

How a City Street Changes Over Time

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Overview:

This is not a traditional outdoor school lesson plan, but a lesson that can be used in an urban or small downtown setting. Students will create an urban survey map to compare with Sanborn maps to understand change over time. If Sanborn maps are not available, students can still make a mental map and a survey map without the historical comparison. First, students will create a mental map of the area they are going to survey and map. Then, working in small groups, students will travel to the location to measure one side of a city block and record information about what businesses are in each space. Students will then compare changes from the Sanborn maps and record their observations. Additionally, the information will be charted in a bar graph to show how many retail stores, restaurants/food establishments, and service business are in the space.

National Geography Standards:

Geography Standard 2: How to use mental maps to organize information about people, places, and environments in a spatial context.

Developing Mental Maps 1: The locations, characteristics, and patterns of physical and human features are the basis for mental maps at local to global scale

Geography Standard 4: The physical and human characteristics of places

The Characteristics of Places 2: Physical and human characteristics of places change

Oregon Geography Content Standards:

6.14 Identify physical features of the Western Hemisphere and explain their effects on people and events

6.15 Explain how people have adapted to or changed the physical environment in the Western Hemisphere

Connections to Common Core:

6-8.RH.7 Integrate visual information (eg., in charts, graphs, photographs, videos, or maps) with other information in print and digital text.

Objectives:

In completing this activity, students will be able to:

- Create a mental map of a known city street
- Map businesses located on a city street
- Identify changes over time on a city street.
- Make inferences about the cause of these changes

Grade Levels: 6-8 **Time:** 2 hours

Materials:

- Mental Map #1 handout
- Sanborn maps
- Survey Map handout
- Measuring tape
- Clipboard, blank paper (to draw a “sloppy copy”), several pencils
- Sanborn maps
- Comparison Worksheet
- Mental Map #2 handout
- Mental Map Scoring Rubric

Background:

Students should have an understanding of basic map skills, such as understanding cardinal directions, symbols, and scale, (Students will need to be familiar with direction so they can find the correct side of a street as it relates to the cardinal directions).

Students should be familiar with mental maps, how to make them and what their use is.

As a pre-learning activity, a class discussion should be held to help students gain basic understanding of why things change in a city over time. An example could be why towns had many video rental stores, yet today very few towns even have a video rental store.

Sanborn Maps:

Sanborn maps are detailed maps made during a specific year. These maps were used for fire insurance purposes. What makes these maps a useful teaching tool is that they are labeled with what occupied a building at that given time, such as livery stables, boarding houses, organization meeting places, gas/service stations, homes, churches, police stations, etc. For example, the Sanborn maps of Myrtle Creek, Oregon from 1950s show where the Veterans Housing was located (today that location is a dog park).

For more detailed information, please visit this website:

<https://www.loc.gov/collections/sanborn-maps/about-this-collection/>

Sanborn maps of Oregon cities and towns can be obtained from Oregon State University free of charge by visiting this website:

<http://scarc.library.oregonstate.edu/findingaids/index.php?p=collections/findingaid&id=2107>

Find the city you want to use and click on “Add to Shelf”.

Then click on the Contact Us tab at the top and make your request.

Maps will be e-mailed to you in a digital file you can save.

In other states, check with your state universities or look for the maps on-line.

Photos:

If Sanborn maps are not available, check with the local museum to see if there are historical photographs of streets and businesses students can use for comparison.

Procedures:

- Make groups of 3-4 students. Assign each group a section/specific side of a street on a city block in an area they are familiar with, such as a street in their hometown or neighborhood. (eg., the west side of Main Street between Oak and Pine).
- In the classroom, each student, will individually, create a mental map of the section of street their group has been assigned. Use the Mental Map #1 handout. This can be considered a pre-test, but students should take the mental map with them to the actual street so they can reference it when working on the Comparison Worksheet.
- Students will travel to their destination in their group with their individual Mental Map #1, a clipboard, blank paper, pencils, tape measure, Survey Map, Comparison Worksheet, and Sanborn map of the street section. It is recommended that students are taught desired expectations and that behaviors are modeled before going to town.
- In their group, students will work together to create a survey map of the street section that has been assigned to them, (the same section where they made their Mental Map #1). Students will measure the city street and record on the Survey Map handout what is located in each 10-foot section and label it with the type of business that is located in that space. These should be ground level drawings to allow students to add details of what the building looks like. Sanborn maps are a birds-eye view, so students will need to understand the difference. An additional map could be drawn at birds-eye view.
- Working with their group, students will then compare the map they created from their measurements (Survey Map) with the Sanborn map. Using the Comparison Worksheet students will work together to record their observations and inferences about these changes. They will also need to reference their individual Mental Map #1 for this activity.
- Back in the classroom, students, will individually, create a new mental map on the Mental Map #2 worksheet to compare to the Mental Map #1.
- Conclusion activity will be a class discussion about how the town has changed over time. How has the town changed to fit the needs of the people living there? What impact do the changes of the town have on people? How have businesses changed over time? What has caused these changes?

