Discussion week 2

Your Name (First M. Last)

School or Institution Name (University at Place or Town, State)

**Discussion week 2**

**Q1**

The two measurement tools that have been chosen for this assignment are as follows.

**Thermometer**

A thermometer’s main purpose is to measure the rise and fall in temperature of the human body. This is achieved by giving a numerical value that ranges from 35 to 45 centigrade or 90 to 110 Fahrenheit. A thermometer is an interval scale. Being an interval scale means that the thermometer possesses both magnitude and equal interval but no absolute zero. It does not have an absolute zero because at no point in time temperature does not exist. The thermometer is both an interval and a ratio scale type. This is because its values have a meaningful difference between each unit. The data that is yielded from a thermometer can be used to determine if the body being tested is not overexerting itself. This can be detrimental for the entity involved (Stimson, 1949).

**Stopwatch:**

Stopwatch measures the time taken to travel for an individual from point A to point B. A stopwatch tells the time taken for the distance traveled in numeric form. A stopwatch has magnitude, equal intervals and absolute zero. This is because values attained have an inherent order while having the same differences between numbers. It also gives a representation of no movement. Just like the thermometer, the stopwatch is also an interval and ratio type of scale. This is because its values have meaningful differences between them and the doubling of measurements is also meaningful. The data yielded from a stopwatch can help determine how much time is taken to perform a certain activity. So it can help in increasing the efficiency of any given entity (Ohira & Sakazaki, 1994).

**Q2**

**Answer:**

The type of data which is required from psychological tests determine what type of scale measurement these tests belong to. These can be categorized into quantitative and qualitative. For qualitative results by categorizing individuals nominal level is used. For quantitative variables, scales such as ordinal level of measurement, interval level of measurement and ratio level of measurement can be used.

**References**

Ohira, T., & Sakazaki, N. (1994). *U.S. Patent No. 5,297,110*. Washington, DC: U.S. Patent and Trademark Office.

Stimson, H. F. (1949). The international temperature scale of 1948. *J. Res. Natl. Bur. Stand. (US)*, *42*, 209-217.