

# Gr 12 Geography

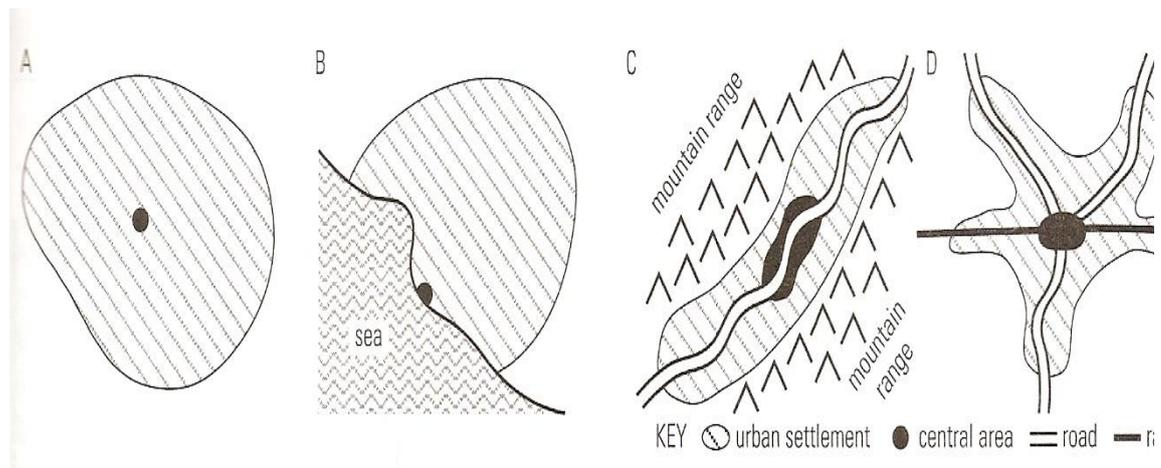
## SETTLEMENT GEOGRAPHY

### URBAN STRUCTURE AND PATTERNS

#### 6.1 Internal structure and patterns of urban settlements: land use zones; concept of urban profile; and factors influencing the morphological structure of a city

Urban structure, or urban morphology, refers to the external, physical aspects of a city.

Urban settlements develop and change over time. Older cities or parts of cities look different from newer cities. The infrastructure like roads, railways and physical features like rivers, coastlines and mountains will all influence what cities look like.



A = circular shape

B = Semi-circle

C = Linear (mountain range determines the shape)

D = Star shape (Roads determined the shape)

Economic factors, such as the location of mines, tourist attractions, industrial areas and large shopping areas can also affect the shape of an urban area.

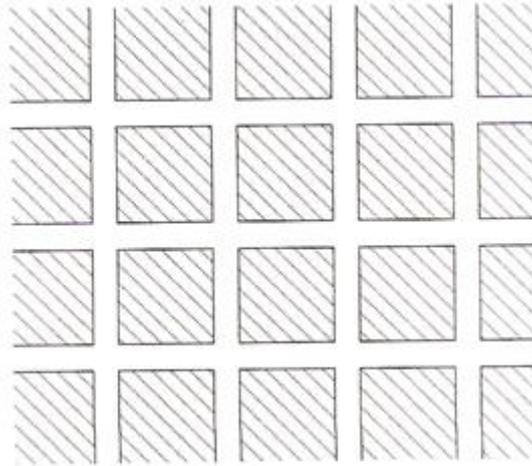
### STREET PATTERNS

#### 1. Grid-iron street pattern

**Advantages:**

Regulated and easy to extend.

