**Unit Test Cheat-Sheet**

Frankly, the unit testing library for Python is fairly well documented, but it can be a bit of a dry read. Instead, we suggest covering the core module concepts, and then reading in more detail later.

**Best of Unit Testing Standard Library Module**

Understand a Basic Example:

* <https://docs.python.org/3/library/unittest.html#basic-example>

Understand how to run the tests using the Command Line:

* <https://docs.python.org/3/library/unittest.html#command-line-interface>

Understand various Unit Test Design Patterns:

* <https://docs.python.org/3/library/unittest.html#organizing-test-code>
* Understand the uses of setUp, tearDown; setUpModule and tearDownModule

Understand basic assertions:

| **Method** | **Checks that** | **New in** |
| --- | --- | --- |
| [assertEqual(a, b)](https://docs.python.org/3/library/unittest.html#unittest.TestCase.assertEqual) | a == b |  |
| [assertNotEqual(a, b)](https://docs.python.org/3/library/unittest.html#unittest.TestCase.assertNotEqual) | a != b |  |
| [assertTrue(x)](https://docs.python.org/3/library/unittest.html#unittest.TestCase.assertTrue) | bool(x) is True |  |
| [assertFalse(x)](https://docs.python.org/3/library/unittest.html#unittest.TestCase.assertFalse) | bool(x) is False |  |
| [assertIs(a, b)](https://docs.python.org/3/library/unittest.html#unittest.TestCase.assertIs) | a is b | 3.1 |
| [assertIsNot(a, b)](https://docs.python.org/3/library/unittest.html#unittest.TestCase.assertIsNot) | a is not b | 3.1 |
| [assertIsNone(x)](https://docs.python.org/3/library/unittest.html#unittest.TestCase.assertIsNone) | x is None | 3.1 |
| [assertIsNotNone(x)](https://docs.python.org/3/library/unittest.html#unittest.TestCase.assertIsNotNone) | x is not None | 3.1 |
| [assertIn(a, b)](https://docs.python.org/3/library/unittest.html#unittest.TestCase.assertIn) | a in b | 3.1 |
| [assertNotIn(a, b)](https://docs.python.org/3/library/unittest.html#unittest.TestCase.assertNotIn) | a not in b | 3.1 |
| [assertIsInstance(a, b)](https://docs.python.org/3/library/unittest.html#unittest.TestCase.assertIsInstance) | isinstance(a, b) | 3.2 |
| [assertNotIsInstance(a, b)](https://docs.python.org/3/library/unittest.html#unittest.TestCase.assertNotIsInstance) | not isinstance(a, b) | 3.2 |
|  |  |  |

Understand more specific assertions such as assertRaises

* <https://docs.python.org/3/library/unittest.html#unittest.TestCase.assertRaises>