Dictionaries Date: 8/12/2025.

1. How are Python dictionaries different from Python lists? `1 point`

   ○ Python dictionaries are a collection and lists are not a collection

   ⦿ Python lists are indexed using integers and dictionaries can use strings as indexes

   ○ Python lists can store strings and dictionaries can only store words

   ○ Python lists store multiple values and dictionaries store a single value

2. What is a term commonly used to describe the Python dictionary feature in other programming languages? `1 point`

   ○ Closures

   ○ Sequences

   ⦿ Associative arrays

   ○ Lambdas

3. What would the following Python code print out? `1 point`

```
1   stuff = dict()
2   print(stuff['candy'])
```

   ○ candy

   ○ -1

   ⦿ The program would fail with a traceback

   ○ 0

4. What would the following Python code print out? `1 point`

```
1   stuff = dict()
2   print(stuff.get('candy',-1))
```

   ⦿ -1

   ○ 0

   ○ 'candy'

   ○ The program would fail with a traceback

5. What is a common use of Python dictionaries in a program? **1 point**

   ◉ Building a histogram counting the occurrences of various strings in a file

   ○ Splitting a line of input into words using a space as a delimiter

   ○ Sorting a list of names into alphabetical order

   ○ Computing an average of a set of numbers

6. Which of the following lines of Python is equivalent to the following sequence of statements assuming that **counts** is a dictionary? **1 point**

```
1   if key in counts:
2       counts[key] = counts[key] + 1
3   else:
4       counts[key] = 1
```

   ○ counts[key] = key + 1

   ○ counts[key] = counts.get(key,-1) + 1

   ◉ counts[key] = counts.get(key,0) + 1

   ○ counts[key] = (key in counts) + 1

   ○ counts[key] = (counts[key] * 1) + 1

7. In the following Python, what does the **for** loop iterate through? **1 point**

```
1   x = dict()
2   ...
3   for y in x :
4       ...
```

   ◉ It loops through the keys in the dictionary

   ○ It loops through all of the dictionaries in the program

   ○ It loops through the values in the dictionary

8. Which method in a dictionary object gives you a list of the values in the dictionary? **1 point**

   ○ all()

   ○ each()

   ○ keys()

   ◉ values()

   ○ items()

9. What is the purpose of the second parameter of the **get()** method for Python dictionaries?

- ○ An alternate key to use if the first key cannot be found
- ○ The key to retrieve
- ● To provide a default value if the key is not found
- ○ The value to retrieve