

## Do You Want to Code a Snowman?

Computers are everywhere. Computer coding is everywhere too. Even kids are learning to code. But what is coding?

Coding is a way for people to communicate with computers. Computers can do a lot of amazing things, but they need to be told what to do. Coding tells the computer what to do. Computer code is the recipe that helps the computer make the cake.

As a computer coder, you are writing directions for a computer. Let's say you want a computerized robot to build a snowman. You have to tell it how. In this way, coding is problem solving. You have to solve the problem of how to build a snowman. Then you have to communicate it clearly.

What are the steps to build a snowman? First, you might tell the robot to make three snowballs. Then you'd tell it to stack them on top of each other. What would that look like? Would it look like a snowman?

No. You forgot to tell the computer what size the snowballs should be. You need to rewrite the code. You'd tell the robot to make a large ball, a medium ball, and a small ball. Then you'd tell it what order to stack them in.

Would that look like a snowman? It's a good start! What else would a snowman need?



You might tell the robot to add sticks for arms. Or a carrot for a nose. Don't forget to tell them where to put it! Otherwise you might find the carrot in the wrong place.

Coding requires you to think through each small step of a problem. Then you have to learn the computer's language so you can talk to it. Learning to code might seem complicated, but it can be creative and fun. And if you take it one step at a time, you get a great result!



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NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

1. What is computer coding?
  - a. A way to build a snowman
  - b. A way for people to communicate with computers
  - c. A secret message
  - d. A pattern
  
2. What is NOT mentioned as being part of a snowman?
  - a. Three snowballs
  - b. Sticks
  - c. Coal
  - d. A carrot
  
3. In the first snowman example, what did the coder forget?
  - a. To tell the computer to make three snowballs
  - b. To tell the computer to stack the snowballs
  - c. To tell the computer where to put the carrot
  - d. To tell the computer about the size and placement of the snowballs
  
4. What does the author mean by “code is the recipe that helps the computer make the cake?”
  - a. Code tells the computer how to do something, like a recipe tells a baker how to make a cake
  - b. Code helps the computer make real cake
  - c. Coding is as complicated as baking
  - d. Only people who can bake can work with computers

Instructions for teachers:

These questions can be used to assess understanding of the reading passage.

The item in bold is the correct answer for each question.

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