

CGC1D: An Urban Planning Simulation

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Lesson Overview

The students are responsible for designing a city, with specific land use constraints. The purpose of the activity is to allow the students to get a real sense of how urban planners decide “why is what where it is?” and all the variables they have to consider when they make that decision. The assignment will also provide the students with a good understanding of the relationship between high residential density and the value of land. This is also a good way to involve students with potential careers in the field of Geography.



Prior Knowledge

- the principal types of urban land use
- factors that affect land use patterns
- how urban expansion affects the surrounding countryside

Overall Expectations

- UMV.01B explain how natural and human systems change over time and from place to place
- UMV.02B predict how current or anticipated changes in the geography of Canada will affect the country's future economic, social, and environmental well-being

Specific Expectations

- UMI.02B recognize the similarities among cultures and the need to respect cultural differences
- UM2.01B explain how selected factors cause changing human and natural systems (e.g. technological developments, corporate and government policies, zoning by-laws, natural hazards, global warming)
- UM2.03B evaluate the impact of change (e.g., new technologies) on a selected planning project (e.g., residential or resort development, urban renewal, installation of water and sewage systems)

Duration

- 2 X 75min of learning the material (see prior knowledge)
- 2 X 75min work periods (access to computers for one class-not mandatory)
- One week to complete the entire assignment

Materials

- Topographic maps, Internet, city brochures, calculators for zoning conversion

Teaching/Learning Strategies

- Activity
- Guided research
- Performance task
- Computer, map construction and analysis

Resources

- Geography of Canada textbook: *Making Connections*
- some useful topographic maps of different cities (provided by teacher, and on Page 249 of the *Making Connections* textbook is a few examples of the different types of residential densities involved in a city.)
- Windfields Junior High School, TDSB, Social Studies Department

Potential websites that may be of use for city maps

- Residential density
<http://www.environ.ie/en/Publications/DevelopmentandHousing/Planning/FileDownload,1611,en.pdf>
- commercial buildings
http://www.toronto.ca/planning/official_plan/introduction.htm

Evaluation

- rubric included with the student handouts

Student assignment sheet

- Handouts are available on the next page

THE MONOGRAPH

CGC1D: Urban Planning

Name(s):

Due Date:

Part I: Map

Instructions

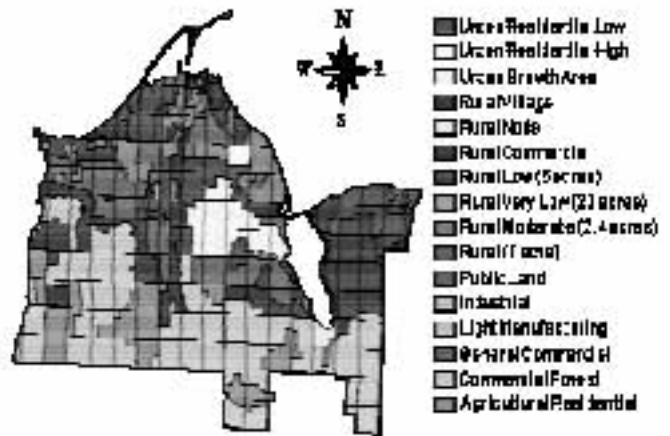
- You are an **Urban Planner** and you are going to create a brand new city.
- You have been given a specific amount of space for each zone type.
- Your task is to place the zones on the map provided (graph paper).
- The total area of each zone can be divided into more than one section (e.g. residential zones may be scattered throughout the city instead of being clumped together into a group of 400 squares).
- The dimension of the city is 1000 squares (25 x 40).

The Zones:

- Residential (40%) = 400 squares
- Transportational (32%) = 320 squares
- Institutional (10%) = 100 squares
- Recreational (7%) = 70 squares
- Industrial (6%) = 60 squares
- Commercial (5%) = 50 squares

Make certain you:

- colour the zones
- provide a title, legend, and map scale
- indicate the direction by using a compass rose



