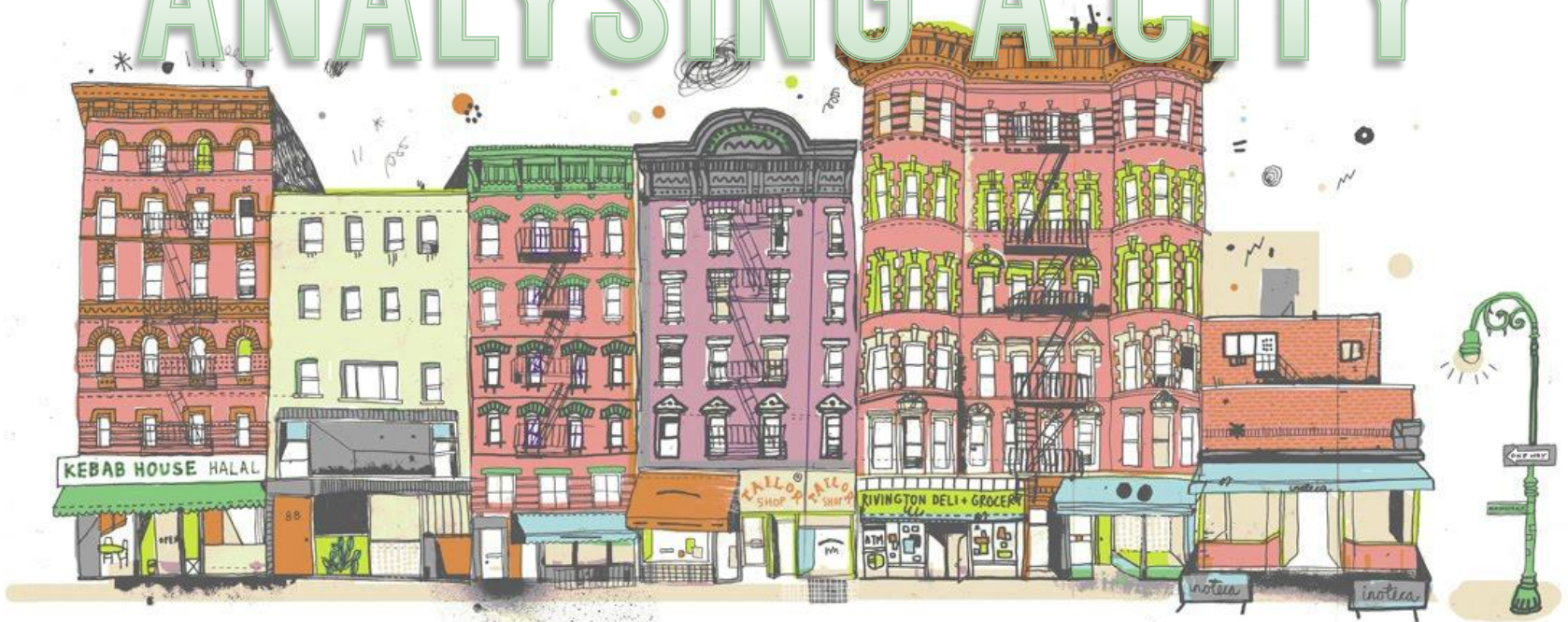# ANALYSING A CITY

TEACHER:
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SETTLEMENT

SETTLEMENT: refers to the action of people settling down and stablishing themselves in an area. Depending on the form they take, settlements can be rural (villages) or urban (cities)

DIFFERENCES BETWEEN RURAL & URBAN

	VILLAGE	TOWN	CITY
SIZE	Small	Big	Very big
POPULATION	Few people	Lot of people	Lot of people: larger than a town
AREA	Rural	Urban	Urban
STREETS	Narrow	Wide and busy	Wide and busy
TRAFFIC	A few cars and no traffic lights	Lots of cars and traffic lights	Lots of cars and traffic lights

	VILLAGE	TOWN	CITY
SERVICES	Few services: hospitals, schools, shops,...	Lots of services: hospitals, schools, shops, banks,...	Lots of services: hospitals, schools, shops, banks, airport,...
HOUSES	1 or 2 story houses	1 or 2 story houses and flats in tall buildings	1 or 2 story houses and flats in tall buildings
JOBS	Most people work in farming	Most people manufacture products or provide services	Most people manufacture products or provide services
YOUNG PEOPLE	Many young people to work or study to towns or cities	Young people work or study	Young people work or study

DIFFERENCES BETWEEN RURAL & URBAN

Let's watch a video 📢

RURAL SETTLEMENT

More than half the world population live in rural nuclei (plural of nucleus).

