

Build Your Own Algorithm!

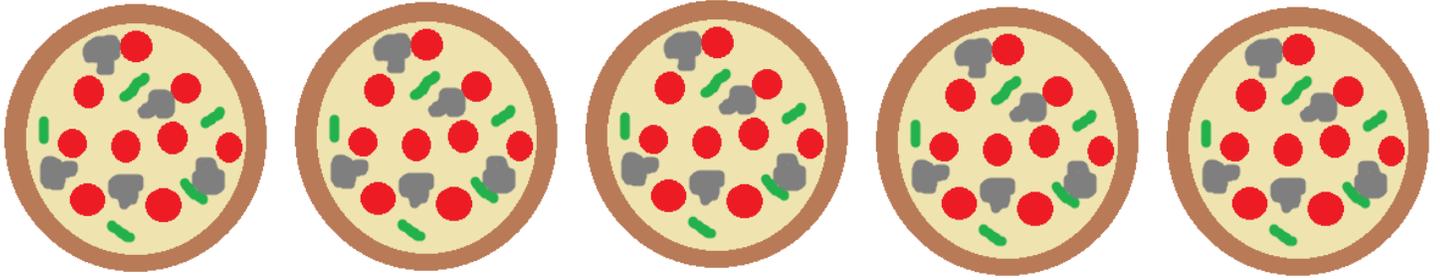
An **algorithm** is a step-by-step procedure for solving a problem or accomplishing some end¹. In other words, an algorithm is a set of step-by-step instruction for solving a problem or completing a task.

Algorithms are what computer scientists write to make computers do tasks. Computers are not the only things that follow algorithms! You design algorithms every day!

When you make breakfast, lunch, and dinner you follow lots of algorithms! For example, when you make a sandwich for lunch you are doing a series of steps to complete a task. Can you think about the different steps you do to make a sandwich? In what order do you put it together? Is it more important to do some steps first? Would it work if you spread peanut butter before you have the bread out?? No, that would not work so well.

These are like the questions computer scientists have to think about when they make a computer do a task. What steps does the computer need to do? What are the important ones? What are the ones I can delete, so the computer runs faster?

¹ Merriam-Webster. (n.d.). Algorithm. In Merriam-Webster.com dictionary. Retrieved March 19, 2020, from <https://www.merriam-webster.com/dictionary/algorithm>



In this activity you will write your own algorithm to make a pizza! You will use the following ingredients to build your pizza: pizza dough, green bell peppers, pepperoni, cheese, mushrooms, and pizza sauce.

You will see paper versions of these ingredients below. All you need to do is cut them out and then follow your algorithm to see if it works!

Here is an example of an algorithm for making peanut butter cookies to get you thinking about how to write one for your pizza!

PEANUT BUTTER COOKIES

Ingredients: 1 cup sugar, 1 cup peanut butter, 1 egg

1. Turn oven to 350 degrees.
2. Put sugar and peanut butter in a bowl.
3. Crack egg into bowl.
4. Stir all ingredients together.
5. Scoop the dough onto a baking sheet.
6. Bake for 12 minutes.
7. Enjoy!

Remember there is more than one way to complete a task! Now it's your turn! See if you can write your own algorithm to make a pizza using the following ingredients: pizza dough, green bell peppers, pepperoni, cheese, mushrooms, and pizza sauce.

**Remix this activity by drawing and adding any other ingredients you like!*

Build Your Own Algorithm!

_____ 's Pizza

Ingredients:

Algorithm:

A large, empty rectangular box with a thin black border, intended for the user to write their algorithm for making the pizza.

