Corrected Coding Answers and Explanation - Python Dictionaries

Explanation: dict.get(key) vs dict[key]

- dict[key] raises a KeyError if the key is NOT found in the dictionary.
- dict.get(key) returns None (or a default value if provided) if the key is NOT found.

Example:

```
mydict = {"name": "Ali"}
print(mydict["name"])        # OK, returns "Ali"
print(mydict.get("name"))    # OK, returns "Ali"
print(mydict.get("age"))     # OK, returns None
print(mydict["age"])         # Error: KeyError: 'age'
```

Correct Coding Answers

```
23. Create student dictionary
student = {"name" : "john", "age" : 25, "grade": "A"}
print(student)

24. Function to return keys with numeric values
def get_numeric_keys(d):
    return [k for k, v in d.items() if isinstance(v, (int, float))]

25. Create dictionary from two lists
keys = ["name", "age", "gender"]
values = ["Ali", 25, "Male"]
mydict = dict(zip(keys, values))

26. Count word frequencies using dictionary
words = ["apple", "banana", "apple", "orange", "banana", "apple"]
counter = {}
for word in words:
    counter[word] = counter.get(word, 0) + 1
print(counter)

27. Increase fruit prices by 10%
mydict = {"apple": 5, "orange": 4, "banana": 2, "cherry": 3, "mango": 6}
for fruit in mydict:
    mydict[fruit] *= 1.10
```

```
print(mydict)

28. Swap dictionary keys and values
def swap_dict(d):
    return {v: k for k, v in d.items()}

29. Key with max value
data = {"a": 10, "b": 20, "c": 30}
max_key = max(data, key=data.get)
print(max_key)

30. Extract names from nested dictionary
def extract_names(nested):
    return [info["name"] for info in nested.values()]
```