**Data Set Worksheet (KEY)**

**For each data set, decide which measure of center *best* represents the data. Explain your reasoning.**

1. 176, 44, 189, 809, 210, 246, 150

Mean: 260.6; Median: 189; Mode: none

Median is best. Mean is too high because of extreme outlier 809.

1. 45, 26, 34, 28, 47

Mean: 36; Median: 34; Mode: none

Either the mean or median is acceptable here.

1. 1096, 1021, 1076, 1201, 1223

Mean: 1123.4; Median: 1096; Mode: none

Mean is best. The median is too close to the first three values, while the mean shows a better idea of the first three values and the last two values.

1. Skittles, Snickers, Mounds, M&Ms, Kit Kat, Snickers, Mounds, Kit-Kat, Mounds

Mean: none; Median: none; Mode: Mounds

Mode is the best. The data is categorical, not numerical.

**For each scenario below, determine which measure of center is *most appropriate* to report. Explain your reasoning.**

1. The finishing times from the last five state track meets are analyzed.

Median; there is a potential for major outliers (such as runners who suffered an injury during the race, disqualifications, etc.), which could skew the mean.

1. You are a deli owner and you need to determine which sandwich customers like most.

Mode; the data here is categorical.

1. The amount of time it takes a turtle to crawl across a sidewalk is analyzed.

Mean; the variation in turtle pace is probably minimal, so there should not be any major outliers to skew the mean.

1. The New York Department of Education examines the performance on the grade 11 New York Regent’s Exam.

Mean; while there may be significant outliers, the outliers are likely important information given this scenario and should be represented.