

Neoclassical Architecture



CAVITT 8TH GRADE ART DOCENT LESSON

Neoclassical architecture describes buildings that are inspired by the classical architecture of ancient Greece and Rome. After the ancient Roman cities of Herculaneum and Pompeii were discovered in the mid-1700s, **artists sought to revive the ideal of classical Greece and Rome in architecture, sculpture, painting, and the decorative arts.** Architects and artists adopted Neoclassicism for aesthetic and political reasons, and the style flourished during the revolutionary periods in France and the United States. (Approx. 1750-1900)



During the late 18th and early 19th centuries many of the foundational buildings of the United States government were constructed. The United States based its constitution, including our three branches of government that incorporates checks and balances, on the governments of ancient Greece and Rome. The U.S. also looked back to antiquity as its prototype for a new democratic system.

The founding fathers of this country chose the Neoclassical style for government buildings, as it symbolizes the classical roots of our government.



Monumental Architecture

For most of history, **temples** and **palaces** served as the leading forms of monumental architecture.

During the Neoclassical era, these building types were gradually replaced by **government buildings** (e.g. courts, public service buildings, schools) and **commercial buildings** (e.g. office and apartment buildings, performing arts centers, transportation terminals).

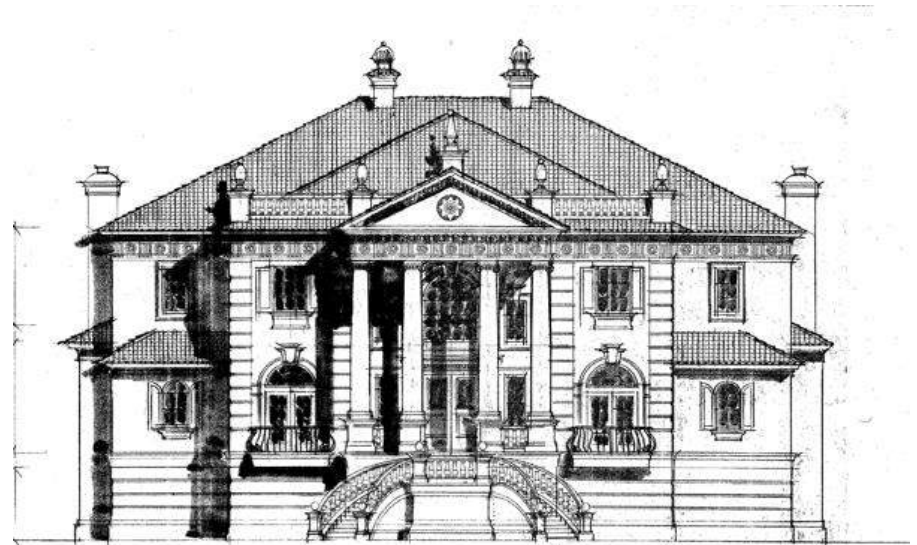
Today, government and commercial buildings dominate **cityscapes** all over the world.

Types of Neoclassical Buildings



Neoclassical buildings can be divided into three main types:

- **Temple:** features a design based on an ancient temple. Many temple style buildings feature a peristyle (a continuous line of columns around a building).
- **Palladian:** Andrea Palladio was an Italian architect who admired ancient Roman architecture. His influence is still seen today and he is the best known neo-classical architect in the western world. A well known Palladian detail is a large window consisting of a central arched section flanked by two narrow rectangular sections.
- **Classical block:** features a vast rectangular (or square) plan, with a flat roof and an exterior rich in classical detail. The exterior is divided into multiple levels, each of which features a repeated classical pattern, often a series of arches and/or columns. The overall impression of such a building is an enormous, classically-decorated rectangular block.