There are threee types of rural settlement:

- Dispersed settlement.
- Nucleated settlemet.
- Interspersed settlement.

RURAL SETTLEMENT

More than half the world population live in rural nuclei (plural of nucleus).

DID YOU KNOW...

Rural populations in the world total 3.4 billion people (47%), but they are decreasing quickly, especially in emerging and developing countries.

RURAL SETTLEMENT

RURAL SETTLEMENT

CLASSIFICATION OF VILLAGES

According to their shape, villages can be classified in: linear, nucleated or radial.

According to their links to agricultural activity can be agricultural village, agrotown (more than 10,000 inhabitants who work in crop agriculture or livestock farming) or residential village.

Please Notice This

HOUSE HALAL

RURAL SETTLEMENT: TYPES OF HOUSES

We can classify houses according to their shape, the materials used in their construction, and their geographical location:

•**Stone houses.** These are durable homes which are characteristic of sedentary populations, such as agrarian communities in Europe, North Africa and the Middle East. In Spain, examples of these are the *masía* (in Catalonia) and the *cortijo* (in Andalusia). In drier areas, their roofs tend to be made of Arabic tiles (curved) or Roman tiles (flat). In areas that are humid, we find slate tiles if that material is available.

RURAL SETTLEMENT: TYPES OF HOUSES

•**Mud houses:** these are made of adobe (a mixture of mud and straw). They sometimes have a wooden frame and often have roofs made of branches. They are characteristic of communities involved in irrigated agricultural activities or extensive livestock farming in areas where stone is scarce. In Spain, *barraca* (in Valencia) and adobe houses can be found in Aragon, Murcia, and other places. It is also a very common type of house in areas such as the south of the Sahara desert and the savannahs of Eastern and Southern Africa.

RURAL SETTLEMENT: TYPES OF HOUSES

•**Wooden houses:** found in forest areas, such as the equatorial forests of Africa and America, European and Canadian forests, and the taiga in Siberia. In wetter swamp areas, they are often built on wooden poles (stilts) to insulate their floors. They are found on the banks of the Amazon River, in New Guinea, and in Southeast Asia.

RURAL SETTLEMENT: TYPES OF HOUSES

•**Houses of fur and fabric:** can be found in areas where nomadic livestock activities are carried out. Examples of these areas are the steppes (Asia, North America), desert areas (Africa, Asia) and the tundra in Lapland (Europe). It is also worth mentioning the Arabic **tent**, the Mongolian **yurt**, and the **tepee**, the traditional home of the Native Americans from North America.

RURAL SETTLEMENT: TYPES OF HOUSES

•**Cave houses:** provide excellent thermal insulation because they are cool in the summer and warm in the winter. They are found in areas where the soil lacks suitable building In Spain they can be found in Eastern Andalusia.

RURAL SETTLEMENT: TYPES OF HOUSES

•**Ice homes:** Eskimos build these near the Arctic using cubes of ice. They are called igloos.

DID YOU KNOW…

Snow and ice work as insulators to trap body heat in the igloo so the people inside act as a furnace by providing their own heat.

