



ARCHI TREKS

ArchiTreks gets kids excited about architecture, science, engineering, and more through fun and educational adventures as they explore and discover their surroundings.

Age Range: Kindergarten - 5th Grade

Subject: Architecture



Lesson 4: Preservation (continued)

[Lesson based on "Architecture: It's Elementary" Fifth Grade Lesson 5 pg. 397\)](#)

Lesson Intro:

Have you ever heard of time capsules? Because of how architects have designed the world we live in, any building or structure we come across can be a time capsule too. Each and every building or structure we find on our ArchiTrek adventures tells a story. In fact, a building can be a window into another time or era.

Lesson Duration: 60 minutes

Video Link:

<https://www.pbs.org/video/dptv-education-architreks-preservation/>

Objectives:

- Become aware of the role of historical preservation in the community
- Understand what a "historical" building is
- Be able to identify historical buildings in the community
- Be able to determine historic/preservation value of an existing building

Materials:

- Sketch of "Old Town Streetscape" for each student
- Copy of "Background Information" for each student
- Student Handouts for each student
- Pencils

Vocabulary:

- Adaptive Re-Use
- Demolish
- Dilapidation
- Historic
- Preservation
- Restoration

Lesson 4: Preservation (continued)

[Lesson based on “Architecture: It’s Elementary” Fifth Grade Lesson 5 pg. 397](#)

Activity:

1. Read and discuss the lesson intro with students: “Have you ever heard of time capsules? Because of how architects have designed the world we live in, any building or structure we come across can be a time capsule too. Each and every building or structure we find on our ArchiTrek adventures tells a story. In fact, a building can be a window into another time or era.”
2. Show video (see link above)
3. Read the Background Information page as a class. Discuss the different options for preservation in a community. Look at images of each type as you discuss.
4. Take students on a preservation search in your community. This can be done physically, or virtually (by using a digital resource such as Google Maps Street View). Discuss buildings or areas in the community that have been preserved in some way.
5. Divide the class into groups of 4–6 students each to represent the members of several city-planning boards. Present them with the “Old Town Streetscape” drawing, which shows a series of different buildings in elevation. Below each building is a brief description of some of its characteristics, relating to all or some of the following:
 - a. Age/date of construction
 - b. Association with historic events
 - c. Condition
 - d. Internal planning configuration and use
 - e. Property size and site characteristics

Also give students a copy of the “Background Information” for this lesson plan to use as a reference.

Lesson 4: Preservation (continued)

[Lesson based on “Architecture: It’s Elementary” Fifth Grade Lesson 5 pg. 397\)](#)

6. Explain to student that the “Old Town Streetscape” is in the process of being redeveloped, and the planning board has to make a decision for each building about whether it should be demolished for new development, preserved and restored as a museum, preserved for “adaptive re-use,” or preserved for its architectural or historical significance. Have the students on each planning board come to a consensus about each building’s fate, and giving their reason(s), have a member from each group present their group’s decision to the class.

Assessment Opportunity:

- Compare and contrast the planning boards’ decisions, noting any differences, and discuss the validity of the decisions to gain an understanding of the students’ grasp of the material.

Optional activity: Most communities have a local preservation group. Contact a speaker from the local historical society or a preservation architect. If your community has an area with historic buildings, a field trip with a speaker could help the students develop an awareness of the history of their community and its buildings. Discuss specific old buildings that the students saw on the field trip, or find photographs of old buildings in your community that still exist today and show them to the class.

Lesson 4: Preservation

Decide It!

The "Old Town Streetscape" is in the process of being redeveloped, and the planning board has to make a decision about whether it should be demolished for new development, preserved and restored as a museum, preserved for "adaptive re-use," or preserved for its architectural or historical significance. Each group needs to come to a consensus about each building's fate, and giving their reason(s), have a member from each group present their group's decision to the class. Record your thinking below.

