

# **Coding and the Creative Arts**

## **Coding & STEAM 2019**

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**Week 3: Coding and the Creative Arts Part 1**

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# Coding and the Creative Arts

- Coding is often seen as something mainly technical and not creative
- Who do you think of when you think of something that Codes as part of their job?
- You may think of people like Mark Zuckerberg, Bill Gates or stereotypes from movies and tv

# Coders & the Creative Arts

- Made with Code has an example of Coders that do work in a variety of creative industries, including:
  - Films
  - Video Games
  - Fashion
- One example is Danielle Feinberg from Pixar

# Using Scratch to be Creative

- Coding in Scratch can be used to make:
  - Music
  - Art
  - Animations

# Creative Computing: Unit 2

- Unit 2 is called **Animations**
- Focus is on **Creative Diversity**
- **Music:** you will compose songs
- **Visual Arts:** you will create images
- **Drama:** You will write scripts for characters (Sprites) to act out

## **Creative Computing: Unit 2**

"It's really great to express yourself creatively. You could do anything with it [Scratch]. You can make video games, music, art, videos, anything. The possibilities are endless, no limitations, really." - Lindsey, 12 years old

# Creative Arts Part 1:

- Three activities from the Guide:
  - Performing Scripts
  - Build-a-Band
  - Orange Square, Purple Circle
- Computational Concepts: Sequences, Loops, Events and Parallelism

# Performing Scripts

- Coding in Scratch is like directing theatre.
- We have characters (Sprites), Costumes, Backdrops, Scripts and a Stage
- We have Events that trigger certain actions (like the green flag)
- We direct the Sprites to move around the Stage with the Code blocks

# Performing Scripts Activity

- You have a handout with a Script for a scene for two Characters to follow
- Can you create Code in Scratch to act out this script after the green flag is clicked?
- Do you need to "reset" the scene and how do you do this?
- What is **Parallelism**?

# Performing Scripts Discussion

- What **Event** blocks did you use in your program?
- How did you "reset" the scene?
- Did anyone use **Broadcasting** for directing the Sprites?

# Build-a-Band Activity

- Build-a-Band Studio
- Where is the **play note** block?
- Create some different Sprites for different musical instruments
- Add some interaction, when the instruments are clicked they should play some music

# Build-a-Band Discussion

- What **Event** and **Sound** blocks did you use in your project?
- Did you change the tempo - what did that do?
- Did you record any sounds for your instruments, how did you do this?
- Did you use **Parallelism** in your projects?

# Orange Square, Purple Circle Activity

- Orange Square, Purple Circle Studio
- Let's look at the Paint Editor first
- Create two **Sprites**: an Orange Square and a Purple Circle
- Explore some of the **Looks** and **Motion** blocks and see what they do

# Orange Square, Purple Circle Discussion

- What **Looks** and **Motion** blocks did you use in your project?
- Let's share the project and add the project to a **Class Studio**
- Did you add another shape? How did you do this?
- Did you find out about the difference between **Bitmap** and **Vector** images?