

**AP CSP Python with Robots  
Defining Functions Activity Guide**

**Name:**

**Introduction** Discuss these concepts using your own words.

Function Answers will vary, but should be different from the slide.

Abstraction Answers will vary, but should be different from the slide.

How do you define a function in Python? `def function_name():  
 [ block of indented code ]`

How do you call a function in Python? `function_name()`

**Examples and Challenge**

Use this space to take notes about functions for example #1. Space for notes as needed

Use this space to take notes about functions for example #2. Space for notes as needed

Use this space to take notes about functions for the challenge. Space for notes as needed

**Wrap-Up**

In your own words, what is abstraction? Answers will vary in the wrap-up, but they should be different from the information on the slides.

Give your own example of abstraction: Answers will vary in the wrap-up, but they should be different from the information on the slides.

In your own words, what is a function? Answers will vary in the wrap-up, but they should be different from the information on the slides.

When should you create a function? When you have repeated code, or when you want to call a block of code more than once.

What must you do to execute (or run) code in a function? A function must be called before its code is executed.

Give two benefits of using functions: 

- Simplify code
- Make code easier to read and understand
- Eliminate duplicated code
- Make code adaptable to different values
- Allows you to easily change the order of sections of code
- Allows you to easily change the block of code in a function without having to search the code to find it (hide the details, abstraction).

Submit the modified programs to the teacher.