Traditional Old Mill

Traditional Style Community

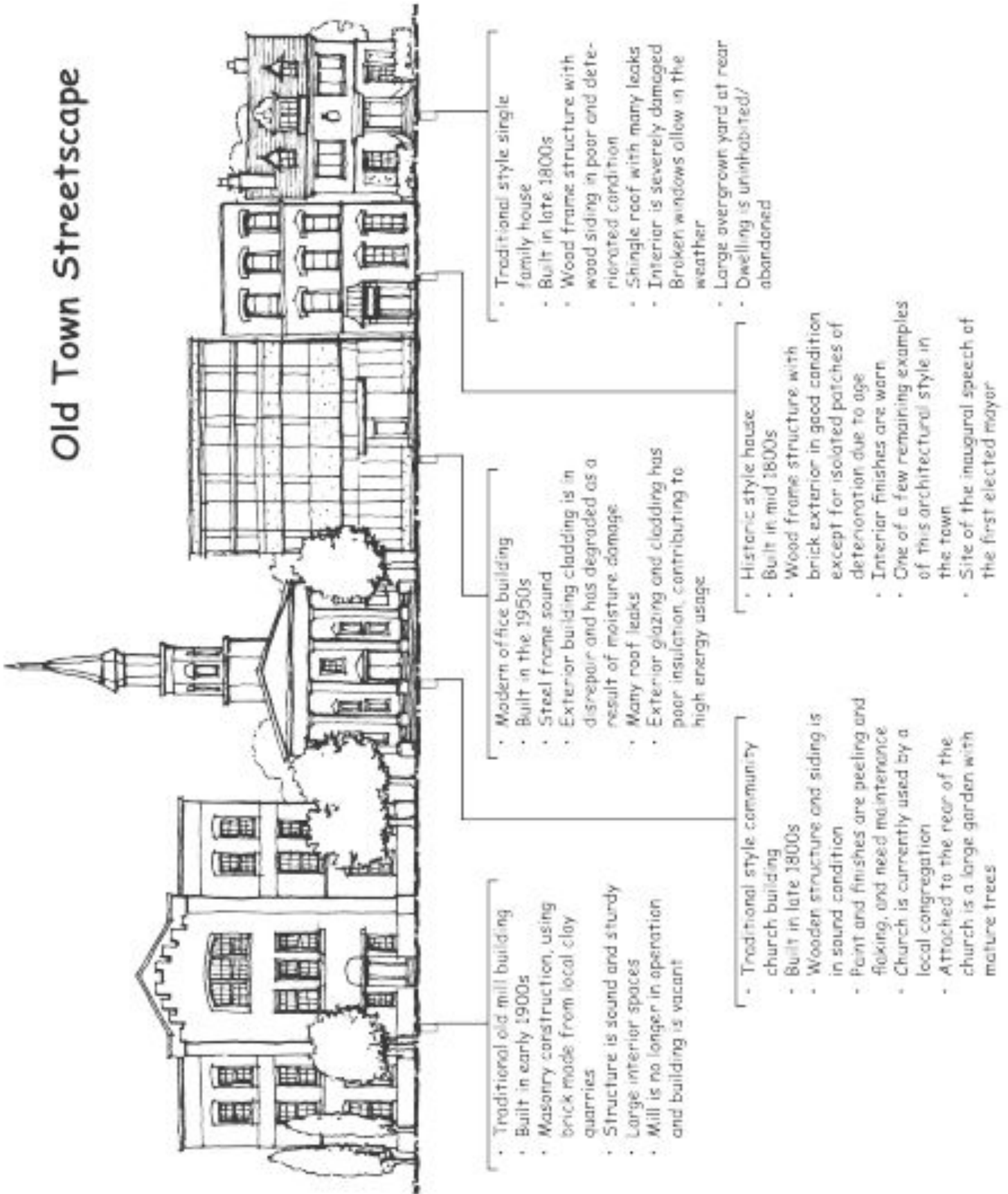
Modern Office Building

Historic Style House

Traditional Style Single

Lesson 4: Preservation

Old Town Streetscape



Lesson 4: Preservation

BACKGROUND INFORMATION

1. What makes buildings or neighborhoods “historic” and therefore worth preserving? This can be a complicated question, but in simple terms, historic preservation is essentially about saving and maintaining old buildings and places because they have value to us today, in one way or another.
 - a. In some cases, old buildings may be aesthetically pleasing to look at and therefore provide visual enhancement to an area.
 - b. Old buildings are worth preserving if they have sound structure and can be adapted to a new use. This is known as “adaptive re-use” and is a form of recycling, avoiding unnecessary demolition and new construction. This contributes to a reduction in landfill use and therefore aids in preserving the environment.
 - c. In other cases, old buildings have played an important role in history and are worth preserving because they provide a link to the past or to some historical event. They provide a place for people to visit, remember and learn about their history. In some instances, it may be appropriate to restore these buildings to their original condition, perhaps to serve as a museum. Their value may be as a record of a historic architectural style, of which there are few remaining examples.
2. What should we preserve? Any kind of building, from factories to mansions, can be considered worth preserving, as can any size or scale of building, structure or neighborhood.
3. What are the advantages of historic preservation?
 - a. Old buildings enhance the appearance of the streetscape by introducing character through their variety of styles and texture of materials.
 - b. “Adaptive re-use” of suitable old buildings into new functions is usually more economical than demolishing them and constructing new buildings.
 - c. Successful historic preservations can often draw visitors to an area, enhancing tourism and contributing to the local economy.
 - d. Historic places inform communities about their roots and their past. They also can be a means of passing memories from one generation to the next.



Dilapidation



**Preservation of a House -
Clawson Historical Society
(Museum That Needs Restoration)**



Historic - Victorian Hackley House



**Preservation - Victorian House
Restored into Apartments**



**Adaptive Re-Use - Schoolhouse
Converted into a Home (Restored)**

Glossary

Adaptive Re-Use (noun) - To take an existing building that had one purpose and renovate it to be used for a different purpose

Arch (noun) - A curved structure, as of masonry, that supports the weight of material over an open space as in a bridge, doorway or gateway

Beam (noun) - A piece of wood, metal or stone that spans from support to support and holds the weight of the floor, roof or material above it

Circle (noun) - A plane figure bounded by a simple curved line; every point is equally distant from the point at the center of the figure