Easy to find your way around and easy to control



**Disadvantages:**

Many intersections

Traffic congestion

Many stop streets – leads to accidents

Solutions:

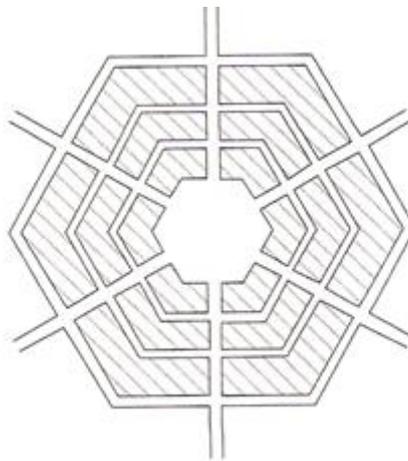
One way streets

**2. Radial street pattern**

**Advantages:**

All major roads lead to the CBD

Few intersections  
attractive



**Disadvantages:**

Very expensive

Street block size changes

**3. Planned irregular**

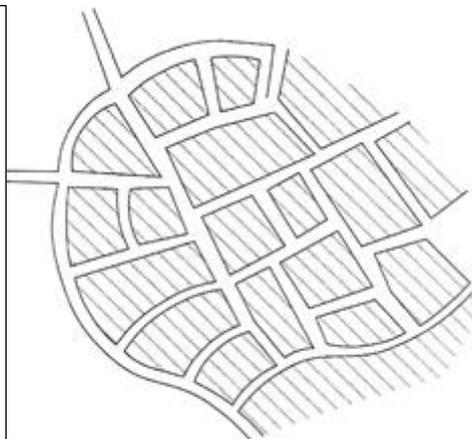
**Advantages:**

Roads don't look all the same

Makes area look attractive.

Fewer intersections

Safer (many crescents and cul-de-sacs)



