

Steps to Success

LESSON PLAN FOR SCHOOL VISITS & VIRTUAL CLASSROOMS



Theme: Exploring Careers in Building Safety



Grade level: K–3

The goal is to increase awareness of students (from kindergarten to third grade) about building safety and the important role code officials play in keeping them and their families' safe.

Objectives:

- The students will learn what a building official does and the role of the building department.
- The students will recognize building safety components in buildings or homes.

Time: 50 minutes

Lesson Plan Summary:

1. Introduce the building official and the building department and how they fit in with other public safety professionals.
2. Explain what the Building Code is and how it fits in with building safety.
3. Personalize building safety for students by having them analyze various building components that may be in their homes.
4. Examine different building materials and discuss how the building official makes sure they are used correctly to keep homes safe and protect students.
5. Introduce building safety careers and invite the students to become part of the building safety team.
6. Finish lesson with the following activities: Fire Escape and Danger Find.

Materials:

- Pictures or examples of a smoke detector, window, stair rail, tub-shower, fireplace and hearth, pool fence.
- Building Safety Career Path [interactive poster](#)
- Safety 2.0 [Building Safety Career Options](#)
- Building code (free access available in [ICC Digital Codes](#))
- *CODiE* the Code Official's Building Safety Activity Book (available for download)
- Building Codes and Code Officials Keep Us Safe coloring book (available for download)
- Building safety vest, hats and pencils (available for purchase)
- Building materials (pipe, brick or rock, wood, wire)

Lesson Outline:

1. **Introduction** – Introduce yourself and the name of the department where you work. Discuss how the code official protects people by making sure their homes and buildings are safe. Talk about how the building department is similar to the police department and fire department because they all protect people. (5 minutes)
2. **Introducing the Building Code** – Show students the building codes and explain that they give directions and contains rules for everything from putting on a new roof to adding on a new room. The building codes are what architects, engineers, builders, construction workers (people who build houses and buildings) and even homeowners need to follow when they are building something in their house so it will be safe. (5 minutes)

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3. Inspecting for Safety – Explain what building inspections are and how they keep people safe. Hold up the pictures or actual items listed below and ask students what it is about these items that helps keep people safe. After students' respond to each one, provide clarification about why the item is included in a house and how the building official checks to make sure it is in the home to keep people safe. (5 minutes)

- **Smoke Detector** – Warns about smoke and fires. Placed in every bedroom.
- **Window** – Provides another emergency escape route.
- **Stair Rail** – Helps people walk downstairs. Prevents falls.
- **Tub-Shower** – Includes device that prevents hot water from burning people.
- **Fireplace and Hearth** – Prevents burning logs from rolling onto the floor.
- **Pool Fence** – Reduces risks of drowning. Prevents children from entering pool without adults.

4. Building Materials and Careers – Pass out building materials (pipe, wood, brick, wire, etc.) to students. Explain that they are materials used to build a house. Ask them what might happen if a weak board were used for a frame or if a worn wire were used to wire a house. Explain that it is the building official's job to make sure the right materials are used to make a house or building safe. Introduce other professions in the safety field. Invite the students to become part of the building safety team. (10 minutes)

- A building inspector inspects structures to determine compliance with the various building codes and standards adopted by the jurisdiction.
- A building official manages the development, administration, interpretation, application and enforcement of the codes adopted by their jurisdiction.
- A special inspector provides a specialized inspection of structural material fabrication and placement, such as poured concrete, structural steel installation and fasteners, etc.
- A permit technician assists in the issuance of construction and development permits to ensure compliance with the provisions of a jurisdiction's adopted regulations and codes.
- A fire marshal develops and delivers fire prevention and implements public fire safety programs that provide for inspections of occupancies for life

safety and fire issues in accordance with codes and standards adopted by their jurisdiction.

- i. A plumbing inspector inspects the installation, maintenance and alteration of plumbing systems complete with their fixtures, equipment, accessories, and appliances.

5. Activity and Q&A Session – Review what the building department does to keep people safe, how it uses the Building Code, and how the building official makes sure the right materials are used to build houses and buildings. Pass out the following activities: Fire Escape and Danger Find. After completing the activity, reserve time for students to ask questions (25 minutes)

- **For Virtual Classrooms** – Have students download the Fire Escape and Danger Find activities to complete.

6. Extension Activities – If time allows, you might do one of the following activities, or they can be left with the teacher to do in the classroom or given as homework.

- **Building Safety Treasure Hunt** – Break students into teams. Have each team go on a walking field trip of the school and find as many safety features in the building as they can, such as the exit signs, sprinklers, railings, etc. The students or the teacher can make a list of the items – or draw each of the items they find. Alternate – Use a picture checklist to check off items. (Grades K–3)

- » **For Virtual Classrooms** – Have students turn on their cameras and go on a virtual tour to identify the safety features within their bedrooms or homes.

- **Posters** – Students design their own Building Safety Month posters. (Grades K–3)

- **Essay** – Students write an essay describing the importance of the building official. (Grades 2–3)

- **Class Book** – Students write/illustrate a class book about the importance of the building official. (Grades K–3)

Optional:

- Distribute CODiE Activity Books.
- Distribute Building Safety Month Coloring Books.
- Distribute building safety inspector stickers.
- Using the information they learned today, invite the students to share and complete these activities with their parents.

