

## PART 1. WHAT IS A SKYSCRAPER?

Vocabulary	
Base	the part of a building that sits on the ground
Elevation	a drawing of the front, back, or side of a building showing its height
Exterior	the outside or outer surface of a building
Interior	the inside or inner parts of a building
Proportion	the comparative measurement or size of different parts of a building
Skyscraper	a tall building with a steel or concrete skeleton frame, an elevator, and floors where people live or work
Story	a floor or level in a building

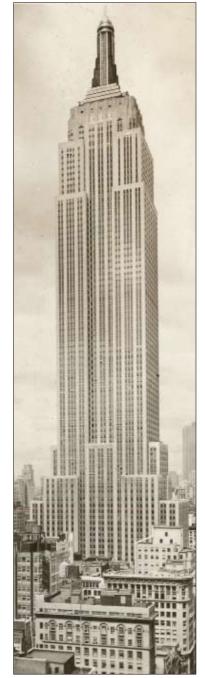
Not all tall buildings are skyscrapers. The best way to determine if a structure is a **skyscraper** is to examine its height, construction, and purpose.

Skyscrapers must be taller than they are wide; it is bigger in height in **proportion** to its width. That means the measurement of the building's height is greater than the measurement of its **base**.

More than a century ago, most buildings were made by stacking bricks or stones to make an **exterior** wall that supported the building. Skyscrapers are built with a strong **interior** structure that also supports the weight of the building from the inside on columns of steel or reinforced concrete. This type of construction makes it possible to create multiple-**story** buildings that rise hundreds of feet in the air. Since these buildings are so tall, skyscrapers require elevators to carry people to the upper floors.

Another way to identify a skyscraper is by the building's purpose, or function—how it is used. Some tall structures, like the *Statue of Liberty*, are taller than they are wide, have a steel frame, and use elevators to bring people to the top. But the *Statue of Liberty* is not a skyscraper because it has no usable floors. People use skyscrapers for work, living, and recreation. They can contain offices, hotels, apartments, stores, restaurants, theaters, and even museums.

BE to do Create a chart listing characteristics of a skyscraper. Name familiar tall buildings in your neighborhood and city. Talk about their height, construction, and purpose to determine if they are skyscrapers.



EMPIRE STATE BUILDING Historic Postcard



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## **Close Looking Activities**

**Object 1. Empire State Building Historic Postcard** At 1,250-feet, the 102-story Empire State Building was the tallest structure in the world from its completion in 1931 until 1972. This historic photograph shows the Empire State Building towering above its neighbors along Fifth Avenue.



TUBF

to do

Compare the Empire State Building to the other buildings around it. Notice the height of each building compared to the size of its base.

**Object 2. Structural Height Comparisons.** This drawing compares the height of famous tall structures in 1930, including the Eiffel Tower located in Paris, France, The Chrysler Building in New York, and the Empire State Building, the tallest skyscraper at the time.

BE Describe the shape of each structure and how the shape is important to its height. What are the similarities and differences of each structure?

**Object 3. Empire State Building Blueprint.** Architects draw blueprints to show the design and measurements of a planned building. These drawings are often used on the construction site. Before digital technology, a blueprint started as a line drawing, but when copied, looked like a negative with white lines on a blue background. This blueprint is called an **elevation** because it shows the complete height of the Empire State Building from the narrow east and west sides of the building.

Locate parts of the building such as windows, doorways, decoration, observation decks, and tower. Examine the height by counting windows and floors. Measure the building's base and use that to measure its proportional height.

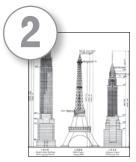
Across the Objects: Compare the three images of the Empire State Building and discuss what different types of information you can get from looking at them together.

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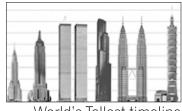
## Additional Web Resource:

www.skyscraper.org/viva2 Visit VIVA2 for construction photos of the Empire State Building.









World's Tallest timeline