

CITY PLANNING

17 pieces of 2X2 to represent businesses and city buildings
(police stations, fire stations, libraries, schools, shops,
restaurants)

2 pieces of 1X4 to represent water supply and sewage

46 pieces of 1X2 to represent houses or apartments

1 piece of 1X6 to represent a medical facility

2 pieces of 2X3 to represent transportation facilities

4 pieces of 2X4 to represent industrial facilities

A – Maximizing Personal Space Using all the pieces you have been given and the flat grid that represents your total land space, take about 5 minutes to design an urban area that maximizes the amount of personal (or private) space for each citizen.

1. Describe the city that you have designed:

2. Quantify the amount of open/green space in the city you have designed (Hint: there are 1024 squares on your grid...how many are left open for green space in the city you have created?) _____ squares

3. Describe the most important benefits that are gained from maximizing personal living space that is privately owned and utilized:

B – Maximizing Public Space Using all the pieces you have been given and the flat grid that represents your total land space, take about 5 minutes to design an urban area that maximizes the amount of public space that is available for all citizens to use.

1. Describe the city that you have designed:

2. Quantify the amount of open/green space on your grid: _____ squares

3. Describe the effect of public green space on each of the topics below:

A. Human quality of life:

B. Urban and suburban animals:

C. Weather and climate:

D. Noise pollution:

E. Air quality:

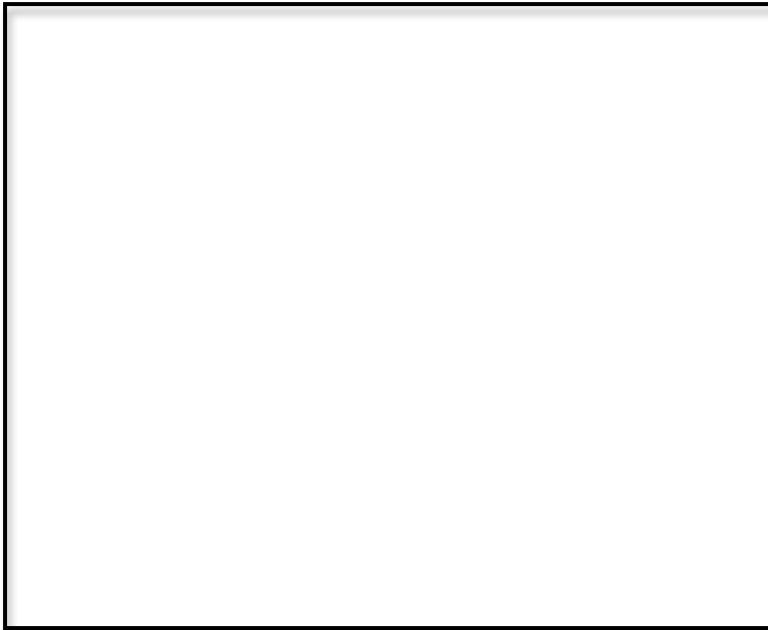
F. Water quality:

C – Designing a Sustainable City Using all the pieces you have been given and the flat grid that represents your total land space, take about 15 minute to design an urban area that maximizes the

positive aspects of city life and minimizes the negative aspects of city life. Use the following questions to help plan your city before you present your final idea to the class.

- What buildings need to be nearest each other to minimize transportation and congestion?
- Which buildings need to be placed apart from others due to sight, smell, noise or toxicity?
- Which buildings should be buffered by open/green areas?
- How could urban agriculture reduce the negative attributes of a city?
- How do you design cities so that the people who live there have a sense of community, support and knowledge of one another?
- How can the design of a city reduce poverty and crime?
- What configuration of transportation veins would be most useful?
- If nothing could be imported into a city (food/resources) or exported out (pollutants/waste), how would the urban layout be altered during planning? Remember that “sustainable” is autonomy on an unlimited time scale.

1. Sketch the city you designed in the grid below and label the buildings for clarity.



2. What are the strengths of this city layout?

3. What are the weaknesses of this city layout?

4. Consider the urban areas created by the other lab groups. Did everyone emphasize the same strengths and weaknesses?

5. In your ideal urban area, what form of mass transportation would be most prominent?

D – Modern Model Cities (Extra Credit) In some cities, the citizens’ quality of life has been improved by implementation of certain practices through government programs, redesigning of the city layout or the enhancement of public works such as schools, parks and mass transportation. Below is a list of several cities that have made strides in one or another. Research each city’s particular improvement projects. What is the long-term effect that each of these city’s changes will have?

- Davis, CA, USA
- Curitiba, Brazil
- Land Conservation and Development Commission in Oregon (Urban and Rural Issues)
- Tapiola, Finland
- Chattanooga, TN