

Tinkercad has a lot of interesting work that can be done with various items. Within the circuits section provides a nice environment for commenting and other important organization, like color labeling wires. For the basics of creating a circuit you need a battery and something to interact with it. Breadboards have negative and positive areas for connectors and pins within columns that are all connected. You can also add components like resistors for reducing current and buttons for different controls to the breadboards. Tinkercad also talks about Ohm's Law. Ohm's Law relates current, voltage, and resistance in an effort to make the voltage equal to the combination of current and resistance. By adding a resistor we can make sure that this law is followed. It is important to make sure that this rule is followed due to the possibility of overloading and frying your components. With coding you can configure more things like color changing of the LEDs.

Code blocks allow the user to have control over 3D designs. With different code blocks you can control the shape and color. By adding different elements like rotations one can rotate the object around the axis of choice. The user can also choose to move the object a certain amount along the x, y, and z axes. There are also code blocks like random and repeat allowing the coder more control over their design. The user also has the option to copy, delete, and add new objects to their design.

Tinkercad is a great program for starting out with learning about circuits and as with coding for 3D objects. It's great for experimenting with things quickly and easily. What makes it even better is that you can make 3D objects for printing.