Assessment:

- Use the Mental Map Scoring Rubric to assess the First and Second Mental Maps. *This assessment is for each individual student's mental map
- The Comparison Worksheet can be assessed at the teacher's discretion. Answers will vary depending on the site. *This worksheet should be considered a group grade as it was completed by the small group.

Extensions and/or Adaptations:


- If Sanborn maps are not available, follow the procedure, but substitute the Comparison Worksheet for the Observation Worksheet. Students will still make a mental map, work in a group to create a Survey Map, but use the Observation Worksheet to record their observations. Assessment will be the same.
- Make predictions to future development or possible destruction.
- Students can create a bar graph on a separate sheet of paper to show how many retail stores, restaurant/food establishments, and service businesses are on that street.

Name: _____

How a City Street Changes Over Time Mental Map #1

From what you can remember about the section of city street assigned to you, draw a map of what is located in that space. You need to draw a street view and only include the ground level (if a building is multi-level, just draw the first level). Draw to scale as best you can.

Label each business with the name and what is sold or offered. Label each street (the street that you are assigned and the two side streets). Label any other important features you feel are important (plants, signs, light poles, parking meters, basically non-building things).

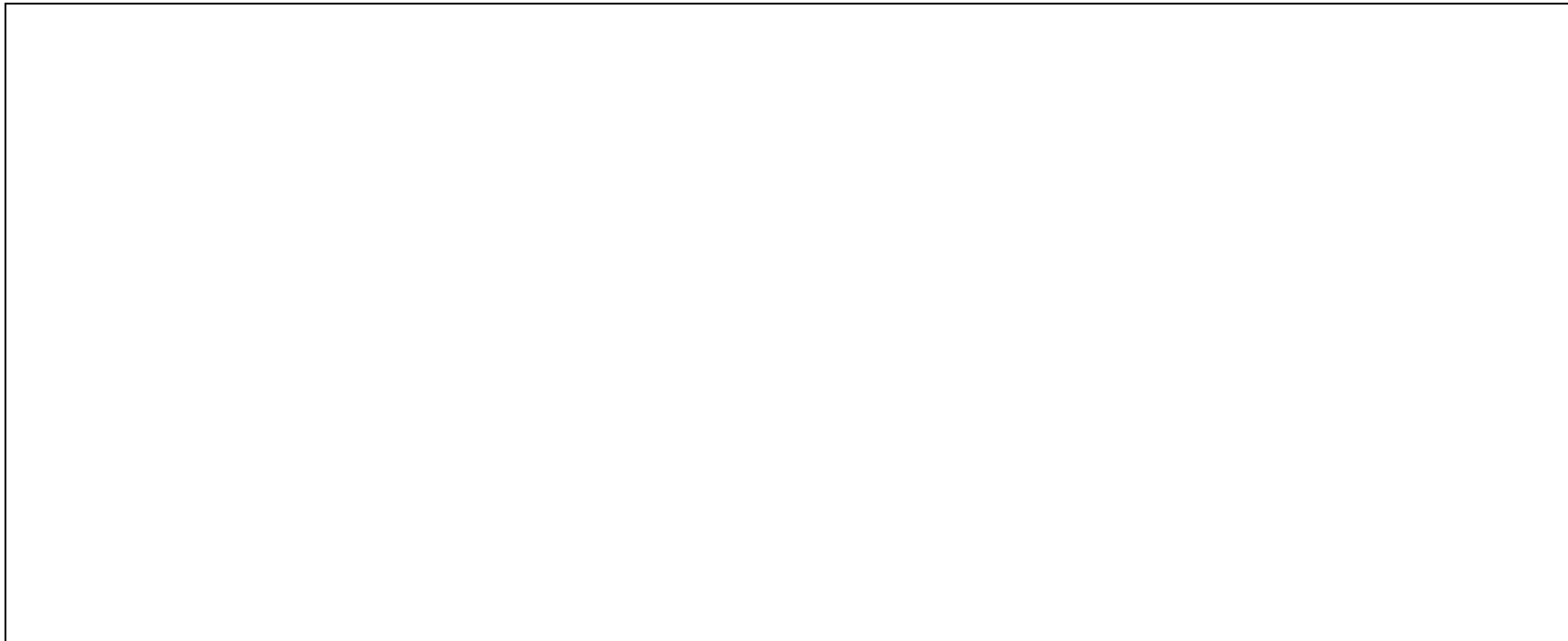


Name of group members:

How a City Street Changes Over Time Survey Map

Draw what you see in each segment of 10 feet. You need to draw a street view and only include the ground level (if a building is multi-level, just draw the first level). Draw to scale as best you can.

Label each business with the name and what is sold or offered. Label each street (the street that you are on and the two side streets). Label any other important features you feel are important (plants, signs, light poles, parking meters, basically non-building things).

A large, empty rectangular box with a thin black border, intended for drawing a street view. The box is currently blank, providing space for the student to draw and label a 10-foot segment of a city street.

Name of group members:

How a City Street Changes Over Time Comparison Worksheet

Using the information from the map of the city street you just created (Survey Map), compare this to the Sanborn Map. Answer the following questions to guide your thinking.

Why are these businesses located in this location?

What has changed over time?

For what reasons do you think caused these changes to happened? (make an educated guess)

What do these businesses say about the people who would shop/eat/get a service here?

List any other observations you can about what was in this location and what is there now.

