Self-Guided Architecture Activity
ARCHITECTURE
YALE UNIVERSITY ART GALLERY
Our museum is made up of three buildings.

This guide focuses on the Kahn building (1), designed by the famous American architect Louis Kahn.

Built in 1953, this building was Kahn’s first opportunity to create a museum. Like any artist, Kahn paid careful attention to not only what he built but also how he built it. He chose lines, shapes, colors, and materials very carefully because he knew they would affect the way people looked at the artwork, and the way people felt in the museum. As you walk through the building, notice how Kahn organized the space, and—like him—pay careful attention to where he put certain materials. Be sure to ask and answer questions, thinking and sketching along the way. Please pick up a floor plan at the Information Desk to help you explore the space.
Lobby

Start in the lobby, where you can see lots of the materials, shapes, and patterns that repeat throughout the Kahn building. Stand here for a bit and look around you. Look up. Look down. Look at the shapes and materials.

Materials

Below is a list of materials that can be found in the lobby, as well as throughout the rest of the Kahn building. Take a minute to look around and find them.

Concrete
Made of crushed rocks, gravel, and cement, concrete is a very strong material often used in buildings. Sometimes it has bits of steel or steel bars inside of it, giving it extra strength and the name “reinforced concrete.” Concrete is everywhere in this building, from the columns to the ceiling to the stairwell.

Wood
The wood floors on the first three levels of the building are made of white oak. Notice how its color and grain change as you move through the Kahn building. (The floor on the fourth floor is made of maple).

Terrazzo
The black terrazzo on the floor is made of crushed marble, quartz, granite, and glass, which are bound together with some sort of “binding agent,” or glue. After the crumbled rocks and glue are mixed together, the terrazzo is polished to be very shiny, like marble.

Brick
Bricks can be made from many different materials, including sand, ceramic, and mud. Think about how the bricks for the walls in this building are different from others you have seen before.

Glass
Glass is made by heating sand and adding chemicals. Kahn used glass in the “curtain wall,” or a wall of windows, which you can see on the north and west sides of the building. The panes of glass are held together by strong metal frames. Be sure to look for them when you are outside.

Cork
Cork comes from the bark of the cork oak tree. It is very light, tough, and elastic, which means it has a bit of stretch and can get bigger and smaller when pushed and squeezed. Kahn used it on the floor between the wood and the terrazzo to absorb some of the pressure from the expansion and contraction of other materials used in the building.

Think: How would you describe this space to a person who has never been here before?
Shapes

Look at the shapes you see around you, and notice where they are located in the lobby.

When looking for the shapes, you probably noticed there are lots of triangles in and on the ceiling. They are four-sided forms called tetrahedrons. Tetrahedrons are a kind of pyramid. They have four triangle-shaped faces and six edges, and they meet at four points. The tetrahedrons are interesting to look at, but they are also incredibly strong. They make up the ceiling in this room, and they support the floor upstairs.

Take a seat and sketch them in a bit more detail—it is trickier than it looks!

Louis Kahn believed in “honest architecture.” That means that when making a building, he wanted to give visitors clues about how he made the building and how the building works. Notice the air ducts and light tracks running through the ceiling. Though he tucks them into the tetrahedrons, he still lets us see where they are, and how they work. Look closely at the concrete columns and notice the lines that look like planks of wood. To make those columns, concrete was poured into wooden molds, and you are seeing marks the wood left on the concrete. Kahn lets us see other clues around the building as well. Both inside and outside the lobby, look for areas where you can see how the building was made, and where the “guts” of the building are kept.
Stairwell

Louis Kahn believed that staircases are some of the most important parts of a building. He thought that, because everyone uses them, they should be designed just as carefully and creatively as the rest of the building.

Find the stairs and go to the very bottom. Look all the way up, and all the way around. Describe what you see. How does it feel to be here?

Now that you’ve seen the view from the very bottom, notice how the space changes when you get to the very top. Don’t run. Make your way up using the stairs or, if you prefer, the elevator. As you move, pay attention to the shapes and materials. Also notice how the light changes.

Look up. Look down. Describe your view from the top of the stairs. How did the space change?

Louis Kahn always used to say, “Let the building be what it wants to be.” By that, he meant that the look of a building—its design, its shapes, its materials—should match the use of the building: a school, a hospital, and a museum should look and feel different from one another, because they are used in different ways. When it was originally built in the 1950s, this building was a museum, but it was also a design laboratory and an architecture school. So, on one floor, students were learning how to make buildings, while on another floor, people were looking at artwork. Louis Kahn figured out a way to make flexible spaces. He created big, open spaces and added walls that could be moved!
Spaces

From the top of the staircase, go down one level to the third floor.

Use the floor plan and find where you are standing.

Hint: Use the staircase and the elevator to help you.

Here is a map with no interior walls. Go into the gallery and mark where you see the walls, drawing directly on this map.

Louis Kahn used interior, or inside, walls called “pogo walls.” The tetrahedral ceiling is strong enough by itself that the pogo walls do not need to hold any of the ceiling’s weight; they simply divide the space up and display the artwork. People who work at the museum can move the walls to show different kinds of artwork in different ways. Look at the tops and the bottoms of the walls and notice the silver cylinders that touch the floor and the ceiling. Like pogo sticks, those cylinders have springs inside of them, which help them expand and contract, or get bigger and smaller, both to lock the walls into place and to release them when they need to be moved.
More to Explore

Now that you have explored the Kahn building, you can also explore the Old Yale Art Gallery building and Street Hall. Look at the drawings at right. Each shows the Gallery—all three of its buildings—from a different point of view.

This elevation drawing shows what you might see from Chapel Street.

This section drawing shows what the building might look like if we removed its front walls, or if you had X-ray vision. Section views help us understand how people might move through and experience the inside of a building.

This floor plan—like the one you picked up at the Information Desk—shows how one floor is organized. Instead of removing the front walls, this view shows what we would see if we removed the roof to look down at the floor, like a map.
Details

On paper, you can see where one building stops and another begins. Inside the Gallery, it might be a little harder to tell where each building meets the next. Look carefully as you walk through the museum. Notice how details change as you move from building to building. Think about how those changes make you feel, and how they affect the way you see the art. In particular, pay attention to shapes, materials, scale (or size), and light.

Draw your favorite details.
We hope you have enjoyed the Gallery and its architecture, and that you will come back and spend more time with the artwork inside its walls. In the meantime, be sure to pay attention to the buildings around you, and to the decisions made by the architects who designed them. Keep asking how lines, forms, and materials affect the way you move through spaces. It’s a question you can ask over and over again, no matter where you are!