**Disadvantages:**

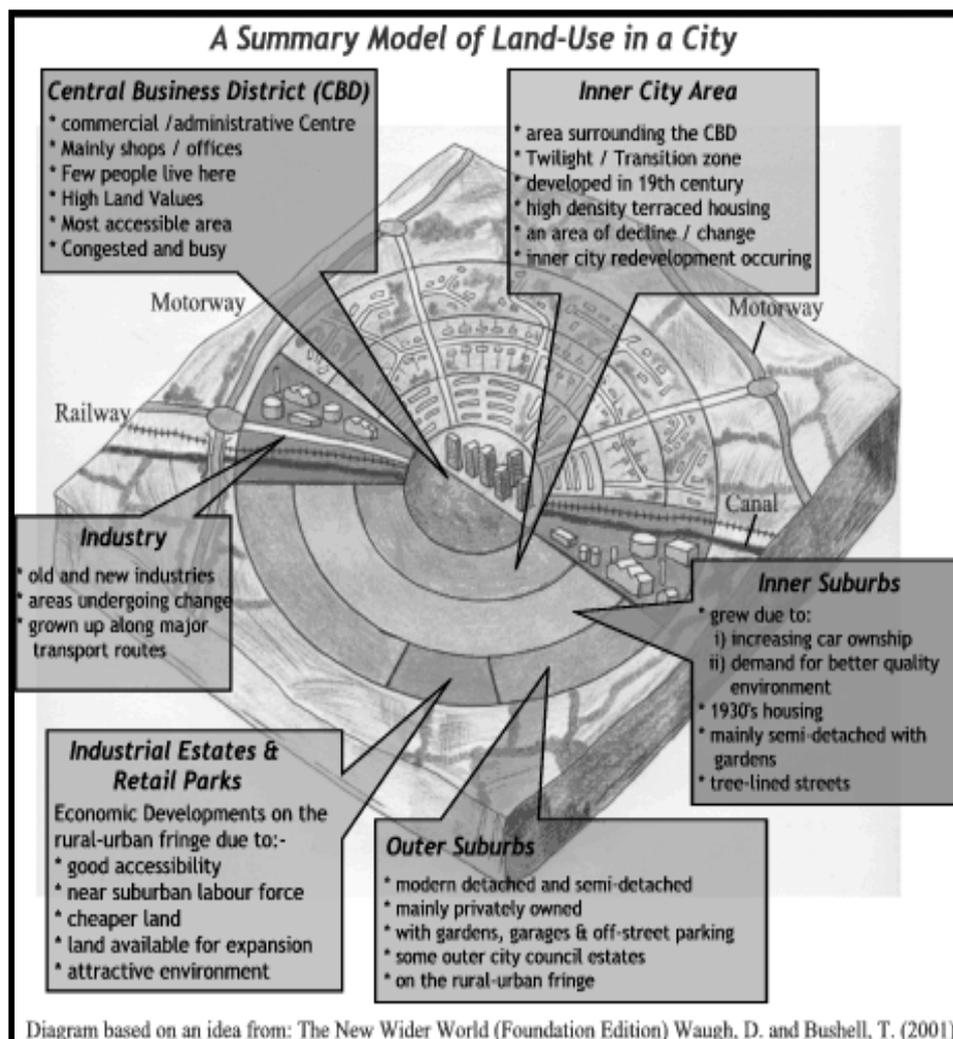
Traffic congestions

Easy to get lost

Traffic can become chaotic

## LAND-USE ZONES

- ✓ **Commercial:** business areas like the CBD (Central Business district), outlying shopping centres, residential store clusters, and commercial ribbon development along access routes etc. Accessibility is very important.
- ✓ **Residential:** formal housing (high, middle and low income) and informal housing namely squatter camps. High income areas are in the most popular areas where there is access to private transport routes. Squatter camps are on the outskirts of the town near to roads and rivers on unoccupied land but it is then illegally occupied.
- ✓ **Industrial areas** – heavy industries with many nuisance factors are on large pieces of land on the outskirts of town. Light industries are near to the CBD so that it can supply products to the retailers in town.
