Mathematics Grade 7
Statistics and Probability (SP)

Outcome	1 - Beginning The student is having difficulty demonstrating an understanding of the concept.	2 – Approaching The student is developing an understanding of the concept.	3 – Meeting The student consistently demonstrates an understanding of the concept or has achieved the concept.	4- Exemplary The student independently demonstrates an in-depth understanding of the concept, and consistently applies this knowledge to new situations.
SP7.1 **I can demonstrate an understanding of the measures of central tendency and range for sets of data. [C, CN, PS, R, T]**	• I can explain what mean, median, mode, and range are.	• Given a list of numbers, I can determine the mean, median, mode, and range of the data.	• Given a problem involving a set of data, I can explain which measure of central tendency would be most appropriate to use, and defend my position.	• I am able to **solve and create complex** word problems that involve measures of central tendency.
	• I can **explain what an outlier** is.	• Given a list of numbers, I **can identify any outliers and explain why I included or excluded them.**	• I am able to **explain an outlier's effect** on a set of data.	• I can **decide whether outliers need to be included** in a list of data, and justify my decision.

Comments

Mathematics Grade 7
Statistics and Probability (SP)

Outcome	1 - Beginning The student is having difficulty demonstrating an understanding of the concept.	2 – Approaching The student is developing an understanding of the concept.	3 – Meeting The student consistently demonstrates an understanding of the concept or has achieved the concept.	4- Exemplary The student independently demonstrates an in-depth understanding of the concept, and consistently applies this knowledge to new situations.

SP7.2
Demonstrate an understanding of circle graphs.
 [C, CN, PS, R, T, V]
	• With help, I can identify **some** the common attributes of circle graphs, including:
	  o title, label or legend;
	  o sum of the central angles
	  o data reported as a percent of the total, sum of the percents being equal to 100%.
		• I can identify **several** the common attributes of circle graphs, including:
		  o title, label or legend;
		  o sum of the central angles
		  o data reported as a percent of the total, sum of the percents being equal to 100%.
			• I can identify **all** the common attributes of circle graphs, including:
			  o title, label or legend;
			  o sum of the central angles
			  o data reported as a percent of the total, sum of the percents being equal to 100%.
				• I can **compare** the **appearance and content of circle graphs in a variety of print and electronic media.**

	• With help, I can create and label **with some accuracy** a circle graph to display a set of data.	• I can create and label **with some accuracy** a circle graph to display a set of data.	• I can **create** and **accurately label** a circle graph to display a set of data.	• I can **compare the appropriate use** of the circle graphs to the use of other types of graphs (e.g. bar graphs, double-bar graphs, line graphs, and graphs of discrete data).

Comments

Mathematics Grade 7
Statistics and Probability (SP)

Outcome	1 - Beginning The student is having difficulty demonstrating an understanding of the concept.	2 – Approaching The student is developing an understanding of the concept.	3 – Meeting The student consistently demonstrates an understanding of the concept or has achieved the concept.	4- Exemplary The student independently demonstrates an in-depth understanding of the concept, and consistently applies this knowledge to new situations.
SP7.3 **Demonstrate an understanding of theoretical and experimental probabilities for two independent events where the combined sample space has 36 or fewer elements.** **[C, ME, PS R, T]**	• I am able to **explain** what the word "outcome" means.	• I am able to **provide at least one of the possible outcomes of two independent events.** (Ex. Flipping a coin and pulling one of four different coloured marbles out of a bag.)	• I can **create a table or a tree diagram to show the sample space** for the all of the outcomes of two independent events.	• I can **solve problems based on the sample space** of at least two independent events.
	• I am able to **describe what theoretical probability and experimental probability mean.**	• I can **make a list of all of the possible outcomes** of two independent events (with 8 or fewer outcomes), as well as a list of the actual outcomes for completing the experiment 8 times.	• In an experiment with two independent events and 36 or fewer outcomes, **I can determine** the theoretical **AND** experimental probability, **AND** I will be able to compare the results.	• I **can create and conduct my own probability experiment AND** provide a detailed analysis of the results.

Comments: