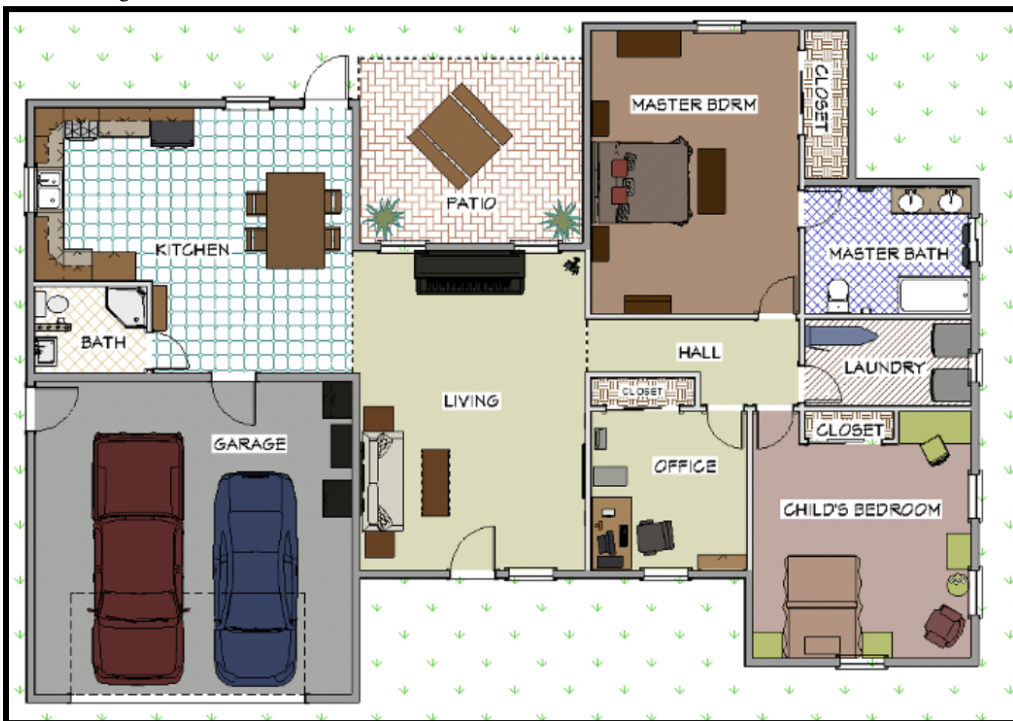




STEM Kits To Go: Let's Make a Floor Plan!

Architects and engineers will usually make a drawing called a **floor-plan** to help them visualize what they want their building to look like. A **floor-plan is a map of a building that basically shows where rooms are and how they are connected to each other**. Importantly, floorplans are drawings that show a building from above with no roof —so what a bird might see if it were looking at a building with no roof from up high in the sky. Floor-plans also give us an idea of how big rooms and furniture should be.

This is a floor-plan of a home. From looking at the floor-plan, can anyone tell us what the biggest room in the house is? What about the smallest? How many chairs are at the kitchen table? How many sinks are in the master bathroom? How many tables are in the living room?



1. Use the blank template or graph paper to help you design your dream home! Notice how some of the rooms are smaller/bigger than others—keep this in mind as you make your floorplan. For example, if you want your room to be the biggest room in the house, make sure your room is the biggest in your floor plan.
2. Draw some furniture that you think would go in each room (i.e. a bed in the bedrooms, a sofa in the living room etc.). Remember floor-plans give us a bird’s eye view! As you draw, think about what furniture looks like from above! You can also think about how you want the outside of your house to look, do you want a backyard? A pool? Draw it in!

Now that we have learned a little bit about how architects plan and design the inside of a building, let’s talk about how they decorate the outside of buildings they design. It’s important to remember that architects are also artists! Not only do they design the shape, size and structure of a building, they often have specific styles/ways of decorating their creations! For example, sometimes architects will add **building ornaments** to make buildings look prettier. This is similar to how people who celebrate Christmas may decorate a Christmas tree with ornaments to make the tree look more festive.

Building ornaments are usually displayed outside of a building and can give us an idea of when a building was built, who built it, and what the building is used for.



Now let’s imagine that you had to put a building ornament on your dream home. What would it look like? What is meaningful to you/how would people know this ornament represents you? You can make your own building ornaments using the model magic in your STEM kit and place it on the construction paper when you are done!

To do more science activities at home, watch *SCFGLive!* by scanning the QR code at the top of the page!