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URBAN SETTLEMENT

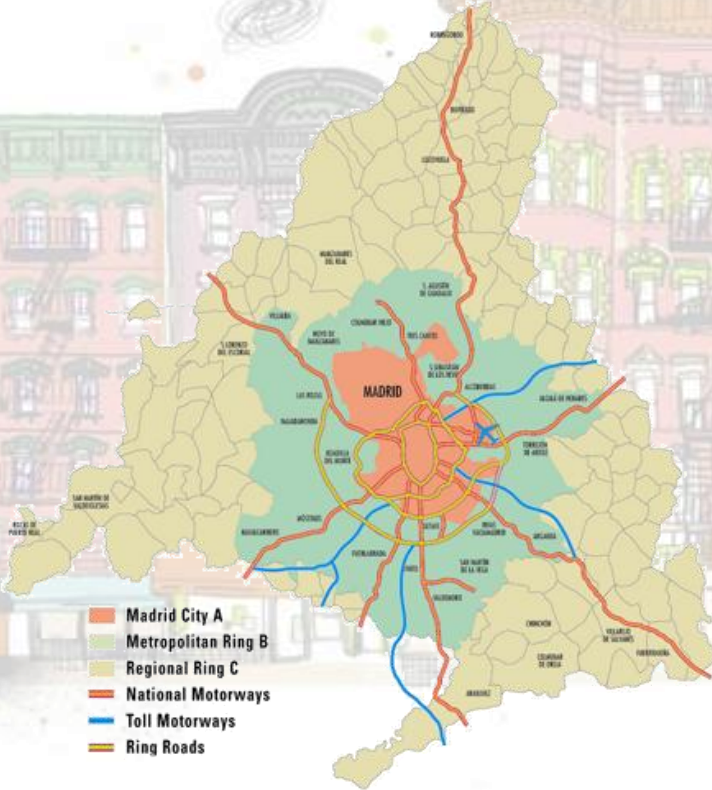Is the result of the concentration of people in cities. The growth of cities has created large urban nuclei like:

- **Metropolitan areas:** urban areas that comprise a main city or metropolis and other smaller nearby nuclei which have airports, homes, shopping centres, etc.
- **Conurbations:** urban area formed by two or more neighbouring cities joining, although each mantains its administrative independence.
- **Megalopolis:** large urban areas formed by several conurbations joining.

URBAN SETTLEMENT

Percentage urban and location of urban agglomerations with at least 500,000 inhabitants, 2014

Percentage urban
- 80 or over
- 60 to 80
- 40 to 60
- 20 to 40
- Less than 20

Urban agglomerations
- Megacities of 10 million or more
- Large cities of 5 to 10 million
- Medium-sized cities of 1 to 5 million
- Cities of 500 000 to 1 million

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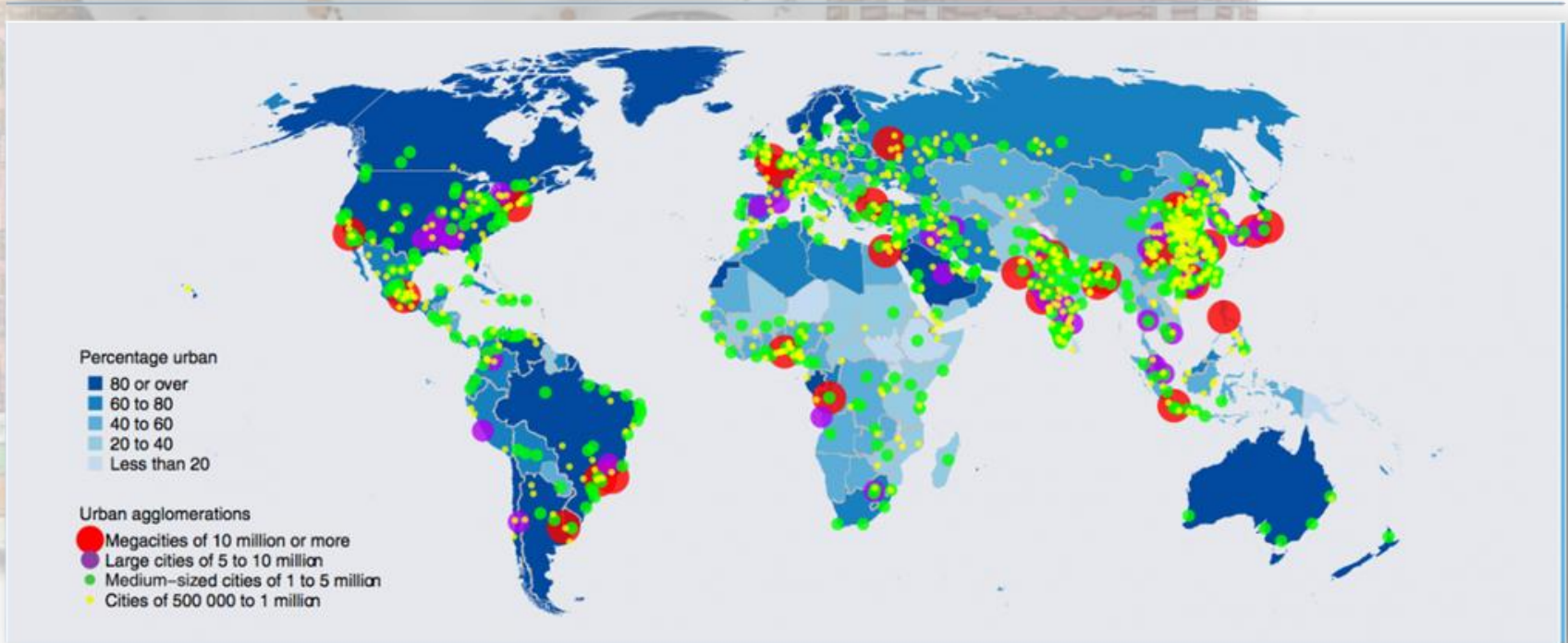
URBAN SETTLEMENT: METROPOLITAN AREA

