Learning to Draw a Plan, a Section, and an Elevation: Slicing into Your Favorite Fruit or Vegetable

This activity introduces the 3 most common architectural drawing types: Plan, Section, and Elevation.

Architects depict buildings through drawings that act as an “instruction book” for the contractor. There are 3 types of drawings contractors commonly rely upon for construction: PLANS, SECTIONS, and ELEVATIONS. The adjacent activity is intended to help your students understand each by having them create drawings of a familiar object. In this case, a piece of fruit or a vegetable can be drawn as it would be seen “in PLAN,” “in SECTION,” and “in ELEVATION.”

PLAN - a drawing showing an object as though it has been horizontally sliced through its mid section and you are looking down at it from above.

SECTION - a drawing showing an object as though it has been sliced along a vertical line from its top to its bottom.

ELEVATION - a drawing of an object seen straight on, as though you were standing in front of it. It is without perspective. The elevation of a building is sometimes called a “facade.”

Sketchbook Exercise: Building Your Own Architect’s Sketchbook

Sketchbooks are essential tools for Architects. Architects use sketchbooks like a writer would use a journal. A sketchbook is a place to keep and record ideas, drawings, and pictures of things Architects liked and want to reference later on.

Have your students create their own sketchbooks in which they will practice and improve their drawing skills. A sketchbook can be any size, shape, or color. It can be bound with a spiral binding, have a hard cover, or simply be a stack of blank pages stapled along one edge. Drawing on grid paper is especially helpful when sketching.

An inexpensive sketchbook can be made by folding 10 pages of copier paper in half and stapled along the fold. Students should write their names, “Architect’s Sketchbook,” and their teacher’s name on the front cover for easy identification. Keep these sketchbooks with the CAL activities workbook, as there will be optional activities suggested in the following pages.
Slicing Into Your Favorite Fruit or Vegetable

Set your fruit or vegetable in front of you. Draw a PLAN, SECTION, and ELEVATION for it in the space below.

Label the parts of your piece of fruit or vegetable: Stem, Peeling or Skin, Seeds or Pit, and Flesh. If different parts of your fruit or vegetable have textures or colors, draw those too.

Imagine this: How small would you have to be if you lived inside your fruit or vegetable? Use a ruler to measure your miniature height.

Adapted from an exercise presented in "Architecture In Education" by Abhau, Copeland & Greenberger. Drawings by James "JR" Ronczy

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