- ✓ **Zone of decay/transition zone** refer to the area around the CBD where the CBD is growing into the light industrial areas and low income housing areas through a process of invasion and succession. This often associated with slums and blight (buildings are not repaired).
- ✓ **Greenbelt** – parks and conservations areas in cities.
- ✓ **Rural-urban fringe** – area where city grows into rural areas – mixture of rural and urban functions.



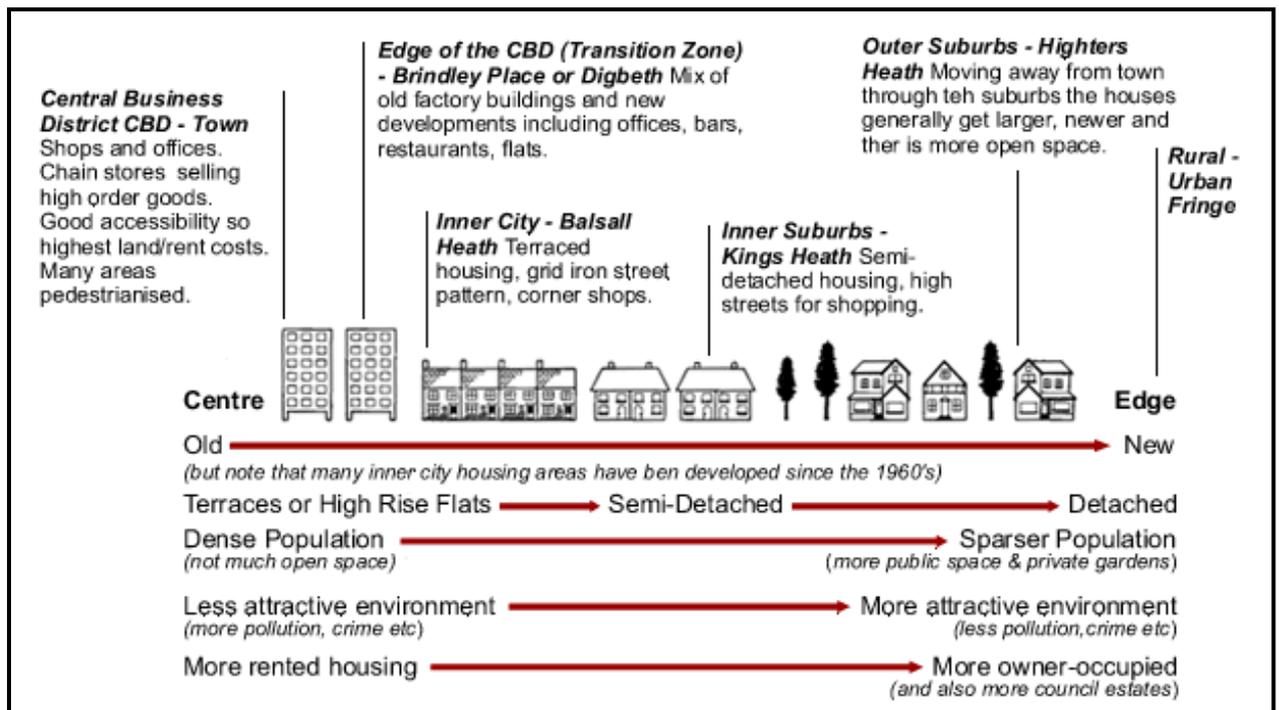
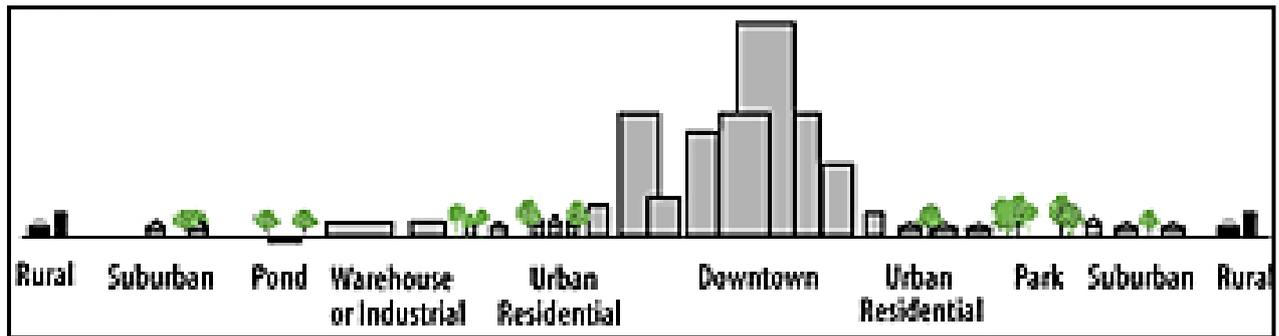
Land Use Zone	Image	Description
CBD (Central Business District)		The commercial and business center of a town or city. This part of the settlement will have the highest land prices.
Wholesale Light Manufacturing		The Zone of Transition Also known as the "Twilight Zone" or more generally as the "Inner City". This area contains both low-class housing (19th century terraced houses arranged in grid iron pattern) and light manufacturing. This zone is in a state of constant change with redevelopment and renewal. The poorest people in the settlement live here.
Low Class Residential (Inner City)		