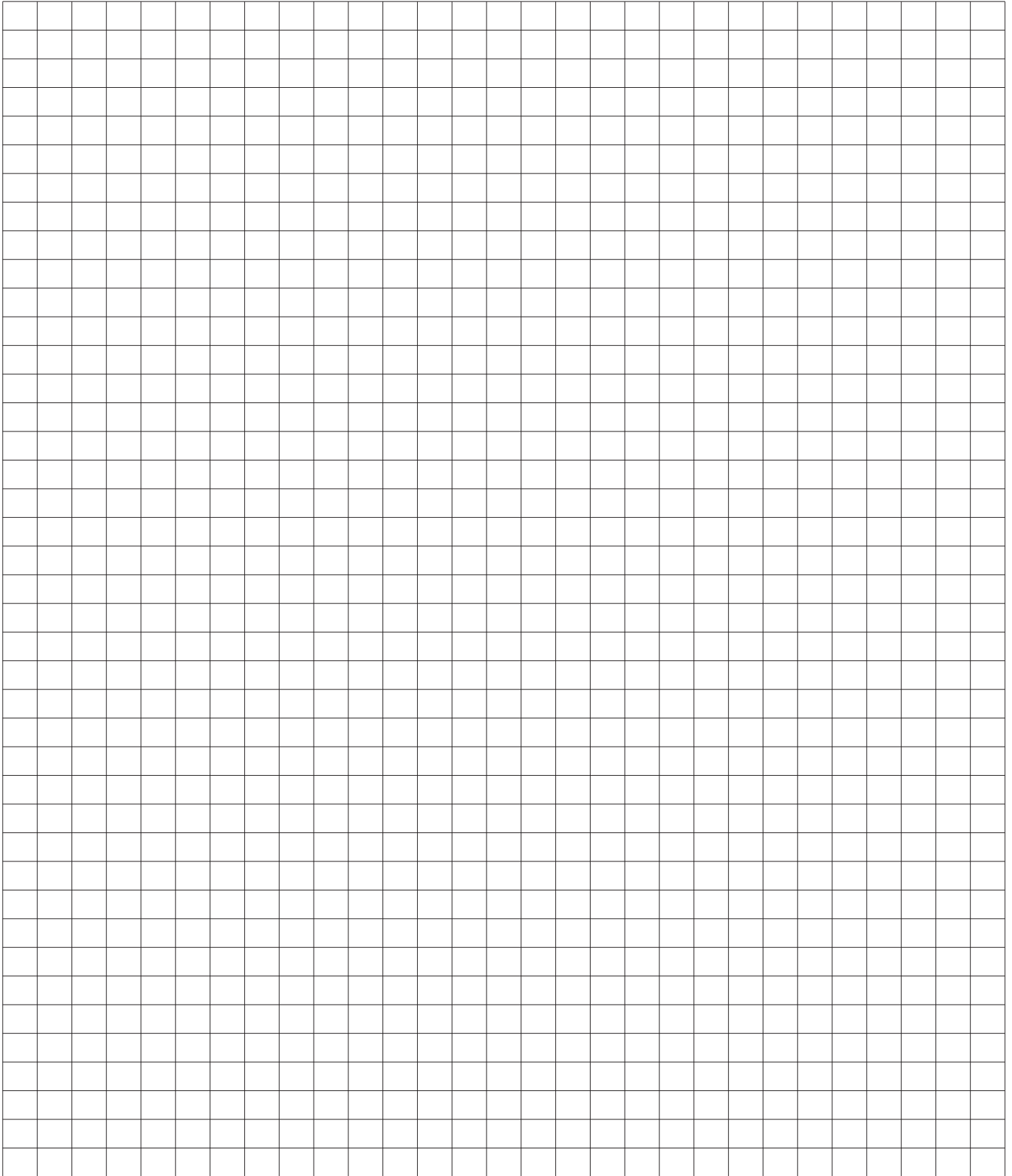
Part II: Explanation

Once you have placed the zones on the map you must

- provide reasons as to why you have placed the zones in each area. (Provide two reasons for each area.)
- This explanation must be 1-2 pages in length and typed (double-spaced, 12 point font).



Urban Planning Grid



THE MONOGRAPH

Urban Planning Assignment

Criteria	Level 1 (50%-59%)	Level 2 (60%-69%)	Level 3 (70%-79%)	Level 4 (80%-100%)	Mark
Knowledge (Explanation) Explain concept providing details.	5.0 5.2 5.4 5.6 5.8	6.0 6.2 6.4 6.6 6.8	7.0 7.2 7.4 7.6 7.8	8.0 8.2 8.5 9.0 10	/10
	Explanation of concept provided limited details.	Explanation of concept provided some details.	Explanation of concept provided considerable details.	Explanation of concept provided thorough details.	
Thinking (Map) All examples clearly show land use and strategic placement.	5.0 5.2 5.4 5.6 5.8	6.0 6.2 6.4 6.6 6.8	7.0 7.2 7.4 7.6 7.8	8.0 8.2 8.5 9.0 10	/10
	Examples demonstrate limited land use and strategic placement.	Examples demonstrate some land use and strategic placement.	Examples demonstrate considerable land use and strategic placement.	Examples demonstrate thorough land use and strategic placement.	
Communication (Explanation) Communicate information clearly.	5.0 5.2 5.4 5.6 5.8	6.0 6.2 6.4 6.6 6.8	7.0 7.2 7.4 7.6 7.8	8.0 8.2 8.5 9.0 10	/10
	Communicates information with limited clarity.	Communicates information with some clarity.	Communicates information with considerable clarity.	Communicates information with a high degree of clarity.	
Application (Map) Use cartographic conventions correctly when constructing maps.	5.0 5.2 5.4 5.6 5.8	6.0 6.2 6.4 6.6 6.8	7.0 7.2 7.4 7.6 7.8	8.0 8.2 8.5 9.0 10	/10
	Able to use a few cartographic conventions correctly.	Able to use some of the cartographic conventions correctly.	Able to use most of the cartographic conventions correctly.	Able to use most of the cartographic conventions correctly all of the time.	
Comments:				Overall Mark:	/40