Legend:
- Madrid City A
- Metropolitan Ring B
- Regional Ring C
- National Motorways
- Toll Motorways
- Ring Roads

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FUNCTIONS OF CITIES

Cities can have various functions:

- Residential
- Commercial
- Industrial
- Political & administrative
- Cultural
- Tourism

URBAN HIERARCHY

Is the organization of cities in ranks/categories depending on:

- The number of inhabitants.
- The extension of the city's sphere of influence.
- Its functions.

HOUSE HALAL

Please Notice This

THE SPHERE OF INFLUENCE

is the area that a settlement provides goods and services for. Sphere of influence is based in part on the concept of '**Settlement hierarchy**' which shows that there are lots of smaller settlements such as Isolated buildings or a small group of houses called a hamlet.

URBAN HIERARCHY

The location of a settlement on the settlement hierarchy and its sphere of influence will largely control the range of goods and services a settlement can sustain.

Small settlements may only sell **low order** (cheaper) goods that people need all the time like milk or bread.

Large cities will have a full range of expensive **high order** goods and services that people only buy very rarely.

Settlement Hierarchy

Increasing in size, decreasing in number

- Conurbation
- Large City
- City
- Town
- Small Town
- Village
- Hamlet
- Isolated farmhouse

SITE & SITUATION

To analyse a city we need to consider several aspects such as:

- SITE: specific place in landscape where a city is established: on a hill, in a valley, on an island, etc.

- SITUATION: position of a city in relation to other places and important features: in the centre of a country, in coastal areas, close to resources, etc.

