

# Summary of Activities

## Animate a Name

Estimated Time: 45 minutes

This is a computer-based activity giving youth the opportunity to build a customized animation using code. With CS First and Scratch, a block-based coding language developed by MIT, kids will make a name come to life through animation.

Materials: Computers, headphones (optional), Internet access

## Code Your Dance

Estimated Time: 15 minutes

This two-part activity introduces "how computers think" and teaches the basic principles of writing instructions for computers to follow. Youth learn algorithm and program design by writing code for the "Chicken Dance".

Materials: Dance Code cards, Dance Code poster, Code Your Dance worksheet, pencils, marker, paper

## Artificial Intelligence

Estimated Time: 30 minutes

This activity introduces the concept of artificial intelligence (AI) and how it can be used to make decisions. First, kids work in groups to play Rock, Paper, Scissors with dice and learn about random number generation. Then, the groups replace their dice with coins and evaluate different algorithms for a fairer AI.

Materials: 5 dice, 5 coins, AI worksheet, pencils

## Color Your World

Estimated Time: 30 minutes

This activity is about a puzzle in CS called map coloring, which involves finding the fewest number of colors to fill in a map so that no country is the same color as any of its neighbors. This introduces the idea of pattern recognition, which is a key skill in breaking down problems into smaller parts and creating reusable solutions.

Materials: Color Your World worksheet, crayons



Learn computer science  
by hands-on doing.