Use your Mental Map #1 to answer these questions. You can do this as a group and share answers.
OR have each person write their answer as individuals. Be sure to put your name by your response if you do it this way!

What is here (on this street section) that was not included on your mental map?

What was added to your mental map that is not here (on this street section)?

Name: _____

How a City Street Changes Over Time Mental Map #2

Now that you are familiar with the section of city street assigned to you, draw another map from what you remember about that space. You need to draw a street view and only include the ground level (if a building is multi-level, just draw the first level). Draw to scale as best you can.

Label each business with the name and what is sold or offered. Label each street (the street that you are assigned and the two side streets). Label any other important features you feel are important (plants, signs, light poles, parking meters, basically non-building things).

A large empty rectangular box with a thin black border, intended for the student to draw a street view map based on their memory of a specific city street section.

Name _____

Period _____

How a City Street Changes Over Time Mental Map Scoring Rubric

Grade	Neatness	Labeled	Accurate
A	Shows excellent neatness in what is represented	All (90-100%) buildings, streets, and other details are labeled and spelled correctly	All (90-100%) buildings, businesses, and other features are drawn correctly
B	Shows good neatness in what is represented	Many (80-89%) buildings, streets, and other details are labeled and spelled correctly	Many (80-89%) buildings, businesses, and other features are drawn correctly
C	Shows average neatness in what is represented	Most (70-79%) buildings, streets, and other details are labeled and spelled correctly	Most (70-79%) buildings, businesses, and other features are drawn correctly
D	Shows below average neatness in what is represented	Few (1-69%) buildings, streets, and other details are labeled and spelled correctly	Few (1-69%) buildings, businesses, and other features are drawn correctly
F	Too sloppy to understand what is represented	No buildings, streets, and other details are labeled and spelled correctly	No buildings, businesses, and other features are drawn correctly

This rubric should be modified to fit the points possible at the teacher's discretion

Name _____

How a City Street Changes Over Time Observation Worksheet

Using the information from the map of the city street you just created answer the following questions.

Why are these businesses located in this location?

What do these businesses say about the people who would shop/eat/get a service here?

List any other observations you can about what was in this location.

What is here (on the city street) that was not included on your mental map?

What was added to your mental map that is not here (on the city street)?