SITE & SITUATION
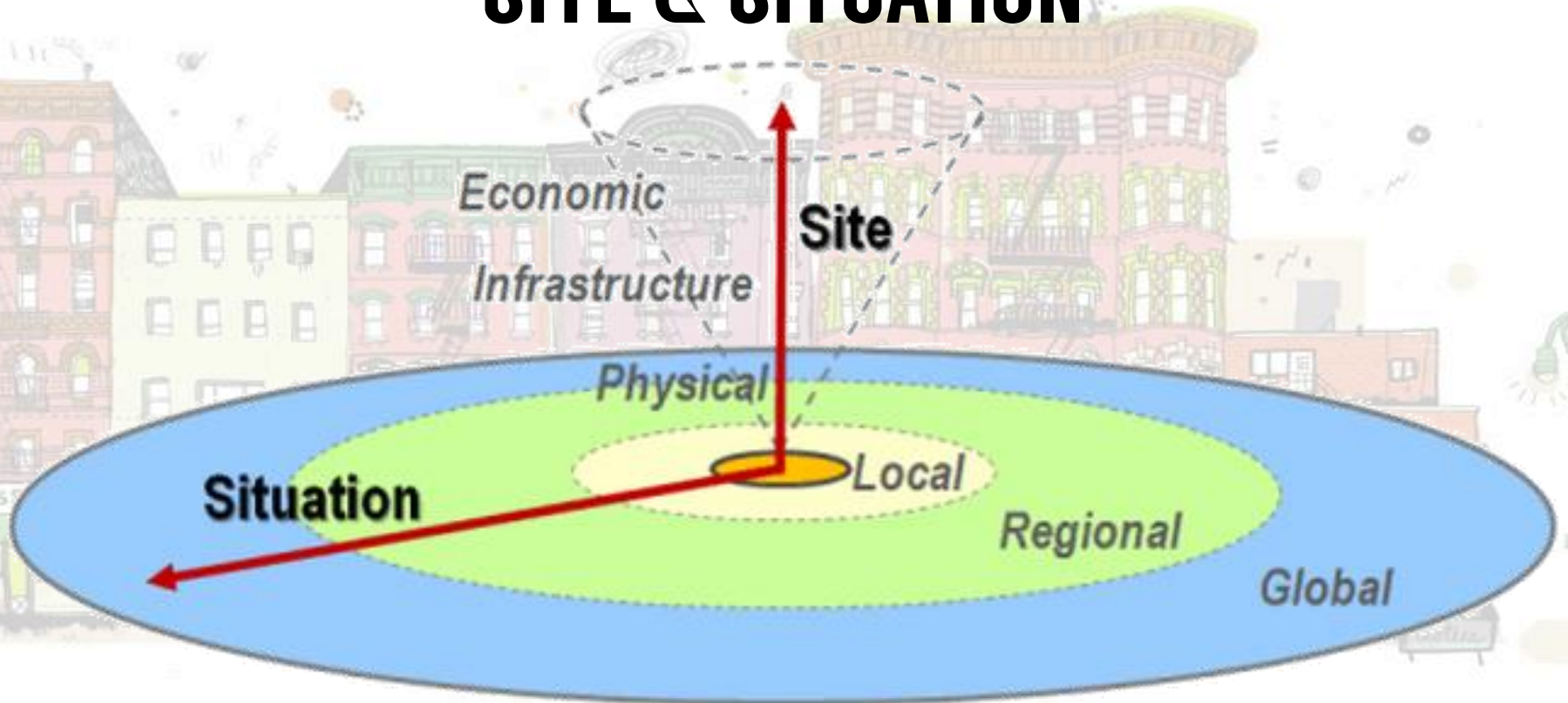
URBAN PLAN

Is a graphical representation of the distribution of build-up areas (houses, public buildings, etc.) and open spaces
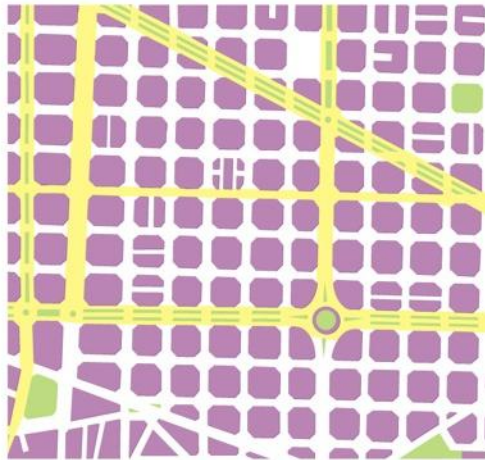
ORTHOGONAL: a grid or chekerboard plan. Consists on straight, wide streets that cross at right angles.

RADIOCENTRIC: consists on a central point from which streets radiate, crossed by others that form concentric circles
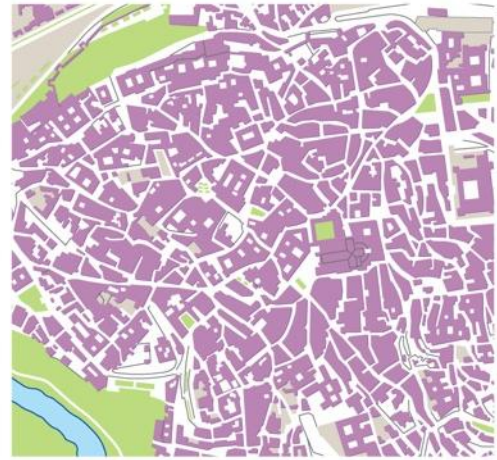
IRREGULAR: does not have a defined geometric shape. Is formed by narrow and irregular streets.

