



CITY PLANNING IS COLORFUL!

Subject: Social Studies

Skills: Application, Classification, Discussion, Drawing, Mapping

Duration: 1-2 class periods (or more depending on depth and discussion)

Setting: Classroom

Materials:

- simple maps of the local community for each student, or copies of the downtown Grand Rapids student worksheet provided at the end of this lesson
- coloring crayons for each student

Michigan Curriculum Framework Content Standards and Benchmarks:

- **Social Studies II.1.LE 2:** Strand II. Geographic Perspective, Standard 1. Diversity of People, Places, and Cultures, Benchmark LE 2. Locate and describe diverse kinds of communities and explain the reasons for their characteristics and locations.
- **Social Studies II.2.LE 3:** Strand II. Geographic Perspective, Standard 2. Human/Environment Interaction, Benchmark LE 3. Describe the major physical patterns, ecosystems, resources, and land uses of the state, region, and country and explain the processes that created them.
- **Social Studies V.1.LE 2:** Strand V. Inquiry, Standard 1. Information Processing, Benchmark LE 2. Organize social science information to make maps, graphs and tables.
- **Social Studies V.1.LE 3:** Strand V. Inquiry, Standard 1. Information Processing, Benchmark LE 3. Interpret social science information about local, state, and national communities from maps, graphs, and charts.
- **Social Studies II.2.MS 4:** Geographic Perspective, Standard 2. Describe, compare, and explain the locations and characteristics of ecosystems. Benchmark MS 4. Explain how humans modify the environment and describe some of the possible consequences of those modification.
- **Social Studies III.1.MS 4:** Standard 1. Identify the purposes of national, state, and local governments in the United States. Benchmark MS 4. Explain the importance of limited government to protect political and economic freedom.
- **Social Studies V.1.MS 2:** Inquiry, Standard 1. Acquire information from books, maps, newspapers, data sets and other sources. Benchmark MS 2. Use traditional and electronic means to organize social science information and to make maps, graphs, and tables.

Kent County Collaborative Core Curriculum (KC⁴):

- **Social Studies:** 4:4, 4:6, 4:8, 4:9
5:4, 5:5, 5:9
6:1, 6:3, 6:4, 6:5, 6:6, 6:10
7:1, 7:3, 7:4, 7:5, 7:8, 7:9
8:1, 8:2, 8:3, 8:5, 8:9

OVERVIEW

On a local map, students use city planner colors and follow a legend to color land use zones. They understand that proper zoning colors are used to identify different land uses (zones) in their community.

OBJECTIVES

After participating in this activity, students will be able to:

- Identify land uses on a map and categorize them with color codes and legend symbols.
- Describe different types of land uses.
- Use city planner and land use category vocabulary words and understand difficult vocabulary words.
- Interpret community information from maps and legends.

BACKGROUND

Land can be used for many things, such as housing, stores, parks, manufacturing, etc. Building a city is like putting together the pieces of a jigsaw puzzle. Certain land uses, like puzzle pieces, will not fit together well. This is called **incompatibility**. Only when each piece is in the right place, will you have an orderly, attractive, and economically strong community.

Putting together the land use pieces is an important part of what a city planner does. But before the city planner can do that, he or she must talk with people who live in the community to see what kinds of land uses residents would like to have and where different land uses should occur. That is why it is important for people to be involved in their local government.

City planners must also find the right balance between various land uses. What would happen if there weren't enough homes for the people who work in your community? Where would they live? How would they get to work? Is there enough open space, such as parks, where people can play sports and have picnics?

When it comes to maps, city planners think in terms of land use categories and create color-coded land use maps. Categories are called **zones** and the general zones include names like Public and Semi-Public, Industrial, Commercial, property, Residential, Parks and Recreation and Agricultural. All planners

use the same color codes when designing maps and plans. Each zone is assigned a certain color that is only used for that particular zone. Services such as transportation have no color, but link one usage area to another. These services may be housed in one of the zones, such as a bus station in a downtown commercial area, but the service itself cuts across the entire range of zoning districts. Bodies of water, such as lakes and rivers, also have no color. (Civic zones are blue.)

