Mission 10 Assignment	**Name:**
Pre-Mission Preparation	
In the last mission, you used a dictionary to store and access information. What do you remember about a dictionary?	Answers will vary. Answers can include: • A dictionary is made up of key:value pairs • A dictionary uses curly brackets { } • You can retrieve a value by giving the key • You can use the get() function to avoid a KeyError • A tuple can be a key
Mission 10 Checks	
Objective #1 Where in CodeSpace do you send and receive data from CodeBot?	The console panel (or REPL)
Objective #2 What built-in Python function is used to give information to CodeBot?	The input() function
Objective #3 List at least 2 benefits of a dictionary:	Answers will vary. They can include: 1. very readable because of the key:value mapping 2. lets you iterate through all the keys or values 3. Any data type or object can be the value 4. Looking up values is efficient
What command retrieves a value from a key?	Value = dictionary[key] –or– response = commands[command]
Objective #4 What code lets you add a key:value pair to an already defined dictionary?	commands[come] = [30, 30] –or– dict[key] = value
Objective #5 What new kind of value is used in this objective?	Dictionaries can have a function name as a value.
Objective #6 What does “refactoring” mean?	When you make big changes to your code. Always remember to test everything!
What are 2 ways to define an empty dictionary?	commands = { } –or– commands = dict()

Objective #7
What is the code for iterating through the keys of a dictionary?
	for k in commands:
	  print(k)
	
	for key in dictionary:
	  print(key)

Objective #8 What command will remove a key from a dictionary?	del commands['speak'] –or– del dictionary[key]
When does a KeyError happen?	When you try to use a key that doesn't exist in the dictionary
Objective #9 How many key:value pairs does your final program contain?	9
Post-Mission Reflection	
On a scale of 1 (not fun) to 5 (the best!), rank this mission. Explain why.	Answers will vary – hopefully a 5!
On a scale of 1 (too easy) to 5 (very hard), rank this mission. Explain why.	Answers will vary – hopefully not too easy or too challenging
Dictionaries are used in all types of software. They are an efficient way to search collections of items you define in code, or for looking up items for a simple task. Think about objects that complete a task after you tell it what to do. Discuss one object that may use a dictionary for efficiency:	Answers will vary. Possible answers: • Coffee maker or microwave are pre-programmed to do many functions • TV remote has many functions pre-programmed, so you just hit a button as input • Video game controller