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URBAN CONSTRUCTIONS

In a city there are different types of buildings:

- Old buildings: houses, palaces, churches, universities, town halls, etc. Some of them have great historical or artistic value.

- Blocks or skycrapers: used for offices, shopping centres and residential apartments.

- Single-family homes: detached, semi-detached or terraced houses. Usually located in the outskirts.

- Shacks (favelas, chabolas or villas miseria): houses built with scrap materials (cardboard, metal, timber, etc.).

STRUCTURE OF CITIES

Cities consist of different zones, labeled according to its main function. However all of them have more than one function.

These are the zone that we can usually differentiate:

- Centre
- Residential areas
- Industrial areas
- Green zones
- Suburban areas

STRUCTURE OF CITIES

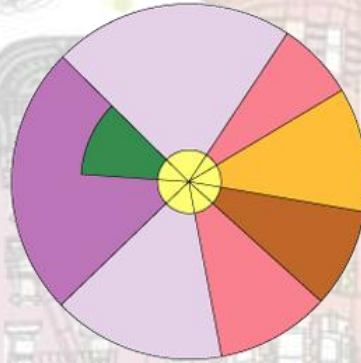# STRUCTURE OF CITIES: MODELS

CONCENTRIC ZONE MODEL

SECTOR MODEL

MULTIPLE NUCLEI MODEL

A

B

C

BURGESS MODEL

HOYT MODEL

HARRYS & ULLMAN MODEL
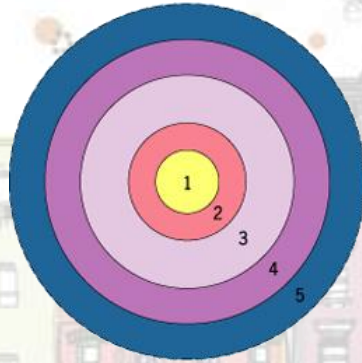
Central business district

Zone of better residences

Zone of transition

Commuters' zone

Zone of independent workers' homes

High-rent residential

Intermediate-rent residential

Low-rent residential

Education and recreation

Transportation

Industrial

Core
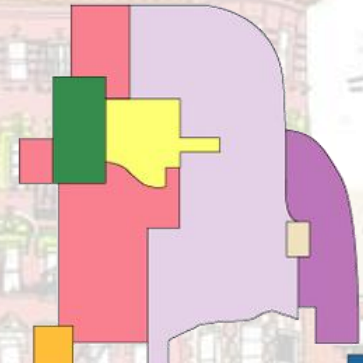
Central business district

Wholesale, light manufacturing

Low-class residential

Middle-class residential

High-class residential

Heavy manufacturing

Outlying business district

Residential suburb

Industrial suburb

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STRUCTURE OF CITIES: THE CENTRE

In many cities consists of the CBD which contains numerous offices, large shops, head offices of banks, cinemas, theatres. Is well connected by different means of transportation.

In the European cities it is also the historic centre with many buildings with a great historical value.

STRUCTURE OF CITIES: RESIDENTIAL AREAS

Distributed all over the city.

Some neighborhoods consist of single-family homes, but most consist of blocks of flats.

STRUCTURE OF CITIES: INDUSTRIAL AREAS

Traditionally were situated inside cities, near railway, stations or ports. Nowadays, because of the pollution they produce, factories are usually located in industrial parks on the outskirts of cities.

Please Notice This

INDUSTRIAL PARKS

is the industrial area on the outskirts of a city with factories, industrial plants, warehouses, services and transport links; mostly for light industry.

STRUCTURE OF CITIES: GREEN ZONES

These areas where there is a lot of vegetation and no, or very few, buildings.

Can be found all over urban spaces and their size varies.

Please Notice This

PUBLIC PARKS

are the open, clearly delineated space with trees, plants, grass, etc., inside or near a city where the access is free to everybody.

CURRENT URBAN PROBLEMS

What are some problems that arise when more and more people start moving to cities? What are some potential solutions?

- Housing
- Traffic
- Pollution
- Waste

CURRENT URBAN PROBLEMS: HOUSING

- **Urban decline**: when old, low quality buildings fall into decay, people leave for the suburbs
- **Urban sprawl:** Spread of housing from cities into the countryside
  - *Problems:*
    - Valuable farmland being used for building purposes
    - Small villages being swallowed into cities
    - Inequality and segregation

CURRENT URBAN PROBLEMS: TRAFFIC

In many urban cities there is a lot of traffic, especially at rush hour.

