



Green Lane Diary 2012 Teaching Notes:
Australian Curriculum Alignment Mathematics
 Associated teaching resources available on Scoutle



MATHEMATICS - FOUNDATION LEVEL											
2012 GREEN LANE DIARY WEEKLY FOCUS	Intro	1	2	3	4	5	6	7	8	9	10
	Our World Today	What's going on?	Power the Planet	Our Big Backyard	Live Green	Every Drop Counts	The 6 Rs	Harden Up	Cool Citizens	Biodiversity	Destination Clean and Green
CONTENT DESCRIPTORS – STATISTICS AND PROBABILITY											
Data representation and interpretation: Answer yes/no questions to collect information	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PROFICIENCY STRANDS											
Understanding includes connecting names, numerals and quantities			✓	✓	✓	✓	✓			✓	
Problem Solving includes using materials to model authentic problems, sorting objects, using familiar counting sequences to solve unfamiliar problems, and discussing the reasonableness of the answer			✓	✓	✓	✓	✓			✓	
Reasoning includes explaining comparisons of quantities and creating patterns			✓	✓	✓	✓	✓			✓	

MATHEMATICS – YEAR 1											
2012 GREEN LANE DIARY WEEKLY FOCUS	Intro	1	2	3	4	5	6	7	8	9	10
	Our World Today	What's going on?	Power the Planet	Our Big Backyard	Live Green	Every Drop Counts	The 6 Rs	Harden Up	Cool Citizens	Biodiversity	Destination Clean and Green
CONTENT DESCRIPTORS – STATISTICS AND PROBABILITY											
Chance: Identify outcomes of familiar events involving chance and describe them using everyday language such as 'will happen', 'won't happen' or 'might happen'	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Data representation and interpretation: Choose simple questions and gather responses		✓	✓	✓	✓	✓	✓			✓	
Data representation and interpretation: Represent data with objects and drawings where one object or drawing represents one data value. Describe the displays.			✓	✓	✓	✓	✓			✓	
PROFICIENCY STRANDS											
Understanding includes connecting names, numerals and quantities, and partitioning numbers in various ways			✓	✓	✓	✓	✓			✓	
Problem Solving includes using materials to model authentic problems, giving and receiving directions to unfamiliar places			✓	✓	✓	✓	✓			✓	
Reasoning includes justifying representations of data, and explaining patterns that have been created			✓	✓	✓	✓	✓			✓	

MATHEMATICS – YEAR 2											
2012 GREEN LANE DIARY WEEKLY FOCUS	Intro	1	2	3	4	5	6	7	8	9	10
	Our World Today	What's going on?	Power the Planet	Our Big Backyard	Live Green	Every Drop Counts	The 6 Rs	Harden Up	Cool Citizens	Biodiversity	Destination Clean and Green
CONTENT DESCRIPTORS – MEASUREMENT AND GEOMETRY											
Location and transformation: Interpret simple maps of familiar locations and identify the relative positions of key features				✓		✓				✓	
Using units of measurement: Name and order months and seasons – eg: investigating the seasons used by Aboriginal people, and recognising the connection to weather patterns – wet/dry seasons.		✓		✓		✓		✓		✓	
CONTENT DESCRIPTORS – STATISTICS AND PROBABILITY											
Chance: Identify practical activities and everyday events that involve chance. Describe outcomes as 'likely' or 'unlikely' and identify some events as 'certain' or 'impossible'			✓		✓	✓	✓	✓	✓		
Data representation and interpretation: Identify a question of interest based on one categorical variable. Gather data relevant to the question – eg: determining the variety of birdlife in the playground and using a prepared table to record observations			✓	✓	✓	✓	✓			✓	
Data representation and interpretation: Collect, check and classify data			✓	✓	✓	✓	✓			✓	



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Data representation and interpretation: Create displays of data using lists, table and picture graphs and interpret them			✓	✓	✓	✓	✓			✓	
PROFICIENCY STRANDS											
Fluency includes using the language of chance to describe outcomes of familiar chance events			✓	✓	✓	✓	✓			✓	
Problem Solving includes formulating problems from authentic situations and making models			✓	✓	✓	✓	✓		✓	✓	
Reasoning includes creating and interpreting simple representations of data			✓	✓	✓	✓	✓			✓	

