

# SCORE



SUGGESTED TIME  
30–45 MINUTES

## OBJECTIVES

By completing this activity, students will:

- + be able to describe what a variable is and why variables are useful
- + be introduced to the computational concept of data
- + experience remixing and reusing a project or part of a project

## ACTIVITY DESCRIPTION

- Optionally, explore the Fish Chomp starter project as a group and have the Score handout available to guide students.
- Help students open the Fish Chomp starter project. Give students time to explore variables by remixing the Fish Chomp Starter Project to add score to the game. Optionally, give students time to incorporate score into their previously started maze, pong, or scrolling game projects.
- Allow students to share their Fish Chomp remixes or game projects with added score. We suggest the Design Demo activity: invite a few students to present their projects to the group and demonstrate how they implemented score using variables. Optionally, have students add their remixes to the Fish Chomp Remix studio or a class studio.
- Ask students to think back on the design process by responding to the reflection prompts in their design journals or in a group discussion.

## RESOURCES

- Score handout
- Score examples studio  
<http://scratch.mit.edu/studios/218313>
- Fish Chomp starter project  
<http://scratch.mit.edu/projects/10859244>
- Fish Chomp remix studio  
<http://scratch.mit.edu/studios/475615>

## REFLECTION PROMPTS

- + How would you explain variables to someone else?
- + What are variables good for?

## REVIEWING STUDENT WORK

- + Can students explain what a variable is and what variables are good for?

## NOTES

- + Encourage students to clarify their understanding of variables by exploring code from sample projects in the Score examples studio.
- + Variables are an important mathematical and computational concept. Students are taught about variables in their math and science classes, but many students have a difficult time learning them. Games are one way to make the usefulness of variables more concrete.

## NOTES TO SELF

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# SCORE

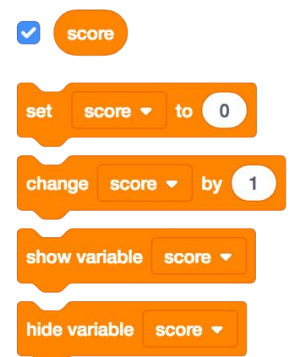
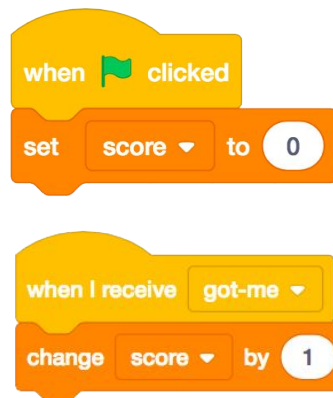
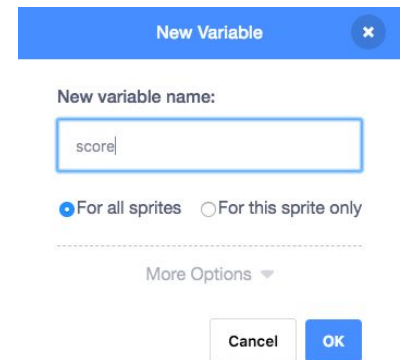
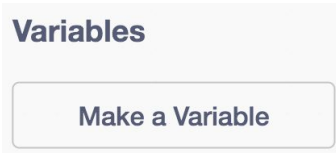
## HOW CAN YOU KEEP SCORE IN A SCRATCH PROJECT?

Fish Chomp is a game where players try to catch as many fish as they can by guiding a sprite with the mouse. In this activity, you will remix Fish Chomp by adding a score with variables.



## START HERE

- ❑ Go to the Fish Chomp project page: <http://scratch.mit.edu/projects/10859244>
- ❑ Click on the Make a Variable button in the Data category to create and name a variable for score.
- ❑ Experiment with your new variable blocks to incorporate score into your project!



**FEELING STUCK?**

THAT'S OKAY! TRY THESE THINGS...

- ❑ Not sure how to work with variables? Check out this project for more information: <http://scratch.mit.edu/projects/2042755>
- ❑ Or take a look at this video: <http://youtu.be/uXq379XkhVw>
- ❑ Explore and study code in games that use score to learn more about creating variables and incorporating score into a project.

## FINISHED?

- + Add your project to the Fish Chomp Remix studio: <http://scratch.mit.edu/studios/475615>
- + Challenge yourself to do more! How can you use score to add difficulty to your game design?
- + Find a game you are inspired by and remix it!

# SCORE REFLECTIONS

NAME: \_\_\_\_\_

RESPOND TO THE FOLLOWING REFLECTION PROMPTS USING THE SPACE PROVIDED BELOW OR IN YOUR DESIGN JOURNAL.

+ How would you explain variables to someone else?

\_\_\_\_\_

+ What are variables good for?

\_\_\_\_\_