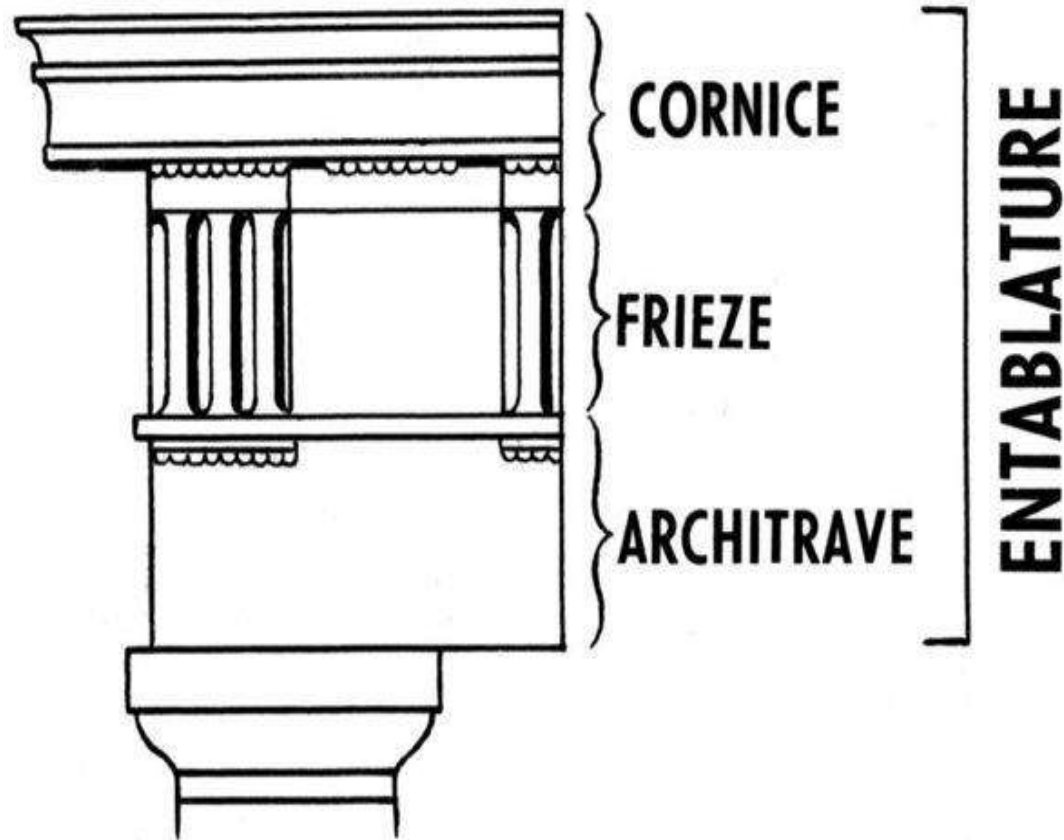
Can you name the type of Neoclassical Architecture for each building?

Neoclassical Architecture Features



**FEATURES OF CLASSICAL ARCHITECTURE
FOUND IN NEOCLASSICAL DESIGN**

On a columned building, the section between the top of the columns and the roof is called the **entablature**. The three parts, cornice, frieze, and architrave, were designed to complement different types of columns.