MATHEMATICS – YEAR 3											
2012 GREEN LANE DIARY WEEKLY FOCUS	Intro	1	2	3	4	5	6	7	8	9	10
	Our World Today	What's going on?	Power the Planet	Our Big Backyard	Live Green	Every Drop Counts	The 6 Rs	Harden Up	Cool Citizens	Biodiversity	Destination Clean and Green
CONTENT DESCRIPTORS – MEASUREMENT AND GEOMETRY											
Location and transformation: Identify symmetry in the environment – eg: symmetry in the natural environment and in Indigenous rock carvings/art		✓		✓		✓				✓	
Using units of measurement: Measure, order and compare objects using familiar metric units of length, mass and capacity – eg: measuring as part of a waste audit or investigation of water footprint		✓		✓		✓				✓	
CONTENT DESCRIPTORS – STATISTICS AND PROBABILITY											
Data representation and interpretation: Identify questions or issues for categorical variables. Identify data sources and plan methods of data collection and recording			✓	✓	✓	✓	✓			✓	
Data representation and interpretation: Collect data, organise into categories and create displays using lists, tables, picture graphs and simple column graphs, with and without the use of digital technologies – eg: collecting data to investigate features in the natural environment			✓	✓	✓	✓	✓			✓	



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Data representation and interpretation: Interpret and compare data displays			✓	✓	✓	✓	✓			✓	
PROFICIENCY STRANDS											
Understanding includes identifying environmental symmetry eg: symmetry in the natural environment and in Indigenous rock carvings/art		✓		✓		✓				✓	
Fluency includes identifying and describing outcomes of chance experiments and interpreting maps			✓	✓	✓	✓	✓			✓	
Problem Solving includes formulating and modelling authentic situations involving planning methods of data collection and representation			✓	✓	✓	✓	✓			✓	
Reasoning includes creating and interpreting variations in the results of data collections and data displays			✓	✓	✓	✓	✓			✓	

MATHEMATICS – YEAR 4											
2012 GREEN LANE DIARY WEEKLY FOCUS	Intro	1	2	3	4	5	6	7	8	9	10
	Our World Today	What's going on?	Power the Planet	Our Big Backyard	Live Green	Every Drop Counts	The 6 Rs	Harden Up	Cool Citizens	Biodiversity	Destination Clean and Green
CONTENT DESCRIPTORS – NUMBER AND ALGEBRA											
Fractions and Decimals: Count by quarters halves and thirds, including with mixed numerals. Locate and represent these fractions on a number line – eg: investigating the use of fractions and sharing as a way of managing Country: for example taking no more than half the eggs from a nest to protect future bird populations		✓		✓						✓	
CONTENT DESCRIPTORS – MEASUREMENT AND GEOMETRY											
Location and transformation: Create symmetrical patterns, pictures and shapes with and without digital technologies – eg: Indigenous Art, Land Art		✓		✓		✓				✓	
Location and transformation: Use simple scales, legends and directions to interpret information contained in basic maps		✓		✓		✓				✓	
CONTENT DESCRIPTORS – STATISTICS AND PROBABILITY											
Chance: Identify everyday events where one cannot happen if the other happens – eg: weather		✓				✓		✓			



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Data representation and interpretation: Select and trial methods for data collection, including survey questions and recording sheets			✓	✓	✓	✓	✓			✓	
Data representation and interpretation: Construct suitable data displays, with and without the use of digital technologies, from given or collected data. Include tables, column graphs and picture graphs where one picture can represent many data values			✓	✓	✓	✓	✓			✓	
Data representation and interpretation: Evaluate the effectiveness of different displays in illustrating data features including variability			✓	✓	✓	✓	✓			✓	
PROFICIENCY STRANDS											
Fluency includes collecting and recording data			✓	✓	✓	✓	✓			✓	
Reasoning includes communicating information using graphical displays and evaluating the appropriateness of different displays			✓	✓	✓	✓	✓			✓	