City (noun) - In the United States, an incorporated municipality whose boundaries and powers of self-government are defined by a charter from the state in which it is located

Civilization (noun) - Advancement in social culture characterized by relative progress in the arts, sciences and statecraft

Column (noun) - A vertical support for supporting horizontal structural members

Compression (noun) - The state of being pushed together or squeezed together, which results in a decrease in volume

Dilapidation (noun) - The natural deterioration of a building due to neglect

Dome (noun) - A hemispherical roof or one formed by a series of rounded arches or vaults on a round or many-sided base

Domesticate (verb) - To tame, as to tame a wild animal; To accustom to home life

Ecology (noun) - The branch of biology that deals with the relationship between living organisms and their environment

Environment (noun) - All the conditions, circumstances and influences surrounding and affecting the development of human habitat for both shelter and community

Flying Buttress (noun) - An inclined masonry structure outside of the wall of a building; connected to the building by an arch designed to resist the outward pressure imposed by a vault or the building's roof; usually found in Gothic churches

Forces (noun) - Strength, energy, vigor and power

Glossary

Gravity (noun) - The force that tends to draw all bodies in the Earth's sphere toward the center of the Earth

Green Roofs (noun) - A living roof that is partially or completely covered with vegetation, and which provides extra insulation and provides a habitat for wildlife.

Historic (adjective) - Referring to an example from the past

Interrelate (adjective) - To be interconnected

Landmark (noun) - Any prominent object marking a locality, often one of historical interest; Any object on land that serves as a reference point or a destination point

Neighborhood (noun) - A community or district composed of people living near one another

Nomad (noun) - People who travel from place, never permanently settling in one area

Preservation (noun) - Protection from harm and/or damage

Rectangle (noun) - A four-sided plane figure with four right (90-degree) angles; the opposite sides are parallel and equal

Restoration (noun) - The act of returning a building to its original condition

Semicircle (noun) - A circle cut in half

Shape (noun) - That quality of an object which depends on the relative position of all points composing its outline or external surface; physical or spatial form

Square (noun) - A two-dimensional figure having four equal sides and four right angles

Sustainable (noun) - Meeting present needs without preventing future generations from being able to meet theirs; includes respect for the environment and for people

Tension (noun) - The state or condition of being pulled or stretched

Triangle (noun) - A geometric figure having three angles and three sides

Vault (noun) - A masonry covering over an area which uses the principle of the arch