- **Traffic congestion:** Road traffic is very slow, with many cars and traffic jams

- **Rush hour:** A time during each day when traffic is heaviest.

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CURRENT URBAN PROBLEMS: POLLUTION

The gases emitted by heating systems cause air pollution and traffic causes air and noise pollution.

Homes, offices, health centres, etc. generate large quantities of waste.

→ Here you can check the pollution Index rate

CURRENT URBAN PROBLEMS: POLLUTION

DID YOU KNOW…

The EU's Noise Observation and Information Service for Europe database allows citizens to see how many people are exposed to excessive noise generated by air, rail and road traffic across Europe.

SOLUTIONS TO THE URBAN PROBLEMS

What are some potential solutions?

- **Public transportation:** bus, tube, suburban train, etc. and bicycles as alternatives for cars: costly, takes time to build infrastructure.

- **Low Emission Zones** (London): Having to pay if your vehicle does not meet certain pollution standards.

- **Car-pooling** (United States): People sharing cars get to drive in faster lanes

- **Cycle and bus lanes.**

- **Speed limit/parking restrictions** (Madrid).

- **Construction of ring roads:** roads that go around cities and make possible for drivers to enter a city without going through the centre.

SOLUTIONS TO THE URBAN PROBLEMS

– **Non-contaminating energies:** promote the use of renewable sources of energy like solar or wind power, giving incentives for using it.

– **Sound barriers:** installation of this barriers in areas close to roads and airports.

– **Promoting recycling.**

– **Cycle and bus lanes.**

– **Construction of public parks, gardens, etc.**

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DESIGNING OUR OWN SMART CITY

You can design your own city model trying to solve the main city problems, making it green, pleasant, attractive and sustainable.
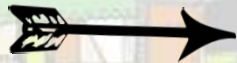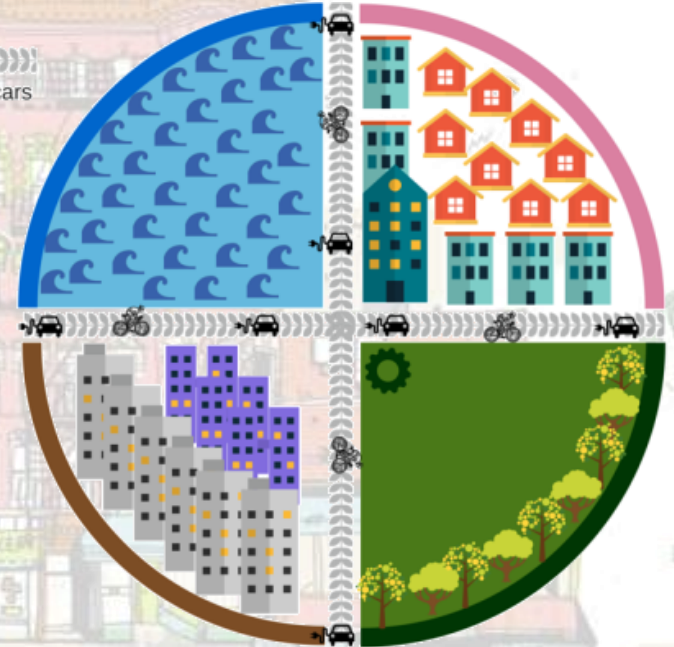
➤ Here you will find interesting and real ideas: sustainable cities

Road for walking / cycling / electric cars

- Water Body
- Green Cover
- Electric Car
- Cycle
- Independent House
- Apartments
- Block Center
- Office
- Recycling Point

Designed by Jayati Deshmukh

A Single Block of City
A Self-Sustainable Unit

DESIGNING OUR OWN SMART CITY

My Smart City

Road + Super speed metro way

- A Single Block
- Water Body
- Green Cover
- Factory
- Railway Station
- Airport
- Recreation Center
- Multi Speciality Hospital
- Multiplex & Restaurent
- Administration and Judiciary

Designed by Jayati Deshmukh

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