

## Scratch Teachers 6.1

Hello everybody! Welcome to week six. It's going quickly isn't it? This week Karl comes back, there he is, to help us learn about the most important concept of programming, the algorithm. So probably algorithm is a word that you often hear in the news. If you go to google and type algorithm, and you go to news, lots and lots of results are there about algorithm. For example here we have an algorithm that predicts box office sales. An algorithm that create artworks, an algorithm that can detect fake news. So probably you've heard of this word algorithm before.

It sounds very technical, but don't worry, an algorithm is nothing scary. An algorithm is most like an action plan. An description of how something has to be done. And in the case of a computer algorithm, the idea is that the computer will do something. But there are also a lot of algorithms also that humans can execute. For example a recipe. A recipe will explain really exactly how to bake a cake. And the writer of the recipe book, isn't with you in the kitchen when you read the recipe. So it must be very precise otherwise you don't know how to make the cake. Also knitting or sewing, are very precise activities and if you have a pattern for a sweater than this too has to be very precise otherwise your sweater will come out all weird.

So these things are also algorithms. And you can definitely start this class again if you do it with your children, by brainstorming with your classroom about, what is an algorithm. The most important requirement for something to be an algorithm is whether or not a robot could do it. So again it has to be very precise. So something like 'bike home' isn't really an algorithm, because it's not precise enough. Because where is home? Is the robot cycling? Or walking? Can he go on the road? Does he stay on the pavement? If you say to a robot 'go home', he wouldn't know what to do. So your challenge after this video is to think of one example of something that is, and one example that isn't an algorithm. And in the following movies in this week, we're going to look at an algorithm that I'm sure you already know.