<http://14kome.wordpress.com/2012/04/17/urban-land-use-models/>

Land Use Zone	Image	Description
Medium Class Residential (Interwar Areas / Inner Suburbs)		Semi-detached housing can be found here with gardens and on large estates. There is a high concentration of council owned housing.
High Class Residential (Outer Suburbs)		Private, top quality housing with large gardens and garages.
Rural-Urban Fringe (RUF)		The very edge of the settlement. Includes satellite villages often called "suburbanized villages" or "commuter villages".

# URBAN PROFILES

- ✓ Concept of urban profile – the side view of a city. The tallest buildings are in the centre and the buildings become lower towards the edge of the city.
- ✓ Reasons for shape of urban profile
  - Highest buildings in the centre of the town, as the competition for land and high land values lead to sky-scrapers being built.
  - As land values decline towards the outskirts so does the height of buildings and the density as well.



[http://www.sellyprk.bham.sch.uk/resources/geography/world/unit2/birmingham\\_urban\\_models.html](http://www.sellyprk.bham.sch.uk/resources/geography/world/unit2/birmingham_urban_models.html)

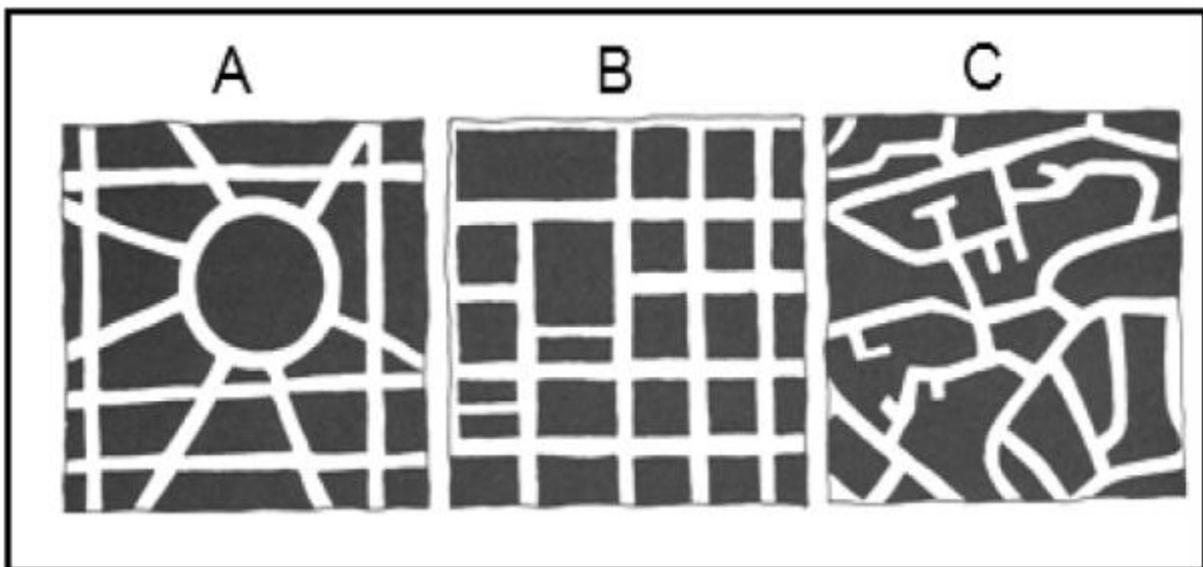
# FACTORS INFLUENCING MORPHOLOGY STRUCTURE OF A CITY

PHYSICAL FACTORS	PLANNING	TRANSPORT
<p><b>Relief</b> – Cape Town developed between Table Mountain and the harbor</p> <p>Pretoria lies between Magaliesberge and Daspoort mountains and has a linear shape</p> <p><b>Micro-climate</b> – Johannesburg extended north and is still extending because of the warmer slopes of the Witwatersrand</p> <p><b>Soil conditions</b> – good soil conditions attract settlements while poor soils are neglected</p>	<p><b>Planned cities</b> – cities planned and built as one unit: have an ordered structure and modern street plan, e.g Sasolburg</p> <p><b>No planning</b> – urban area developed quickly, e.g Kimberley – no specific city centre or street pattern.</p> <p><b>Piecemeal planning</b> – Settlements in which each new suburb may have a different appearance – no evidence of urban planning, e.g many SA cities.</p>	<p>Plays a vital role in the development of a city's structure.</p> <p>As transport systems improved, more people buys cars and towns becomes less compact. People could live away from city centre and commute to work places. Result = urban sprawl is evident along transport networks.</p>

## WORKSHEET 6:

### QUESTION 1:

*Study the sketches below illustrating street patterns and answer the following questions:*



Complete the table below to compare the three street patterns illustrated.

(15)

Characteristic	A	B	C
Identify streets pattern			
Advantage			
Disadvantage			
Most common land use suing this pattern			
Relative age			

**QUESTION 2:**

*First see what the photograph is about before answering the questions.*



2.1 Refer to the figure above which shows an image of a land-use zone.

Identify the land-use zone in the image.

(1)

2.2 State TWO characteristics of this zone that is evident in the image.

(2 x 1 = 2)

- 2.3 Explain why this land-use zone developed the characteristics mentioned in QUESTION 2.2. (3 x 2 = 6)
- 2.4 This zone is losing prominence (importance) in most South African cities and many businesses are moving out of the cities.
- 2.4.1 Give a term used for the movement of businesses away from this land-use zone towards the suburbs. (1)
- 2.4.2 Centrifugal forces drive people and businesses to move out of this land-use zone. Write a paragraph (approximately 12 lines) supporting this statement by referring to factors that cause businesses to move away from this land-use zone. (4 x 2 = 8)
- 2.4.3 In this urban settlement centrifugal force was counter acted. Proof this statement with evidence from the photograph. (2 x 1 = 2)