



STEM Challenge: Drawing an Architectural Diagram Story Book Science at Home Activity

What you need

- Pencil, pen, or other writing utensil
- Colored pencils or crayons
- Activity guide worksheet, included in the final pages of this activity guide
- Museum maps of National Museum of African American History & Culture, included in the activity guide worksheet in the final pages of this activity guide
- Museum map of KU Natural History Museum, included in the activity guide worksheet in the final pages of this activity guide
- Additional paper

Preparation

Diagrams are tools used to represent an idea. Diagrams include charts and other graphs that represent numbers and data. They can also include illustrations that represent logical relationships between at least two items. Some diagrams, such as architectural diagrams, are drawings that provide a general description of a structure and the space it takes up.

What to do

Follow the instructions on and use the activity guide worksheet, included in this guide, to explore architectural diagrams!

Activity modified from *Architecture For Kids* from Glazer Children's Museum

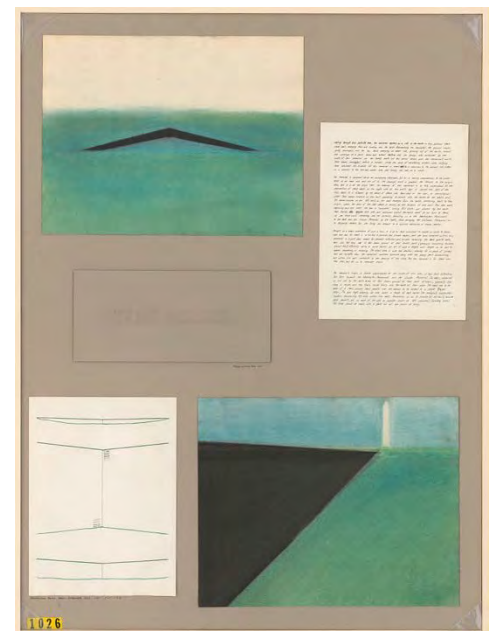
What is happening?

Architects are people that design buildings. Architects use diagrams, or drawings, to represent buildings and their spaces, including how the building will be used and the different parts of the building.

Elements like shape, color, and distance can be used in diagrams to represent a building and its spaces and how those spaces relate to one another.

Diagrams are tools used by architects to communicate information about a building. They are not formal drawings with precise details. Instead, diagrams are informal drawings used to represent a structure and communicate its components as general information. Different styles of architectural diagrams exist to represent structures.

Information from *Architecture For Kids* from Glazer Children's Museum and *Understanding Architectural Diagrams* from Archisoup



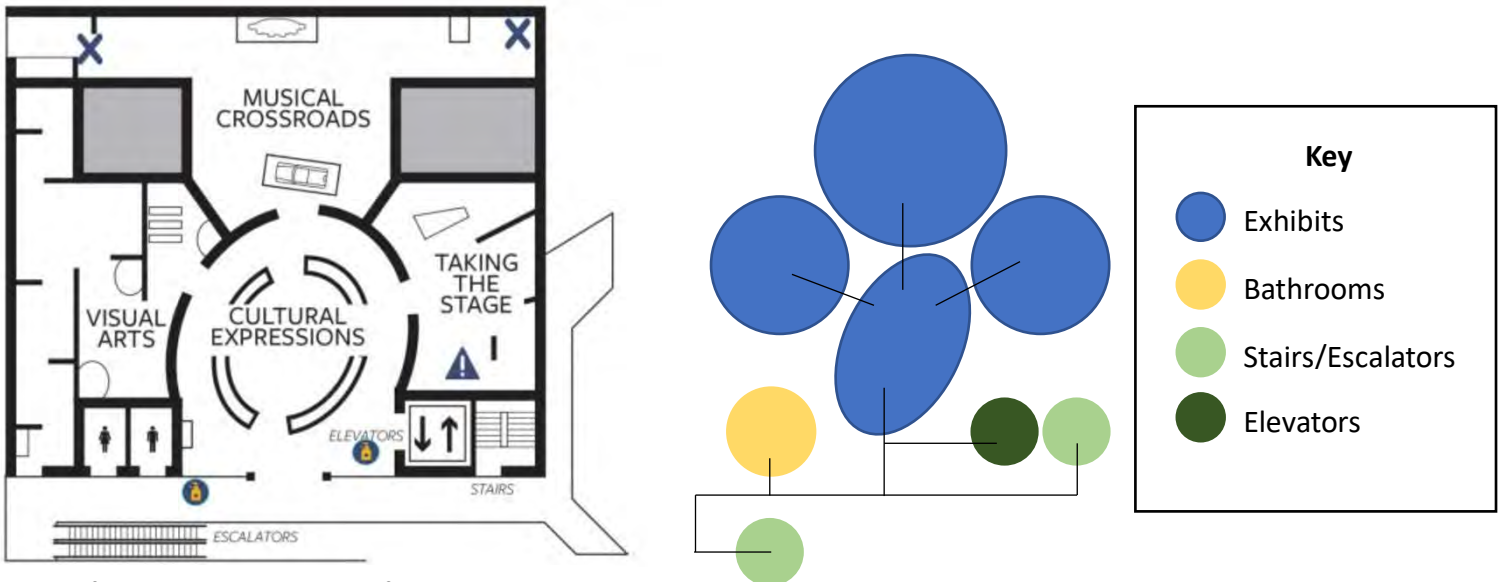
Example of an architectural diagram by architect Maya Lin. *Vietnam Veterans Memorial*. Competition drawing by Maya Lin from Library of Congress (LOC).