Column & Capital Basics

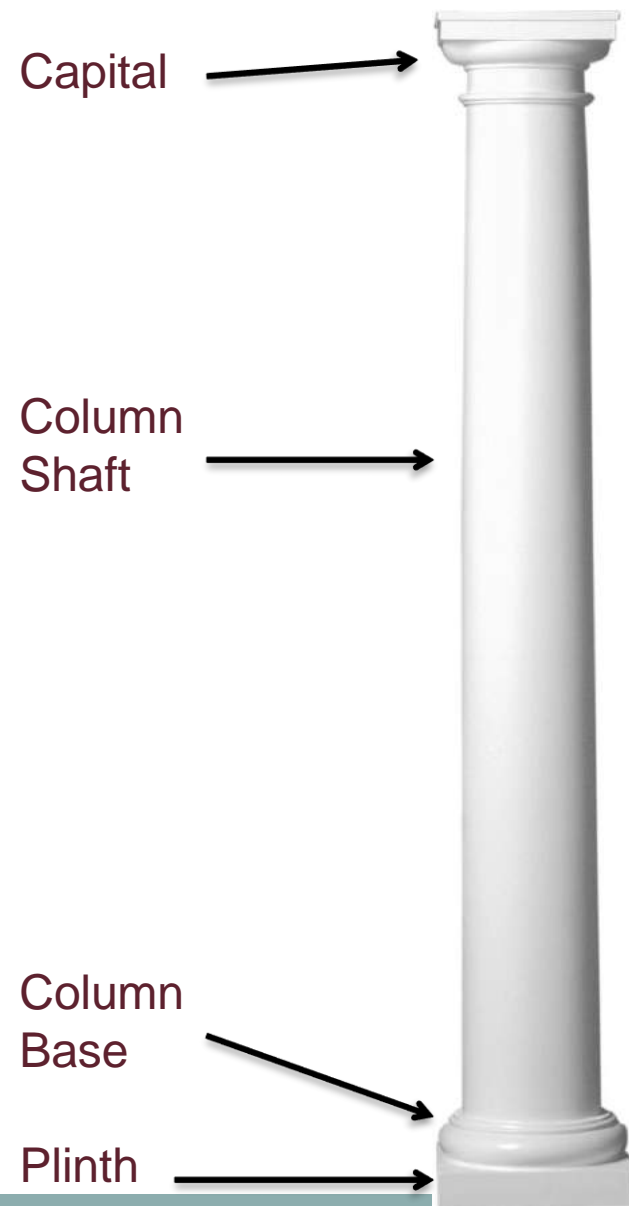
CAPITAL

A **Capital** is the crowning member (top) of a column, on which rests the column and base. Capital styles are based on the Orders of Architecture.

COLUMNS

Columns are vertical architectural support. They typically include: the round or square shaft, the top (capital) and the bottom (base). The **base** is the lowest element of a column structure on which the column shaft rests. The **plinth** is the square or round slab that the column base rests upon.

In architecture, columns are utilized as load-bearing elements supporting porches, arches or a cornice.



Ancient Greek and Roman builders developed the Five Orders, or rules, for the design and proportion of buildings. These classical orders are prominent in Neoclassical Architecture.



Tuscan



Doric



Ionic



Corinthian

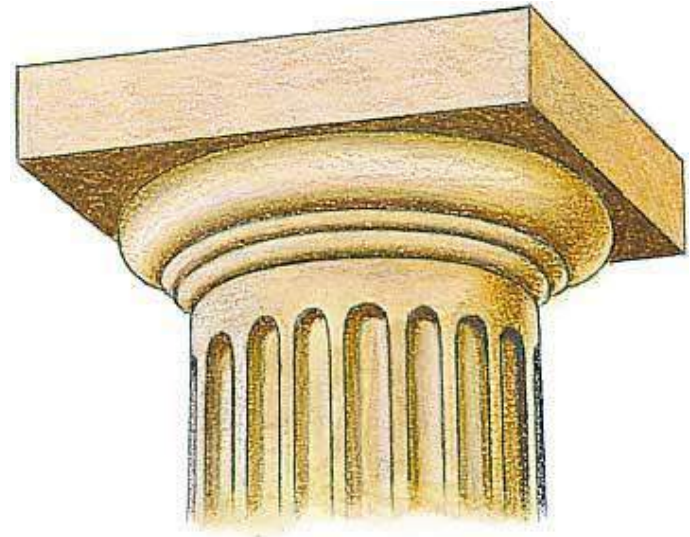


Composite

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DORIC

The Doric order was the earliest order. It was mainly used on the exterior of large structures and public buildings. A Doric capital consists of a square stone slab [abacus], above a round molded slab with fillets and is elegantly simple in design.



Alan Witschonke

The Parthenon is the most famous surviving building in the Doric order. Built to honor the Greek goddess Athena, the Parthenon is considered an ideal example of Greek achievement and the finest example of the Doric order.



IONIC

The Ionic order was developed later than the Doric. Ionic capitals were more elaborate than their Doric counterparts. Its graceful, well proportioned style was used for small buildings and decorative interiors.



CORINTHIAN

The ornate Corinthian order was developed by the Greeks in the fifth century. It was not used often by the Greeks, but was modified and used extensively by the Romans.



