

# Enabling Digital Fluency

Ages 5 to 7

 WHOCODES

# Objective

The WhoCodesProgram learning platform is looking to introduce “Computer Science Fundamentals” (CSF) curriculum for kids in the age group 5 - 7 years

EduJoy Learning proposes a customized curriculum designed for students in 5-7 years age group which builds CSF concepts in a fun and engaging manner

# Audience

- Batch : 5-7 Years

# Detailed Implementation Plan

# Classroom Overview

## Overview

- 18 Classes (customized for 5-7 age group)
- Develops Critical Thinking, Collaboration, Creativity and Communication

## Core concepts:

- Digital Citizenship
- Sequencing, Loops, Events
- Conditionals
- Binary and Data
- Games and animations

## Attitudinal goals:

- Programming is fun
- It's okay not to get it right the first time
- I can solve problems if I keep trying

## Key teaching tips:

- Use the stories as a read-aloud and discuss the scenarios as a class
- Use pair programming where possible and encourage students to help each other
- Work through sample problems with students as a class
- Celebrate persistence as well as successes
- Remind students that they can go back and fix mistakes

## Standards Mapping

This curriculum references CS Fundamentals which was written using both the K–12 Computer Science Framework [[k12cs.org](https://www.k12cs.org)] and the 2017 Computer Science Teachers Association (CSTA) standards as guidance.

# Materials

- Laptop/Desktop (1:1)
  - Internet Connection
  - Google Classroom
  - Code.org
  - Zoom
- Headphones (1:1)

# Classroom Methodology and Tools

Teacher:

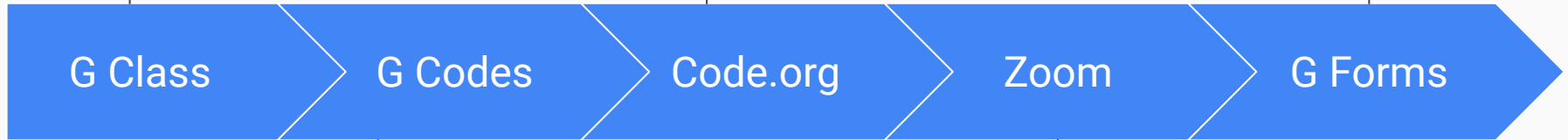
Creates **Google Classroom** and account for each Student

Teacher:

**Loads** the Activity for each Student before the class

Teacher:

**Assesses assignments and shares personalized feedback** using G Class



Teacher:

Shares **Google codes** for each student and ensures access

Teacher:

**Delivers lesson and facilitates knowledge and sharing**

## 60 Minutes Detailed Plan

Teacher:

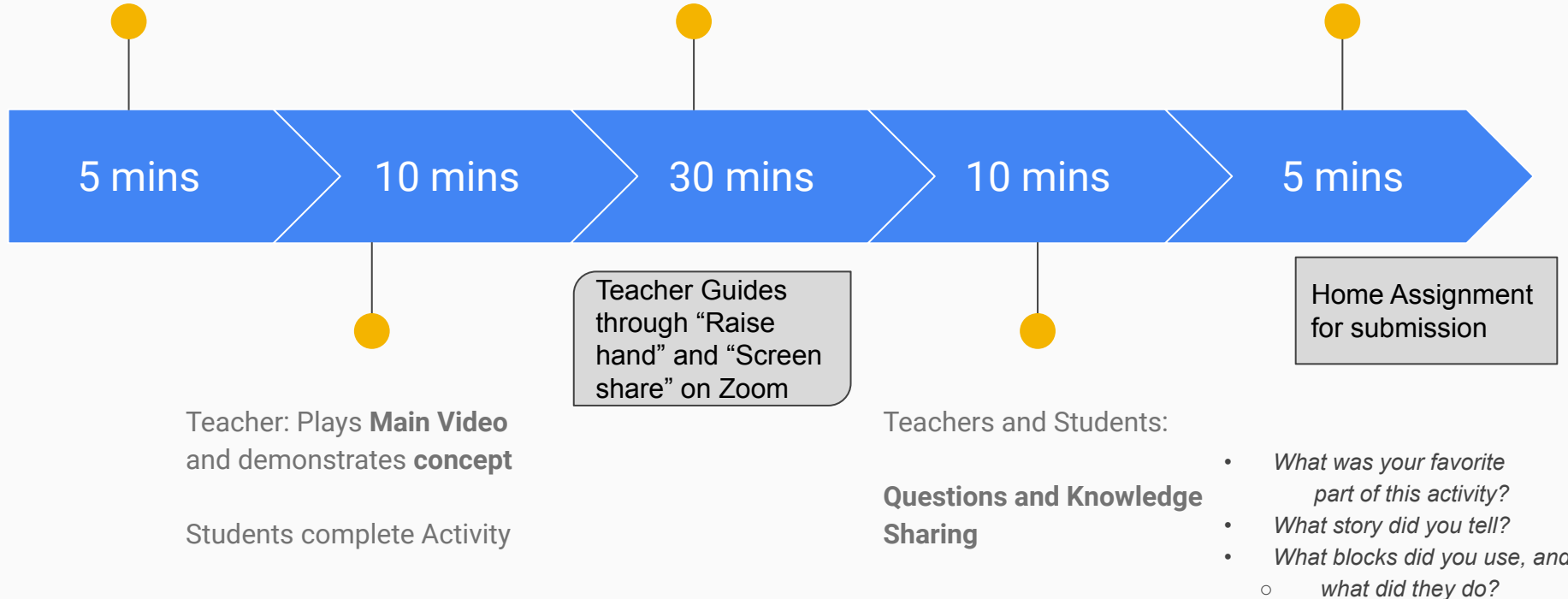
**Recapitulation** of Previous concepts

Students complete “add on” activities/puzzles

Guided by Teacher

**Wrap up:** by Teacher

**Students submit project for assessment. Personalized feedback shared**





## Coding Camp (5-7 years)

	Class Name	Activity	Platform	Objective
T	Dance Party Animation	Animation	Code.org	Students build a dance animation . Introduction to Code.org, Google classroom and Cpdng/Computer Science
1	Sequence	Puzzles	Code.org	Students will develop sequential algorithms step through the existing code to identify errors and fix them
2	Debugging	Video, Puzzles	Code.org	Students learn about debugging
3	Loops	Puzzles, Video	Code.org	Students learn about repetitions
4	Loops Practice	Puzzles, Video	Code.org	Students do art loops and also have fun with Minecraft
5	Build your Game - 1	Play Lab	Code.org	Students will create their own games using Play Lab demonstrating concepts learnt so far!

## Coding Camp (5-7 years)

	<b>Class Name</b>	<b>Activity</b>	<b>Platform</b>	<b>Objective</b>
6	Passwords and Digital citizen	Play Lab	Code.org	Importance of password using game and other skills
7	Events and Flappy Game	Puzzles	Code.org	Introduces events and build your own game!
8	Art Basic	Puzzles	Code.org	Create your Art
9	Minecraft	Puzzles, Video	Code.org	Students learn building Minecraft games
10	Creating Art Loops	Puzzles	Code.org	Create Art using Lops
11	Build your own Games - 2	Puzzles	Code.org	Students will create their own games using Play Lab demonstrating concepts learnt so far!

## Coding Camp (5-7 years)

	<b>Class Name</b>	<b>Activity</b>	<b>Platform</b>	<b>Objective</b>
12	Binary images	Puzzles	Code.org	Students learn about binary images and numbers
13,14	Games and Animations Intro	Game Lab	Code.org	Students are introduced to Game Lab and begin to use it to position shapes on the screen
15,16	Shapes and Parameters	Game Lab	Code.org	Students develop familiarity with shapes and different parameters on how to modify them
F	Final Project		Code.org	Final project demonstrating concepts learnt. Demo to Parents and Certificates Handling