Primary Mathematics Curriculum

Data

	Stage 1 (Junior & Senior Infants)	Stage 2 (1st & 2nd Class)	Stage 3 (3rd & 4th Class)	Stage 4 (5th & 6th Class)
	Through appropriately playful and engaging learning experiences, children should be able to			
Learning Outcomes	explore, interpret and explain data in a variety of ways for a range of purposes.	pose questions of interest, record and use data as evidence to answer those questions and communicate the findings.	pose questions of interest and collect, display and critically analyse data in a range of ways for a range of purposes and communicate the findings.	pose questions, collect, compare, summarise and represent data selectively to answer those questions. critically analyse and evaluate findings; and communicate inferences, conclusions and implications from the findings.
Mathematical concepts	Data is all around us and helps us interpret the world.	Investigations are cyclical and are motivated by posing a question.	Data displays can hold a vast volume of information which can be reasoned about and from which decisions and inferences can be made.	The mean, median and/ or mode are measures of centre which communicate different middles of the data and provide a range of insights.
	A data set is a collection of information that can provide answers to questions we ask.	Data investigations involve a process of collecting, representing and analysing data, and communicating conclusions that answer questions.	Data displays are selected and justified based on their ability to communicate aspects of the data and answer the questions posed. Moving between data displays allows for further comparison and analysis.	Samples can be drawn from a population of data as representative evidence, to make generalisations and determine the degree of confidence or certainty about the generalisation.
	Data can be collected and represented in many ways.	Data can be qualitative (it describes something) or quantitative (it holds numerical value).	Measures of centre (e.g., mean as the fair share, and median as the middle-ordered value of the data) are one-number summaries of entire distributions.	Reported data can be evaluated in terms of its representativeness, intentionality and reliability.
	Data can be collected and represented in many ways.	Different types of data require different graphs and different statistical measures.	The range is a measure used to capture variability or spread of the data.	Data displays (e.g., graphs) can be used to represent the variability in the data, the measures of centre and to compare between two groups.
	Data displays (e.g., tables, picture graphs, block graphs) are a useful way of conveying information.	Graphs are tools which communicate distribution, shape, centre and variability of data.	Secondary data can be analysed to make observations or inferences and to draw logical conclusions.	
	Objects and sets can be sorted according to one or more attributes.		Informal inference is about moving beyond the data collected (sample) to a wider context (population).	
			Data can be distributed in different ways. Such distributions of data can be compared according to their shape.	