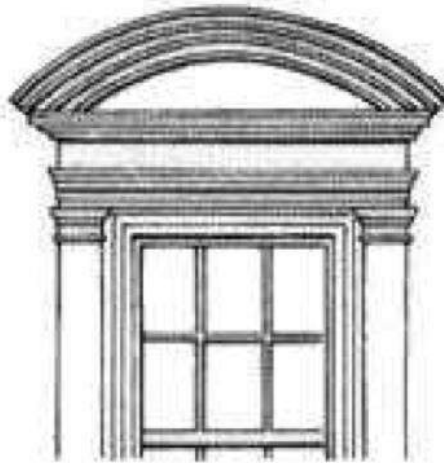
Corinthian Capital

Architectural Pediment

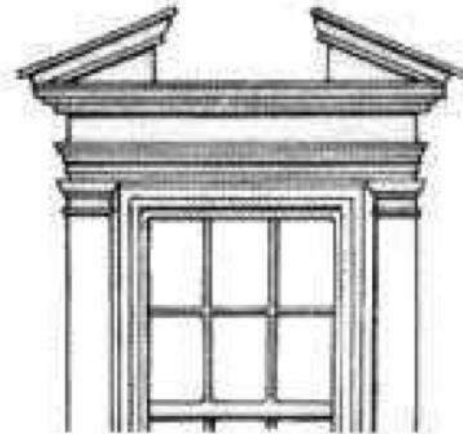
An architectural element developed in ancient Greece, **pediments** were historically **embellishments** over doors and windows that were both **structural** (*supported by columns*) and **decorative** (with sculpture reliefs). Beginning with Roman architecture, pediments became primarily decorative.



Pointed



Curved



Broken

A few Neoclassical window styles:



Palladian Window

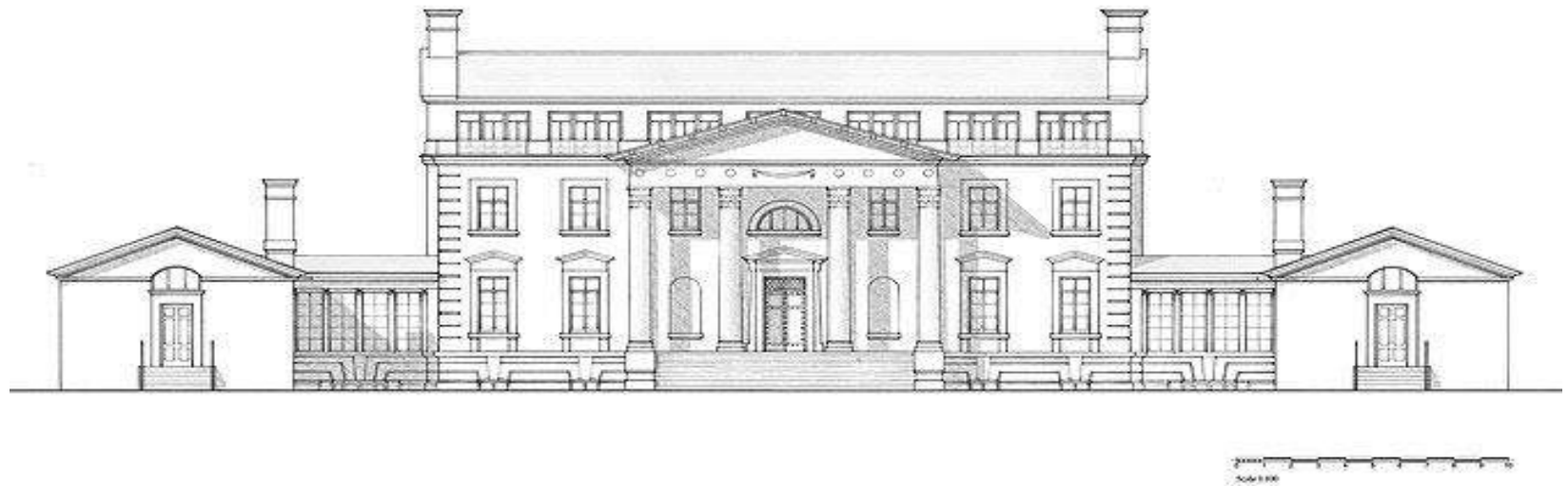


Norman Wheel

Neoclassical Building Characteristics

- 1 - 2 1/2 stories in height – generally **low buildings**
- **Symmetrical**: balance and symmetry are the most predominant characteristic of neoclassicism
- Porticos (porches) featuring Doric or Ionic **columns**
- Building's **facade is flat** and long, often having a screen of free-standing columns.
- May feature **domes** or **towers**
- **Dentil molding** and **frieze** band beneath the **cornice** are common
- Decorative **pediments** on doorways and windows
- **Multiple windows**; upper and lower levels
- Wide variety of **different window configurations** including basic, arched, Palladian and Norman Wheel
- **Ornamental detail** includes broken or unbroken pediments and side lights (windows) surrounding the entry

What Neoclassical Building Characteristics do you see in this building elevation?



