.
- Footings (or footer) may be poured concrete, gravel, or even a turned-down portion of a slab.





# FOUNDATION

- The foundation consists of the foundation walls (sometimes called “stem” walls) and other vertical elements needed to support the floor (piers and steel columns).
- Foundation walls may be formed concrete, treated wood, masonry (brick or concrete block) or nonexistent - in the case of slab construction, where the walls go up directly on top of thickened portions of the slab.



# FLOOR

- Floors divide a building into stories.
- Floor systems are either wood or concrete. In residential construction, concrete floors are slab-on-grade (concrete poured on the ground).
- You will usually use this type of floor system for the garage and basement, or for the main floor in southern areas where slab-on-grade is feasible for the first floor.
- For the rest of us, the wood floor is the standard. The wood floor consists of the supporting members - beams and joists - and the flooring material, usually a plywood product.



# WALLS

- The walls divide the interior space into rooms. They may support a load from above (load-bearing) or simply their own weight (partition wall).
- Walls are the vertical elements on which the roof finally rests. They can be made of different materials like bricks, stones, mud, concrete blocks etc. If the walls are very long, columns can be provided to carry the roof.
- Walls provide privacy and enclosure. Walls also provide security and protection against natural elements such as wind, rain and sunshine.



# CEILING

- A ceiling is an overhead interior surface that covers the upper limits of a room.
- Ceilings are supported by the walls below or by a ceiling beam.
- The ceiling does not actually support a vertical load. It is included in the load bearing elements of the building because it does support the rather significant weight of the drywall attached to it.



# ROOF



- Roof is the main part of a building.
- The roof provides protection for the building and the people living in it. The roof rests on the walls and requires proper anchoring so that wind and other mechanical impact cannot destroy it. A roof can have different shapes but it is always either flat or sloping.
- Roof should be stable, durable, weather resistant.



# SYSTEMS

## Systems:

The Plumbing, Electrical, and Mechanical - heating, ventilating, air conditioning (HVAC) - are the three major systems of the house. Included within the electrical system would be the security, communication, and entertainment systems for the building.



# CHOOSE THE CORRECT VARIANT AND COMPLETE THE SENTENCES:

1. The part upon which the stability of the structure depends is ...  
a) floor b) framework
2. The coverings or upper parts of the building are called ...  
a) ceilings b) roofs
3. The exterior of a building must be...  
a) with superfluous decorations b) simple
4. The water supply and sewerage systems are called ...  
a) heating b) plumbing



# COMPLETE THE FOLLOWING SENTENCES:

1. The excavation is dug ... .
2. The stability of the structure depends upon ... .
3. The building is divided into stories by ... .
4. The main parts of a building are ... .
5. The interior should be planned to suit ... .
6. Every building should be provided with ... .
7. An estimate depending upon the design of the building must be calculated ... .





# ANSWER THE FOLLOWING QUESTIONS:

1. What is done first during the construction of a building?
2. What keeps the walls and floors from contact with the soil?
3. What are the floors for?
4. What do the walls of a building serve for?
5. Does the stability of a building depend on the framework?



# **BUILDING QUESTIONNAIRE NAME:**

1. One part of the building upon which the stability of the structure depends.
2. Two components of cement.
3. Three components of concrete.
4. Four requirements for concrete.
5. Five natural building materials.
6. Six artificial building materials.
7. Seven parts of a building.



# SUMMARY

- ▶ Many materials are used in building construction, and each material reacts differently to heat and fire.
- ▶ The types of building construction each have their own strengths and weaknesses and different levels of resistance to fire.
- ▶ Buildings contain a variety of parts or components.
- ▶ Materials used in building components vary.



# **HOMEWORK**

Learn parts of building and their functions, building materials they are made of.



THANK YOU FOR THE  
LESSON!



