JSON Self-Study Questions

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Question 1: JSON Datatypes

Question: The following are all valid JSON datatypes EXCEPT for:

- Array
- Integer
- String
- Object

Answer: The correct answer is **Integer**. JSON does not have a specific "Integer" type. Instead, it has the **Number** datatype, which includes both integers and floating-point numbers.

Question 2: JSON Stands For

Question: JSON stands for:

- \bullet JavaScript Object Notation
- JavaScript Schema Object Notation
- JavaScript Scripted Object Notation
- JavaScript Schema Oriented Notation

Answer: The correct answer is JavaScript Object Notation.

Question 3: Symbol Separating Name-Value Pairs

Question: This symbol separates multiple name-value pairs in JSON:

- :
- { }
- ,

Answer: The correct answer is , (comma). Commas are used to separate name-value pairs within objects and values in arrays.

Question 4: Structure of JSON

Question: JSON is made up of:

- name:value
- elements:value
- string:value
- value:name

Answer: The correct answer is **name:value**. JSON consists of key-value pairs where the key is a string and the value can be any valid JSON datatype.

Question 5: Validity of JSON

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Question: The following is valid JSON:
{
    "name": "Doug"
```

True or False?

Answer: The correct answer is **True**. The provided JSON is valid as it contains a properly formatted key-value pair.

Question 6: Valid JSON Examples

Question: This is valid JSON:

- { overAge: TRUE }
- {studentName: "Frank"}
- { "imageLocation" : "C: images" }
- { "numberOfStudents": 2 }

Answer: The correct answer is { "numberOfStudents": 2 }. The other options are invalid because:

- Keys must be enclosed in double quotes.
- The boolean value TRUE should be in lowercase (true).
- Backslashes must be escaped.

Question 7: Null Datatype

Question: The null datatype is used to represent a value that cannot be defined, such as an empty string or the value 0.

True or False?

Answer: The correct answer is **False**. The null datatype in JSON explicitly represents the absence of a value, which is different from an empty string ("") or 0, which are valid values.

Question 8: Validity of JSON

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Question: The following is valid JSON:

{
    "numberOfPlayers": 6
}

True or False?
```

Answer: The correct answer is **True**. The provided JSON is valid, with a correct key-value pair and syntax.

Question 9: Escaping Characters in JSON

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Question: The following is valid JSON:
{
    "quote" : "He said \"Come out to the coast, we ll get together, have a few laughs\""
}
    True or False?
    Answer: The correct answer is False. The inner double quotes need to be escaped using backslashes
(\). The corrected JSON would look like this:
{
    "quote": "He said \"Come out to the coast, we ll get together, have a few laughs\""
}
```