United States of America

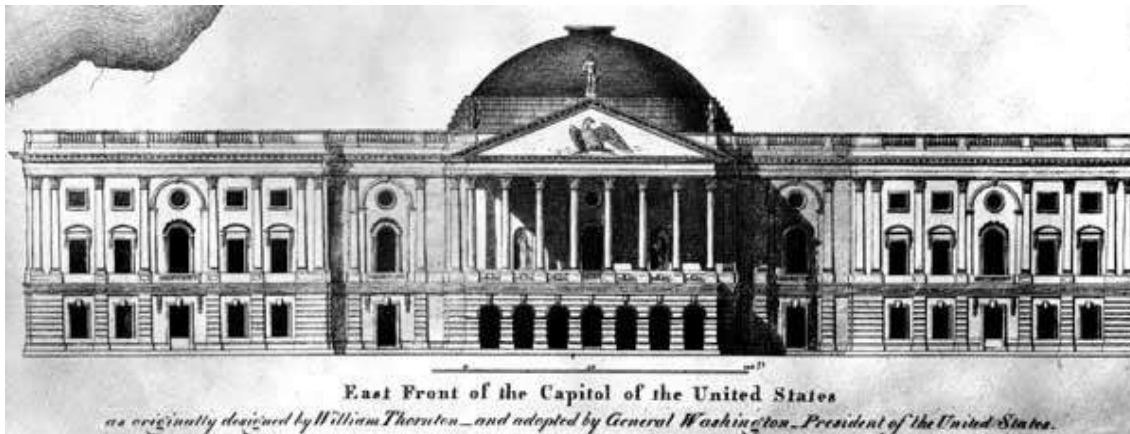
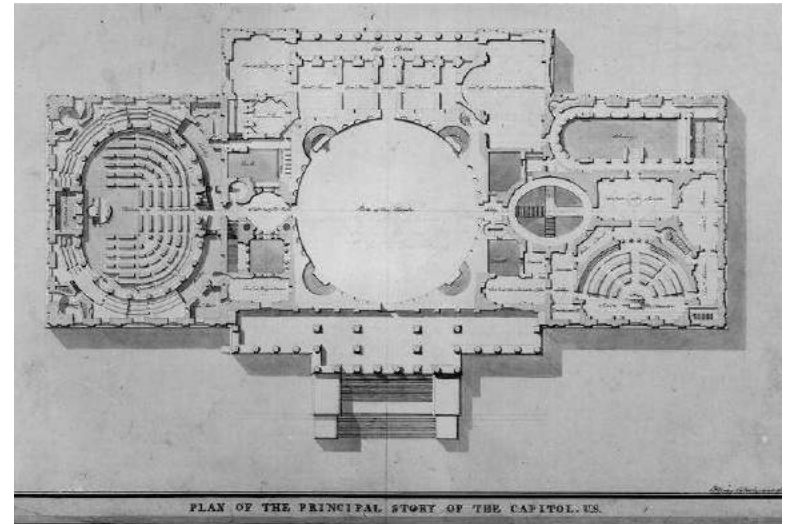


EXAMPLES OF NEOCLASSICAL ARCHITECTURE

Perhaps the single greatest example of Neoclassical style in the U.S. is the **United States Capitol Building**, for which construction began in 1793. President Washington selected a building plan that was composed of three sections. The central section was topped by a low dome and was flanked by two rectangular wings, one for the House of Representatives and one for the Senate. This original plan can still be seen today but in a much grander scale than the original concept. The building has evolved over hundreds of years but still retains its original Neoclassical style.



