## **Check Your Understanding – Statistics**

The table below identifies the key concepts from this unit.

- 1. Check your understanding by completing these questions.
- 2. Check your answers in the key provided.
- 3. In the table below, highlight the questions you got correct.
- 4. Ask peers/Dr. James about concepts where you can improve.

Key Concepts	) Mild	)) Medium	<b>Spicy</b>
Box and Whiskers Plot		1, 2	
Dispersion Measures		2, 3	
Weighted Mean		4, 5	6

**1**. The number of people living in each apartment of an apartment building is recorded and displayed below.

2	4	3	1	0	2	4	5	4	6
4	6	2	5	3	4	2	3	1	3
3	2	1	3	5					

Create a box and whiskers plot to represent this data.

2. Students took a math test, and the results for 30 students are recorded below.

78	60	80	88	78	86	77	60	64	85
70	88	77	45	47	93	56	74	50	83
97	70	94	67	77	84	62	72	82	57

a) Create a box and whiskers plot to represent this data.

- b) Determine the variation interval
- c) Determine the variation range
- d) Determine the interquartile interval
- e) Determine the interquartile range

- 3. Using the data below, determine:
  - a) the variation interval
  - b) the variation range
  - c) the interquartile interval
  - d) the interquartile range

18, 2, 29, 44, 21, 14, 13, 19, 19, 23, 26, 41, 60

4. A student is calculating their Math mark for term 3. They know the following:

	Mark	Weight
Assignments	68	20%
Quizzes	75	30%
Tests	62	50%

What is the students overall mark for term 3?

5. The marks for a student in Grade 9 math are shown below. The final test is equivalent to 3 test marks.
Test 1: 85
Test 2: 89
Test 3: 78
Final Test: 87

What is the student's test average?

6. You are hoping to get an 80 in Science this year. Your marks and the weightings are given below:

	Mark	Weight
Term 1	85	20%
Term 2	76	20%
Term 3	78	30%
Final Exam	?	30%

What grade do you need to earn on the final exam in order to earn an 80?

Answer Key