Alignment of Classroom activities on CensusAtSchool with National Standards

Following is a summary of our CensusAtSchool activities and where they fit with the National Standards.

The material at each curriculum level will be spread across two years of National Standards. Activities can be used at either year within the recommended NZC Level but we have placed them alongside the most appropriate National Standard. Words in italics under National Standards are new content for that year level.

If you think you have a resource that you would like to contribute to the CensusAtSchool website, please contact us at t.meek@auckland.ac.nz.

Useful links:

National Standards: http://nzcurriculum.tki.org.nz/National-Standards/Mathematics-standards/The-standards.

New Zealand Curriculum: http://new.censusatschool.org.nz/wp-content/uploads/2012/08/new-nz-stats-curriculum.pdf

NZMaths Illustrating the standards: http://www.nzmaths.co.nz/national-standards-illustrations?parent_node=

New Zealand Curriculum		**National Standards**		**CensusAtSchool Activities**
Level		**Year**	**National Standard in Statistics**	
Level 1	**Statistical Investigation** Conduct investigations using the statistical enquiry cycle: - posing and answering questions; - gathering, sorting and counting, and displaying category data; - discussing the results. **Statistical Literacy** Interpret statements made by others from statistical investigations and probability activities. **Probability** Investigate situations that involve elements of chance, acknowledging and anticipating possible outcomes.	After 1 Year at school	In contexts that require them to solve problems or model situations, students will be able to: *investigate questions by using the statistical enquiry cycle (with support), gathering, displaying, and/or counting category data.*	
		After 2 years at school	In contexts that require them to solve problems or model situations, students will be able to: investigate questions by using the statistical enquiry cycle (with support), gathering, displaying, *and/or identifying similarities and differences in category data* *describe the likelihoods of outcomes for a simple situation involving chance, using everyday language.*	

Level 2	**Statistical Investigation** Conduct investigations using the statistical enquiry cycle: - posing and answering questions; - gathering, sorting and displaying category and whole-number data; - communicating findings based on the data. **Statistical Literacy** Compare statements with the features of simple data displays from statistical investigations or probability activities undertaken by others. **Probability** Investigate simple situations that involve elements of chance, recognising equal and different likelihoods and acknowledging uncertainty.	After 3 years at school	In contexts that require them to solve problems or model situations, students will be able to: investigate questions by using the statistical enquiry cycle (with support): - *gather and display category and simple whole-number data* - *interpret displays in context* *compare and explain* the likelihoods of outcomes for a simple situation involving chance.	
		After 4 years at school	In contexts that require them to solve problems or model situations, students will be able to: investigate questions by using the statistical enquiry cycle *independently*: - gather and display category and simple whole-number data - interpret displays in context compare and explain the likelihoods of outcomes for a simple situation involving chance, *acknowledging uncertainty.*	

Level 3	**Statistical Investigation** Conduct investigations using the statistical enquiry cycle: - gathering, sorting, and displaying multivariate category and whole-number data and simple time-series data to answer questions; - identifying patterns and trends in context, within and between data sets; - communicating findings, using data displays. **Statistical literacy** Evaluate the effectiveness of different displays in representing the findings of a statistical investigation or probability activity undertaken by others. **Probability** Investigate simple situations that involve elements of chance by comparing experimental results with expectations from models of all the outcomes, acknowledging that samples vary.	After 5 years at school	In contexts that require them to solve problems or model situations, students will be able to: investigate *summary and comparison* questions by using the statistical enquiry cycle: - gather, display, and identify patterns in category and *whole-number* data - interpret results in context *order the likelihoods of outcomes for simple situations* involving chance*, experimenting or listing all possible outcomes.*	• Posing summary Investigative questions • Nosey Parker 1 • Nosey Parker 2
		After 6 years at school	In contexts that require them to solve problems or model situations, students will be able to: investigate summary and comparison questions by using the statistical enquiry cycle: - gather *or access multivariate category* and whole-number data - *sort data into categories or intervals, display it in different ways, and identify patterns* - *interpret results in context, accepting that samples vary* order the likelihoods of outcomes for *situations* involving chance, *considering experimental results and models* of all possible outcomes.	• Masterpiece 1 • 8 glasses per day • Using data cards • ID Cards

Level 4	**Statistical Investigation** Plan and conduct investigations using the statistical enquiry cycle: - determining appropriate variables and data collection methods; - gathering, sorting, and displaying multivariate category, measurement, and time-series data to detect patterns, variations, relationships, and trends; - comparing distributions visually; - communicating findings, using appropriate displays. **Statistical literacy** Evaluate statements made by others about the findings of statistical investigations and probability activities. **Probability** Investigate situations that involve elements of chance by comparing experimental distributions with expectations from models of the possible outcomes, acknowledging variation and independence. Use simple fractions and percentages to describe probabilities.	After 7 years at school	In contexts that require them to solve problems or model situations, students will be able to: investigate summary, comparison, *and relationship* questions by using the statistical enquiry cycle: - gather or access multivariate category *and measurement data* - sort data and *display it in multiple ways,* identifying patterns *and variations* - interpret results in context*, accepting that samples vary and have no effect on one another* order the likelihoods of outcomes for situations involving chance*, checking for consistency between experimental results and models of all possible outcomes.*	• Masterpiece 3 • Rumbling Tummy • Analysis Tools • How high can you jump?
		After 8 years at school	In contexts that require them to solve problems or model situations, students will be able to: investigate summary, comparison, and relationship questions by using the statistical enquiry cycle: - gather or access multivariate category, measurement, *and time-series data* - sort data and display it in multiple ways, identifying patterns, variations, *relationships, and trends and using ideas about middle and spread where appropriate* - interpret results in context*, identifying factors that produce uncertainty* *express as fractions the likelihoods of outcomes* for situations involving chance, checking for consistency between experimental results and models of all possible outcomes.	• Masterpiece 2 • Speedster • The case of the missing cake • Are you getting enough zz? • Who wants to be a millionaire? • Scatter it