Architectural Drawings - U.S. Capitol



Finished and occupied in 1935, the **Supreme Court** building is home to the nation's third branch of government. The architect of the Supreme Court, Cass Gilbert of New York City, drew upon the classical Roman **temple form** as the basis for the Court's new building. Reached by a great flight of broad steps, the portico of tall **Corinthian columns** gives the building a monumental entrance. Lower wings flank the central temple and help relate it to the lower-scaled buildings of the Capitol Hill neighborhood.





University of Virginia



Low Library – Columbia University

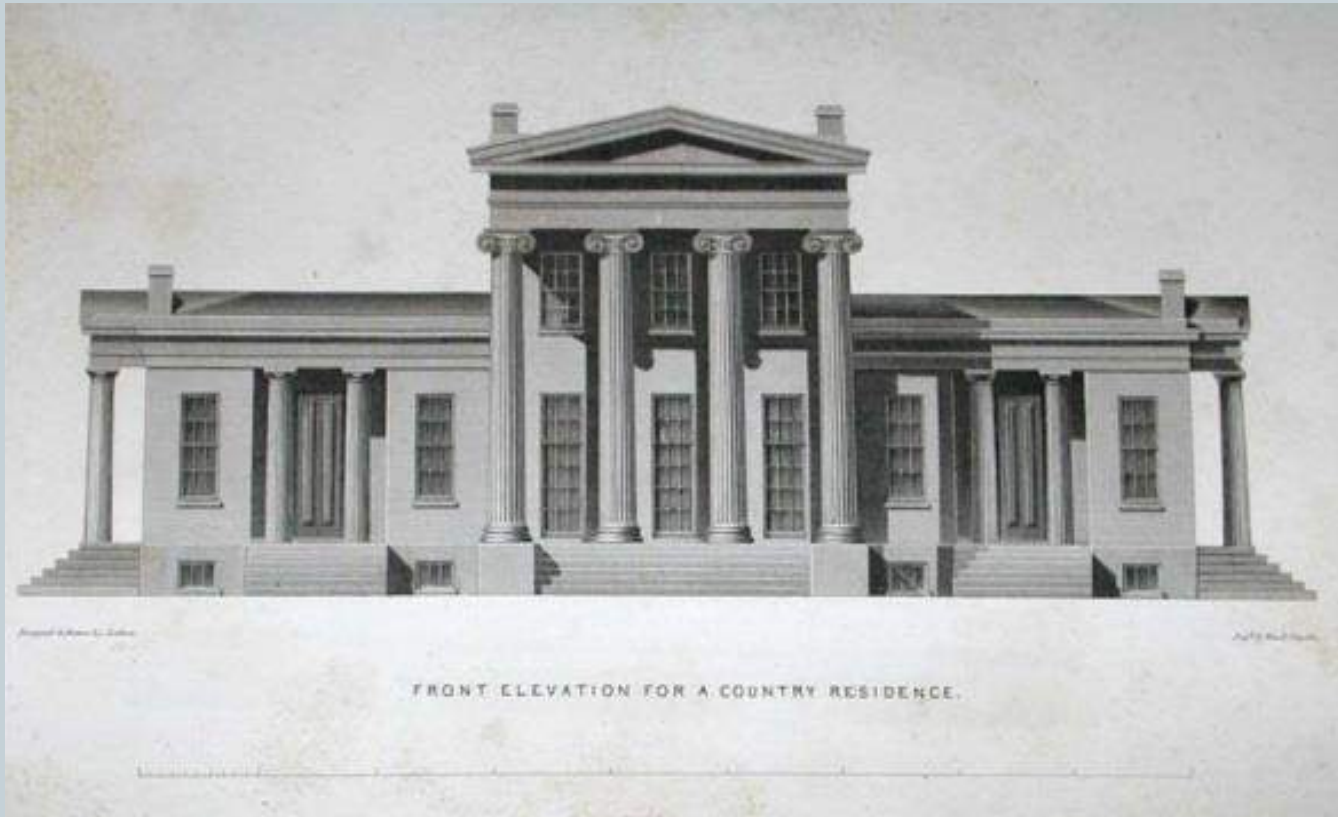


Baltimore Cathedral



White House – South Façade

Art Project



Project Introduction

You will be completing a drawing project in which you redesign the façade (or front) of Cavitt School in the Neoclassical style.