Some helpful definitions include:

Land Use: The way that land is used by humans
Zone(s): Areas which allow only certain land uses

Commercial Zone (RED): Businesses that sell goods and services to local citizens (retail) or other businesses (wholesale)

Industrial Zone (PURPLE): Highly developed factories, warehouses, or plants that produce mass quantities of a product

Residential Zone (YELLOW): Places for people to live (homes, apartments)

Public/Semi-Public (Civic) Zone

(BLUE): An area that serves or is used by all people

Parks/Recreation Zone

(BROWN): A piece of land reserved for public use and recreation

Agricultural Zone (GREEN): Land used for livestock, growing crops, and required farm buildings (barns and farmsteads)



When the most appropriate mix or balance of land use is determined, city or community planners establish a map and a set of rules generally referred to as **zoning**. These rules and maps tell land owners, neighbors and local officials what land uses can be built or conducted on which land. **Zones or zoning districts** vary significantly depending on the use they regulate. Some zones depict areas where very few types of uses are permitted (such as a residential zone which only allows one house for a single family). Other zones, such as commercial, may allow a great variety of land use as long as it meets certain guidelines or criteria such as providing products for local residents or providing a certain number of parking places.

Zoning is not a perfect land use solution and can be problematic itself. It can cause unnecessary segregation of land uses, for example, minimum lot sizes and other restrictions that contribute to sprawl. It can exclude uses or people from certain

places. It can also be very challenging legally. For example, consider private property rights versus the public requiring certain uses be made or not be made of your land.

Special Note To Teachers: In Depth Zoning Information

Zoning is relatively new and can be very controversial. When it was first approved for use in cities by the U.S. Supreme Court in the early 1920's, there was great concern over the government dictating what individuals could do with their land. "Land rights" and who controls them are a very important aspect of various governing structures throughout the world and throughout history. A fundamental aspect of our free-market, democratic system is that the people own and control their own land, not the government. What meaning does "owning land" have if the government controls the use?

On the other hand, uncoordinated, excessive or obnoxious use of land can lead to great burdens on public resources or cause nuisance conditions. For example, an individual landowner's decision to build a 10-story housing complex in an area without public services, such as sewer and water, could cause severe conditions for new residents and burden the public at large. Who would pay the cost for the landowner's decision? Probably the tax payer.

For many decades now, zoning has been ruled as a legal tool for governments to use, as long as it does not arbitrarily or unreasonably restrict landowners from profitable use of their property. Governments in charge of zoning, therefore, have a special obligation to make sure the rules they adopt serve the public, allow landowners a reasonable profit, and do not grant favorable uses to select individuals. Would it be fair for the zoning body to let John Smith build a bank, but not Sally Jones, without any apparent reason or because she was a woman or African-American?

Finally, long-term use of zoning has achieved both good and bad results. When properly balanced and well thought out, zoning can be used to encourage just the right mix of uses. However, if a zone is strictly limited in its use, and that zone is spread over wide areas, then years of development may result in very uninteresting places. An example of this is a large area with only single family homes. There are no stores for local shopping, and residents drive everywhere. These are often called bedroom communities since that is all they provide. Zoning could also isolate certain uses that a town doesn't like (certain industries or dwelling types for example). Refusing to allow for a specific land use is called exclusionary zoning, since it essentially "keeps out" certain uses. Is it fair for a town to keep out a mobile home park because the current residents don't care for mobile homes or the people who live in them?

There are many other examples of how zoning can be used or misused. Since it deals directly with the use of it can cover a very wide range of legal issues and be very thought

provoking for students. Locally, zoning violations can be treated as criminal violations or as civil infractions. State and federal courts deal with zoning matters routinely, depending upon whether the challenge is statutory or constitutional. The U.S. Supreme Court has ruled on zoning issues as recently as 2001 and is likely to consider other fundamental distinctions between private property rights and the public domain in the years to come.



discussion about the colors and land uses they see on their maps, or assign homework questions pertaining to the map. Expand on these example discussion questions:

- Why is it necessary to have different city zones?
- Why are the zones located where they are? Are there any patterns, similarities, or environmental features that might cause zones to be where they are?
- Why do you see some zones on a map and not all the zones?
- Why is it necessary to follow the legend and use the proper zoning colors?

