

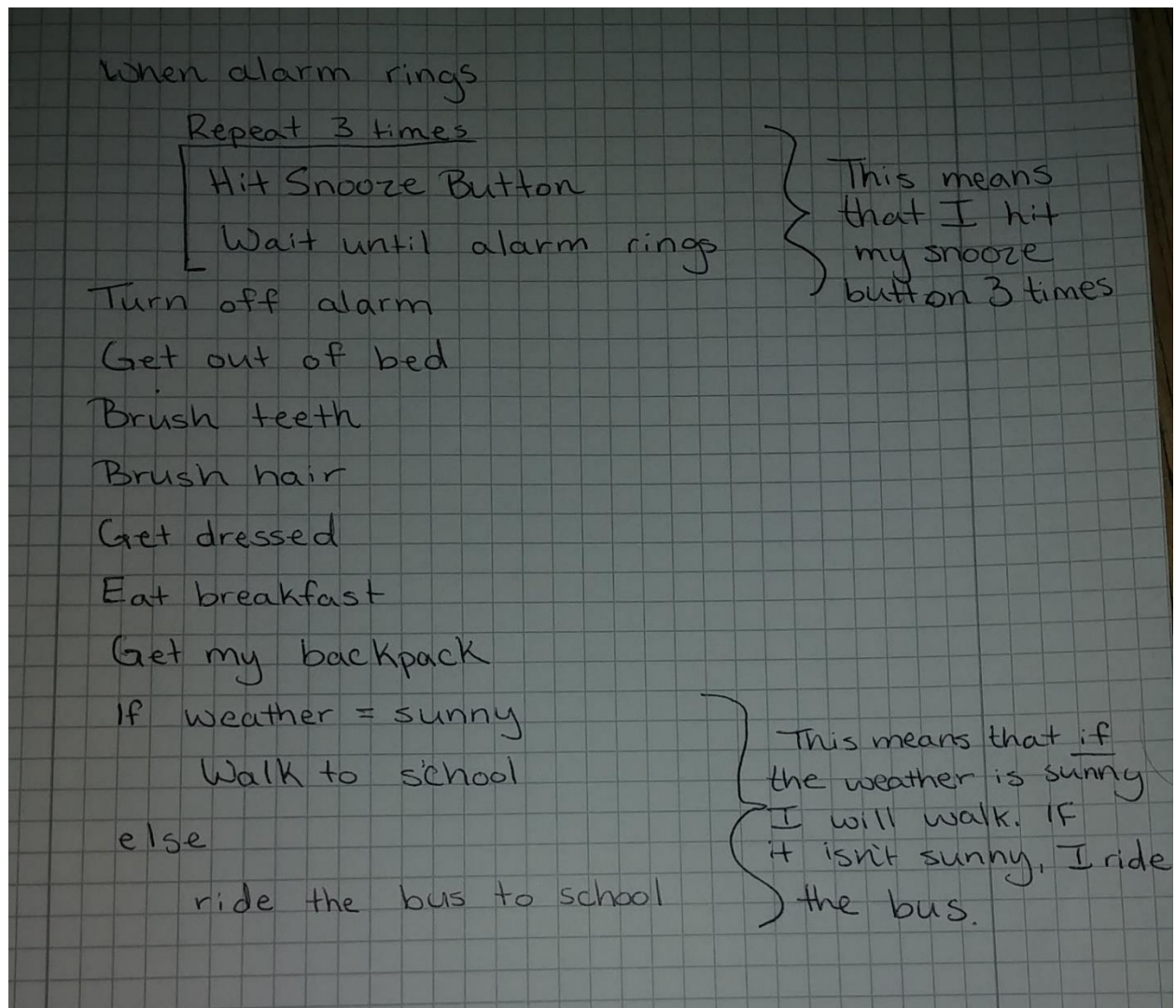
Activity 1: Create algorithms for a computer that follow a sequence

Think about your morning routine? Do you do some of the same things every morning? Do you brush your teeth? Do you eat breakfast? What about getting to school? Do you ride the bus? Do you walk? Does an adult take you?

With an adult's help, write down your morning routine.

An algorithm is a set of instructions that are followed step by step by the person or machine reading them. Let's write an algorithm that gives us a set of instructions of a normal school day morning!

Here's mine!



How would you create your morning algorithm?

Activity 2: Use Loops to improve your algorithm

Tell your girl to jump up. Wait until she jumps and then say jump up again. And then tell her to jump up a third time.

Do you think it would have just been easier if I had told you to jump three times?

Computers sometimes have to do something hundreds of times over and over. Instead of telling it to do the same thing over and over, we say do it 30 times.

Let's make a dance routine! You can use the moves Twist, Jump, and Jazz Hands to make your dance.

Mine would be:

Twist, Jump, Twist, Twist, Jazz Hands and you repeat it three times. That is a loop!

Now make your own!

Activity 3: Learn about women in computer science

Do you know someone who works with computers? What about the names of people that created the computers that we use today? Women have worked and designed computers since they started and Grace Hopper is one of those women.

Watch [this video](#) on Grace Hopper!

Activity 4: Keep your code interesting with conditionals and create your own set!

Conditions are just rules that say if this happens, do that. Games like Tag or Foursquare use conditionals to make them fun. Tag uses conditionals because you know that if you are tagged, you are It and you have to go and tag someone else!

What are some other games that you know of that use conditionals?

Using [Scratch](#), create your own conditional statement.

Mine is a math problem! My person asks you what the answer to 5+5 is. If you answer 10, she'll say Correct! If you answer anything else, she'll think about it for a second before saying That's wrong. Sorry!

Scratch is good for all types of coding fun! If you've never tried it, get on and see what you can make!

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