You have been given several drawing pencils and other tools to use for this project. Let's review them along with some basic drawing concepts so that you can complete your best work . . .

Drawing Tips:

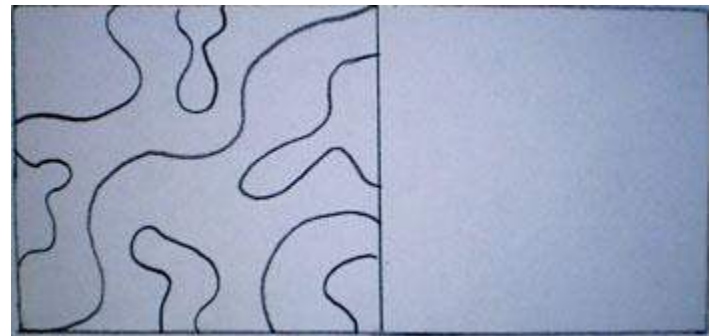
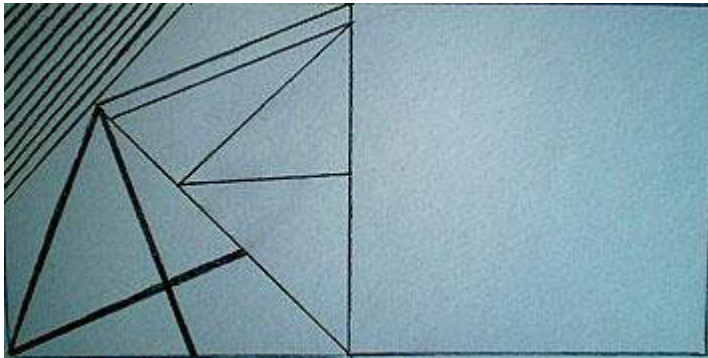
Step One - It Begins With Observation:

One of the most important aspects of drawing is observation. Unless you learn how to see, it will be difficult for you to draw the objects around you successfully. The fundamental aspect of depicting any form, tone, color, or texture starts with your eyes. Only when you have the ability to observe and recognize these factors can you simulate them with your pencil on paper. For example, a computer monitor is made up of rectangular shapes, so is the table on which it rests. **Whenever you begin a project, consciously seek the object's hidden contours and shapes.**

Step Two - The Lines:

For this project you have 4 different tools to draw with. Practice drawing lines to see how soft or hard each of these pencils are. The harder the lead, the lighter the lines. The softer pencils allow you to get darker areas for shading and shadows.

Use your hardest pencil to draw light lines and your softer pencils to get dark shadows and darker lines.



Step Three - Get The Right Shade:

Shading is the key to making the objects you draw appear 3-dimensional. Before you begin shading, you need to determine where the source of light is in your drawing. For example, if the source of light is on the left of the object, the right side will get the darkest shading, while the left will get the lightest.

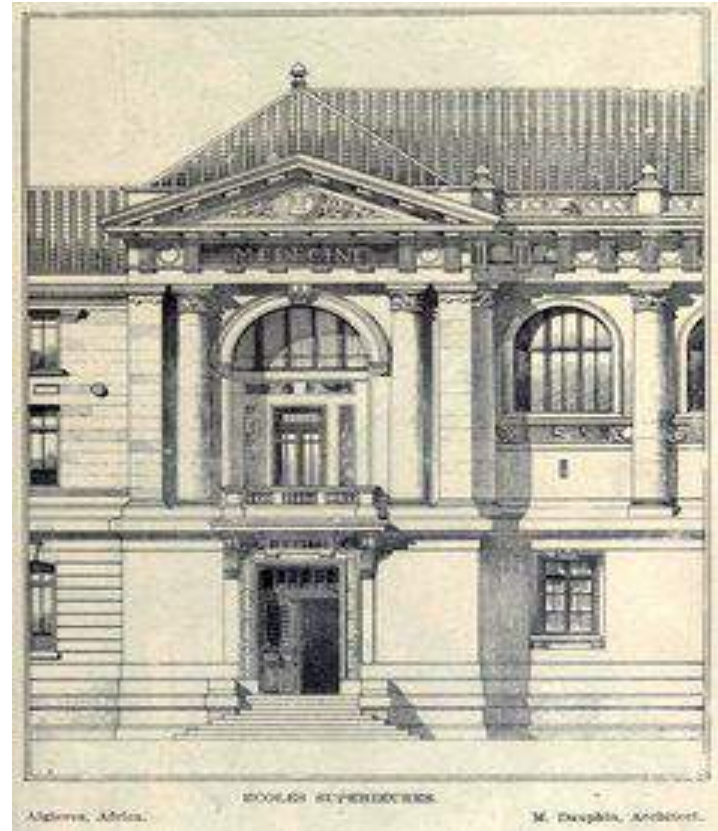
For example, say you want to draw a ball. First, make a round shape on your paper. Then, say you decide your light source is on the left side of the ball. Begin shading from the lower right side of the ball, using curved shading movements with your pencil. As you approach the top left side, keep making lighter strokes, until the shading is barely visible right on the top portion of the left side. Smudge the shaded area using a **blending stump**, to smooth the shading.



