

# Lesson 9: Text

## Overview

**Question of the Day: How can we use text to improve our scenes and animations?**

This lesson introduces Game Lab's text commands, giving students more practice using the coordinate plane and parameters. At the beginning of the lesson, students are asked to caption a cartoon created in Game Lab. They then move onto Code Studio where they practice placing text on the screen and controlling other text properties, such as size. Students who complete the assessment early may go on to learn more challenging blocks related to text properties.

## Purpose

This lesson introduces text, which students will need as they begin to build more complex programs (e.g. games with scoreboards). This is the last type of element that students will be placing on the screen. After this, students will focus on how they can control the movement and interactions of these elements.

## Assessment Opportunities

### 1. Add text

Use Level 5 as an assessment for students. Click inside the level to view a rubric.

## Standards

Full Course Alignment

### CSTA K-12 Computer Science Standards (2017)

- **AP** - Algorithms & Programming

## Agenda

### Lesson Modifications

#### Warm Up (5 minutes)

Journal

#### Activity (35 minutes)

#### Wrap up (5 minutes)

Journal

## Objectives

Students will be able to:

- Place text on the screen using a coordinate plane.
- Use arguments to control how text is displayed on a screen.

## Links

**Heads Up!** Please make a copy of any documents you plan to share with students.

For the teachers

- **CSD Unit 3 - Interactive Animations and Games** - Slides

# Teaching Guide

## Lesson Modifications



**Attention, teachers!** If you are teaching virtually or in a socially-distanced classroom, please **click here** to access modifications that can be used during this lesson.

## Warm Up (5 minutes)

Journal



**Display:** Display the cartoon for students to see.

**Prompt:** Look at the cartoon that was made in Game Lab. What do you think the alien should be saying?

**Share:** Allow volunteers to share out their ideas.

### *Remarks*

We've had a lot of fun drawing things and using our sprites, but there's been one thing missing from our Game Lab pictures: text! Today we're going to learn how to add text to Game Lab projects.

**Question of the Day:** How can we use text to improve our scenes and animations?

# Activity (35 minutes)

**Transition** Send students to Code Studio.

 1

Prediction

 2-3

Skill Building

2

3

 4

Practice

 5

Assessment

✓ Assessment Opportunity ▲

You can use this level as a formative assessment for students. Click inside the level to view a rubric and leave feedback to your students

 6

Challenges

## Wrap up (5 minutes)

Journal

**Question of the Day: How can we use text to improve our scenes and animations?**

**Prompt:** You've drawn with both text and shapes on the screen.

- What are two ways drawing with text is similar to drawing shapes?
- What is one way that drawing with text is different from drawing with shapes?

**Share:** If there is time, allow students to share out their answers.

 Discussion Goal ▲

Student answers to the question may vary, but some similarities are that they both use the coordinate plane, and that they are drawn automatically, unlike sprites, which must use the `drawSprites` command. One possible difference is that it is more difficult to control the exact size of text, since the amount of text and font size are not as specific as height and width parameters.