PROCEDURE

1. Develop a student worksheet — trace a local map by taping a map to the window and tracing onto white paper the community around the school (or have students do this to create their own maps); or photocopy the map and enlarge the community around the school. Be sure to include token buildings that will serve as clues for students, such as a hospital or gas station. Include a color-coded legend so that they know the colors to make their zones. Make enough copies for each student. Remember, the students will not be able to figure out exact zone lines, but they should recognize different land use areas. (Or, use the downtown Grand Rapids Map that is provided; you or the students will have to color in the legend colors before starting the activity. Or call your local City Planning Dept. to possibly obtain a customized map of your area.)
2. Explain (or review from the lesson, Land Uses — There Are So Many!) that urban planners think in terms of land use categories called zones, and they create color coded land use maps. Students are going to color their own local land use maps like city planners do (for homework or in class). List and explain zoning vocabulary words from Land Uses — There Are So Many! as you go.
3. Tell the students that the following colors are generally used for these land use categories/zones:
 - Public and Semi-Public (Civic) = Blue
 - Industrial = Purple
 - Commercial = Red
 - Residential = Yellow
 - Agricultural Areas = Green
 - Parks and Recreation = BrownServices such as transportation have no color but link one usage area/zone to another. For planners, water bodies, such as rivers and lakes, also have no color. Discuss the different land uses as you explain.
4. After the maps have been colored, engage the students in

ASSESSMENT OPTIONS

1. Collect and evaluate the land use maps for completeness and accuracy.
2. Have the students pair together and evaluate each other's maps. Have them complete an evaluation checklist. For example, name, map completeness, correct colors used, etc.
3. Provide a different land use map and ask questions to see if students understand color code and zoning concepts. For example, if the factory is colored purple, ask, "What land use category is the factory in?" Answer: Industrial. Another question might be, "Name a land use that is commercial and circle it on the map." Answer might be: Grocery Store.

TEACHER MEMOS

Adaptations/Extensions

1. Have small groups make (by tracing maps on the window) and color maps of different areas in their city: the downtown, the airport, historical areas, the zoo, old neighborhoods, new neighborhoods, natural areas, parks, hospitals, new shopping areas, etc. Groups could explain their maps to the rest of the class, or exchange their findings with another group.
2. Bring in a city planner's land use map of the students' local area and display it for the class.
3. To inventory neighborhood land use, complete **Survey: Land Use** in the lesson Walking Neighborhood Surveys. Have students develop graphs and charts to organize the data.
4. Have the students help you to make up a fictional map of an ideal town with areas for all the different types of zones. Allow time for discussion and planning in order to develop a city that runs smoothly.

Computer Extensions

1. American Planning Association. World Town Planning Day. 21 Mar. 2002. <<http://www.planning.org/world-town/>> Gives information on how to celebrate World Town Planning Day in your community.
2. City of Rancho Cucamonga Planning Division. Kids Neighborhood Workshop. September 2000. 7 Mar. 2002. <www.Ci.rancho-cucamonga.ca.us/planning/kid-splan.htm>. A complete online unit for the study of a community.
3. U.S. Geological Survey. USGS Learning Web. May 2000. 21 Mar. 2002. <www.usgs.gov/education/teacher/what-do-maps-show> Lessons for grades 5-8; A map is a picture of a place, and different maps show different information. Students will compare shaded relief maps, road maps, and topographic maps.

SOURCE

Adapted with permission from Walk Around the Block. "Understanding Land Use" page 26-27 by Ginny Graves HAIA, 5328 W 67th St., Prairie Village, KS 66208, Tel (913) 262-8222, ginny@cubekc.org, <www.cubekc.org>. Background information from City of Rancho Cucamonga Planning Division, Kids Neighborhood Workshop, September 2000. 7 Mar. 2002. <www.Ci.rancho-cucamonga.ca.us/planning/kidsplan.htm> and modified by Andy Bowman, Grand Valley Metro Council. Downtown Grand Rapids, Michigan map developed by Ramona Rogers, City of Grand Rapids Planning Division, and modified by Andy Bowman, Grand Valley Metro Council and Allegra Graphic Design Group.

ADDITIONAL RESOURCES

Contacts:

American Planning Association (APA) or the Michigan chapter of the APA
Center for Understanding the Built Environment (CUBE)
Grand Valley Metro Council
Local City Planning Division
Local Planning Commission
United Growth for Kent County

References and Teacher Resources:

Graves, Ginny. Walk Around the Block. Prairie Village, Kansas: Center for Understanding the Built Environment, 1997.

CONCEPTUAL FRAMEWORK REFERENCE

IB2, IB3, IB4, IC1, IE2, IIB2, IIB3, IIC2