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Step Four - Add A Shadow

The final step of giving form to your 2-d item is to add a shadow. Whenever there is a source of light falling on an object, it creates the shadow of the object on the opposite side. Observe well how the shadows of objects appear when light falls on them. You will notice that the shadow will always be an elongated version of the object. Plus, the stronger the light, the sharper the shadow will be, and conversely, the weaker the light, the more diffuse the shadow.



8/2

Drawing Instructions:

You are an architect who has been asked to redesign Cavitt School in the Neoclassical style. To prepare for your redesign work, consider the following:



- You will identify the elements that need to be considered when redesigning the aesthetic elements of the façade of a building. Windows, roof lines, and structural elements to name a few.
- Cavitt was originally built in the 1980's as a middle school for the Eureka School District. Now a junior high, Cavitt is one of California's "Outstanding Schools" with a focus on Science, Technology, Engineering and Mathematics including Project Lead The Way curriculum for eighth graders. What type of design and decorative elements might be included to convey this importance?
- Architects use detailed measurements to present their work in scale. In the same way, you will use your ruler and reference the photograph of Cavitt to determine the proper dimensions for the new façade.
- Think about the Neoclassical details you have been shown and use these in your redesign of the Cavitt façade.
- You can use details like shading and shadowing to depict depth if desired and time permits.

Start by observing the photo of Cavitt . . .

- This image is taken at a slight angle but you will be re-drawing the façade from a head-on elevation view.
- The basic building is just a series of squares and rectangles.



We will sketch the basic structure together.

- Keep your paper oriented horizontally.
- Draw the ground:
 - With your ruler, measure two points 4cm (1.5") from the bottom of the page.
 - Use the ruler to connect the points, extending the line across the width of your page.
- Draft the center portion of the building:
 - Draw the walls. On your ground line, measure from the left of the paper and lightly draw one point at 10.5 cm and another at 20 cm. Repeat these measurements a second time, making two additional marks, a few inches higher. Lightly connect these points to create two vertical lines for the building's center walls, extend the lines $\sim 3/4$ the height of the page.
 - To create the roof, make a point 10 cm from the bottom of each of your vertical wall lines. Connect these points horizontally to create your roofline.
 - We are now done with the center portion of the building. You will embellish this later on.

- In the photo, notice the wings extending from both sides of the building's center. Let's sketch the wings:
 - Draw two points at 8cm from the ground line. Connect these with a horizontal line (broken through the center part of the building) to create the basic roofline for each wing.
- That completes the sketch of the basic structure!
 - The other lines you observe are not structural. They can be changed or omitted. The rest of the design is up to you!
 - Erase your construction points and excess lines that you do not need anymore. If needed, darken the lines you kept.

As the architect, it is time for you to be creative and embellish!

- Add Neoclassical elements, such as columns, stairs, windows, domes, pediments, etc. as you see fit.
- You may use your ruler and stencil, and also draw freehand.
- Ignore the landscaping for this drawing.
- If you have time, you may finish by shading to provide dimension, and darken up the major lines of your building to help create depth and emphasis.
- When finished, ensure all 7 drawing tools are in your supply bag.