MATHEMATICS – YEAR 5											
2012 GREEN LANE DIARY WEEKLY FOCUS	Intro	1	2	3	4	5	6	7	8	9	10
	Our World Today	What's going on?	Power the Planet	Our Big Backyard	Live Green	Every Drop Counts	The 6 Rs	Harden Up	Cool Citizens	Biodiversity	Destination Clean and Green
CONTENT DESCRIPTORS – MEASUREMENT AND GEOMETRY											
Using units of measurement: Choose appropriate units of measurement for length, area, volume, capacity and mass – eg: measuring ecological footprint, calculating the amount of mulch needed for a garden			✓	✓	✓	✓	✓			✓	
Using units of measurement: Compare 12- and 24-hour time systems and convert between them – eg: investigating the ways time was and is measured in different Aboriginal Country, such as using tidal change		✓		✓		✓					
Location and transformation: Use a grid reference system to describe locations. Describe routes using landmarks and directional language – eg: comparing aerial views of Country, desert paintings and maps with grid references		✓		✓						✓	
CONTENT DESCRIPTORS – STATISTICS AND PROBABILITY											



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Data representation and interpretation: Pose questions and collect categorical or numerical data by observation or survey – eg: posing questions about insect diversity in the playground, collecting data by taping a one-metre-square piece of paper to the playground and observing the type and number of insects on it over time			✓	✓	✓	✓	✓			✓	
Data representation and interpretation: Construct displays, including column graphs, dot plots and tables, appropriate for data type, with and without the use of digital technologies			✓	✓	✓	✓	✓			✓	
Data representation and interpretation: Describe and interpret different data sets in context			✓	✓	✓	✓	✓			✓	
PROFICIENCY STRANDS											
Reasoning includes posing appropriate questions for data investigations and interpreting data sets			✓	✓	✓	✓	✓			✓	
Problem solving includes formulating and solving authentic problems using whole numbers and measurements – eg: waste audit, energy audit, water footprint			✓	✓	✓	✓	✓			✓	

MATHEMATICS – YEAR 6											
2012 GREEN LANE DIARY WEEKLY FOCUS	Intro	1	2	3	4	5	6	7	8	9	10
	Our World Today	What's going on?	Power the Planet	Our Big Backyard	Live Green	Every Drop Counts	The 6 Rs	Harden Up	Cool Citizens	Biodiversity	Destination Clean and Green
CONTENT DESCRIPTORS – STATISTICS AND PROBABILITY											
Data representation and interpretation: Interpret and compare a range of data displays, including side-by-side column graphs for two categorical variables			✓	✓	✓	✓	✓			✓	
Data representation and interpretation: Interpret secondary data presented in digital media and elsewhere – eg: critically evaluating data representations and the source of data available in the media			✓	✓	✓	✓	✓			✓	
PROFICIENCY STRANDS											
Understanding includes making reasonable estimations			✓	✓	✓	✓	✓			✓	
Problem solving includes interpreting secondary data displays			✓	✓	✓	✓	✓			✓	

MATHEMATICS – YEAR 7											
2012 GREEN LANE DIARY WEEKLY FOCUS	Intro	1	2	3	4	5	6	7	8	9	10
	Our World Today	What's going on?	Power the Planet	Our Big Backyard	Live Green	Every Drop Counts	The 6 R's	Harden Up/ Get Ready	Cool Citizens	Biodiversity/ Meet the Characters	Destination Clean and Green
CONTENT DESCRIPTORS – NUMBER AND ALGEBRA											
Linear and non-linear relationships: Investigate, interpret and analyse graphs from authentic data – eg: Travel Smart audit – or use graphs to investigate evaporation rates during an exploration on water storage			✓		✓	✓	✓			✓	
CONTENT DESCRIPTORS – STATISTICS AND PROBABILITY											
Data representation and interpretation: Identify and investigate issues involving numerical data collected from primary and secondary sources – eg: investigating secondary data relating to the distribution and use of non-renewable resources around the world			✓	✓	✓	✓	✓			✓	
Data representation and interpretation: Construct and compare a range of data displays including stem-and-leaf plots and dot plots			✓	✓	✓	✓	✓			✓	
Data representation and interpretation: Calculate mean, median, mode and range for sets of data. Interpret these statistics in the context of data			✓	✓	✓	✓	✓			✓	
Data representation and interpretation: Describe and interpret data displays using median, mean and range - eg: Examine the mean and median values for records of emergency response times.			✓	✓	✓	✓	✓	✓		✓	



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PROFICIENCY STRANDS

Problem Solving includes interpreting sets of data			✓	✓	✓	✓	✓			✓	
Reasoning includes interpreting data displays			✓	✓	✓	✓	✓			✓	