



# Pixels as Building Blocks

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## Code Your Story: Session 3

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# Telephictionary

- This game is a hybrid between Telephone and Pictionary, where you will pass along a secret code through pictures and writing.
- First round: everyone simultaneously draws a picture of the word they've been given. Fold the paper above the picture and pass to the right.
- Second round: everyone simultaneously writes down a guess for the word based on the picture you received. When the time is up, you'll fold their paper so that *only* the word they guessed shows, and pass it to their right again.
- We will alternate rounds until everyone receives their original piece of paper again.

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# Pixel Programming 0: Introduction

- The “MARK” command, which means to fill in the square with the current color, and the “set COLOR to \_\_\_” command are both new.
- The latter command is a *variable*, or a bit of information a computer holds that isn’t set in stone
- The “COLOR” bit is the variable, and its associated information, called its *value*, can change; it can be RED or WHITE or CYAN.
- This is what enables a program to do different things depending on the value—in this case, fill in squares with different colors.

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# The Power of Words

- We create words to streamline communication and programmers do the same thing: they create and use shortcut words to save them from writing the same code over and over again.
- Learning a new vocabulary might sound like a lot, but it's really no different from how slang or inside jokes spread: they move like wildfire and it doesn't take long to catch on.

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# Prompt

How do you describe things with a very, very restricted vocabulary?

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# Making Words

- What language gaps did you see?
- What words and concepts have we conceptualized?
- Making up words is a strong skill for life, but also for programming: it helps to simplify messy codes and finish unfinishable codes!

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# Pixel Programming 1: Loops and Numerical Values

- *Keywords* allow programmers to do cool things; in Pixel Programs, we're going to start with a repeat, which allows for repeating lines of code.
- These repeated codes, made in Pixel Programming by using the word *repeat*, are called *loops*.