

MAKE AN EDIBLE MINERAL MODEL

Materials needed:

- gum drops OR different colored mini marshmallows OR jellybeans
- toothpicks
- three plates or napkins, paper plates are fine
- table
- plastic tablecloth (sometimes science can be a bit messy so be sure that when doing experiments, you are using a space that is okay to be a bit messy in and taking precautions, like putting down a tablecloth)

Now that we have all our materials let us make our rock cycle.

Step 1: We going to make a simple molecular model of a mineral. The gumdrops or marshmallows or jellybeans will represent the atoms in our model. I am going to build my model using gum drops. Place a plate on the table and count out 8 gum drops, four of one color and four of another color. I will count out four red and four orange. You will also need 12 toothpicks. The toothpicks will represent the chemical bonds holding the atoms together.

Step 2: Attach a gum drop of one color to the end of a toothpick and a gum drop of the other color to the other end of the toothpick.

Step 3: Repeat this three more times. Now you should have four toothpicks with different colored gum drops on each end.

Step 4: Using two more toothpicks, attach two of the toothpicks with gum drops together to make a square. When attaching your toothpicks, attach opposite colors to make your square. Repeat this process, so that you will have two squares.

Step 5: Take one square and add four more toothpicks standing straight up.

Step 6: Now take your other square and place it on the toothpicks, so that opposite colors are connected. Now you have a cube. It looks like the example of the salt that we saw earlier.

Step 7: Let's make another model of mineral, a different one this time. We will need different colors of gum drop or jellybeans or marshmallows. You need eight altogether, four of one color and four of another, also 12 toothpicks. You already know how to build your model so go ahead.

Step 8: Great, now we have two molecular models of minerals that look like cubes. Let's make another. Remember to use different colors of gum drops, or whatever you are using.

Step 9: We have three model minerals on three different plates. Now put all three of your minerals on one plate, right next to each other. Now you have a model of a rock, remember a rock is made up of different minerals.

Step 10: Here is the best part! Take the toothpicks out of the gum drops and eat your model.

Step 11: Clean up! You always want to be sure that when you make a fun science mess you also clean up the fun science mess.