STEM Challenge: Drawing an Architectural Diagram Activity Guide Worksheet

Part 1.

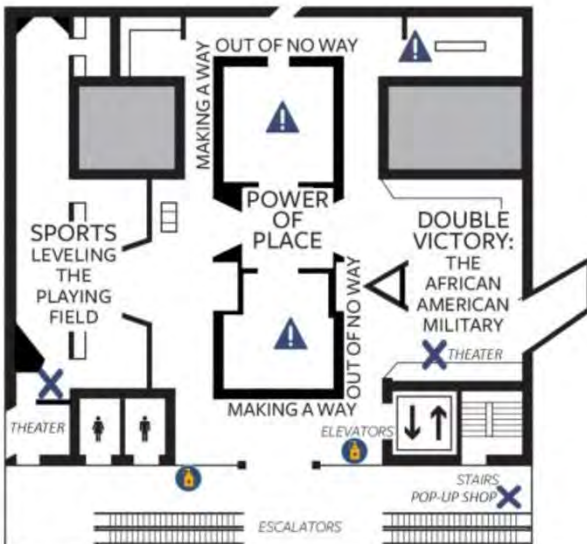
Look at the example of the architectural diagram created from the map of the Culture Galleries at the National Museum of African American History & Culture (NMAAHC). Notice how the architectural diagram uses a few colors to communicate the different components of the Culture Galleries and includes a key to help viewers understand the diagram.



Map of Culture Galleries. Image from NMAAHC.

Part 2.

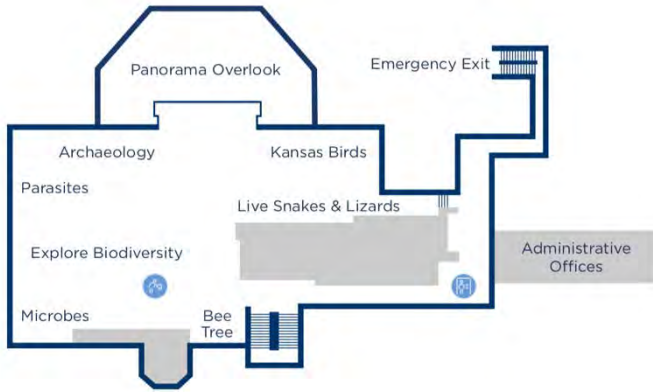
Create an architectural diagram from the map of the Community Galleries at the National Museum of African American History & Culture (NMAAHC) using the materials for this activity: a pencil, pen, or other writing utensil, and colored pencils or crayons. If you need more space, use an additional sheet of paper. Don't forget to include a key for your diagram!



Map of Community Galleries. Image from NMAAHC.

Part 3.

Create an architectural diagram from the map of the sixth floor at the KU Natural History Museum (KUNHM) using the materials for this activity: a pencil, pen, or other writing utensil, and colored pencils or crayons. If you need more space, use an additional sheet of paper. Don't forget to include a key for your diagram!



Map of sixth floor. Image from KUNHM.

Part 4.

Create an architectural diagram for any place, such as your local public library, using the materials for this activity: a pencil, pen, or other writing utensil, and colored pencils or crayons. If you need more space, use an additional sheet of paper. Don't forget to include a key for your diagram!