



# Architecture

## Merit Badge Workbook

Read "the merit badge pamphlet on the subject...meet the requirements as they are stated." - [Boy Scout Requirements pp. 22-23](#)

Each "Scout must be reviewed individually by the counselor." - [Advancement Policies p. 26](#) See the [Online Resources](#).

Send comments to the workbook developer: [craig@craiglincoln.com](mailto:craig@craiglincoln.com). Requirements revised: 2010, Workbook updated: 8/10.

Scout's Name: \_\_\_\_\_

Unit: \_\_\_\_\_

Counselor's Name: \_\_\_\_\_

Counselor's Ph #: \_\_\_\_\_

1. a. Tour your community and list the different building types you see. \_\_\_\_\_

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Try to identify buildings that can be associated with a specific period of history or style of architecture. \_\_\_\_\_

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Make a sketch of the building you most admire.

1. b. Select an architectural achievement that has had a major impact on society. \_\_\_\_\_

Using resources such as the Internet (with your parent's permission), books, and magazines, find out how this achievement has influenced the world today. Tell your counselor what you learned. \_\_\_\_\_

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2. In the Outdoor Code, a Scout pledges to "be conservation-minded." Discuss the following with your counselor:

a. The term sustainable architecture. \_\_\_\_\_

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Identify three features typical of green buildings. \_\_\_\_\_

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b. The difference between renewable building materials \_\_\_\_\_

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and recycled building materials, \_\_\_\_\_

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and how each can be used in construction. \_\_\_\_\_

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c. The relationship of architecture with its surrounding environment and the community. \_\_\_\_\_

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d. How entire buildings can be reused rather than torn down when they no longer serve their original purpose. \_\_\_\_\_

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3. Do ONE of the following:

a. With your parent's and counselor's permission and approval, arrange to meet with an architect. \_\_\_\_\_

Ask to see the scale model of a building and the drawings that a builder would use to construct this building. \_\_\_\_\_

Discuss why the different building materials were selected. \_\_\_\_\_

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Look at the details in the drawings and the scale model to see how the materials and components are attached to each other during construction. \_\_\_\_\_

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b. With your parent's and counselor's permission and approval, arrange to meet with an architect at a construction site.

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Ask the architect to bring drawings that the builder uses to construct the building. \_\_\_\_\_

While at the site, discuss why the different building materials being used were selected. \_\_\_\_\_

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Discuss how the different building materials and components are attached to each other during construction. \_\_\_\_\_

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Note: To visit a construction site will require advance planning. You will need permission from your parents, counselor, the architect, and the construction site manager. A construction site is a very dangerous place. While there, you will need to closely follow the site manager's directions and comply with all the safety procedures, including wearing a hard hat protective eyewear, and proper footwear.

c. Interview someone who might be your client (such as a prospective homeowner or business owner) if you were an architect. \_\_\_\_\_

Find out what your client's requirements would be for designing a new home or business building. Write a short program including a list of requirements for the project, \_\_\_\_\_

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the functions of the building and site, \_\_\_\_\_

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how the functions relate to one another, \_\_\_\_\_

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and the goals of the project. \_\_\_\_\_

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4. Measure a room such as one where you live or where your troop meets. Make an accurately scaled drawing of the room's floor plan showing walls, doors, closets, windows, and any built-in furniture or cabinets. Neatly label your drawing with the following: your name, the date, what room you drew, and the scale of the drawing. (Drawing scale: 1/4 inch = 1 foot)



**Requirement Resources**

1: [Architectural Styles of America](#) Arranged by theme and time period. Also see: [Wikipedia: Architecture](#)

The graph paper you need is in the [Architecture Worksheet](#).

2: [Outdoor Code](#)

3: [Find an architect in your area](#) through the American Institute of Architects' "Architect Finder"

[Building Materials](#)

4: The graph paper you need is in the [Architecture Worksheet](#).

[How to draw a Scale Floor Plan](#)

5: [Careers in Architecture](#)

**General Resources**

Amer. Architectural Found.: <http://www.archfoundation.org>

Amer. Institute of Architects: <http://www.aia.org>

Amer. Institute of Arch. Students: <http://www.aiasnatl.org>

Assn. of Collegiate Schools of Arch.: <http://www.acsa-arch.org>

Assn. of Licensed Architects: <http://www.licensedarchitect.org>

Nat. Council of Arch. Reg. Boards: <http://www.ncarb.org>

Nat. Org. of Minority Architects: <http://www.noma.net>

New York Society of Architects: <http://www.nysarch.com>

Soc. of Amer. Registered Architects: <http://www.sara-Nat.org>

**Outdoor Code**

As an American, I will do my best to—

***Be clean in my outdoor manners.*** I will treat the outdoors as a heritage. I will take care of it for myself and others. I will keep my trash and garbage out of lakes, streams, fields, woods, and roadways.

***Be careful with fire.*** I will prevent wildfire. I will build my fires only when and where they are appropriate. When I have finished using a fire, I will make sure it is cold out. I will leave a clean fire ring, or remove all evidence of my fire.

***Be considerate in the outdoors.*** I will treat public and private property with respect. I will follow the principles of Leave No Trace for all outdoor activities.

***Be conservation-minded.*** I will learn about and practice good conservation of soil, waters, forests, minerals, grasslands, wildlife, and energy. I will urge others to do the same.