|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2nd Grade | 3rd Grade | 4th Grade | 5th Grade | 6th Grade |
| By the end of grade 2, students will be able to explore methods of how we observe and measure differences. | By the end of grade 3, students will be introduced to qualitative (observation of attributes) and quantitative (measurement) of data. (ex: Simple Machines) | By the end of Grade 4, students will be able to distinguish between Qualitative and Quantitative Observations. | By the end of Grade 5, students will be able to describe qualitative and quantitative information using common units of measurement to include: Qualitative: (5 Senses) and Quantitative: (Linear Measurement, Finding Mass) | By the end of Grade 6, students will be able to describe qualitative and quantitative information using common units of measurement to include: Qualitative:  (Distinguishing subjective and objective in qualitative observation) and Quantitative:  (Volume, Density, Area /Perimeter, Accuracy in use of tools) |
| Students will be able to understand and develop relevant questions. | Students will be able to make connections with questions and activities. | By the end of Grade 4, students will be able to identify and verbally share the key essential question or problem being explored. | By the end of Grade 5, students will be developing the ability to independently identify and express in a complete sentence the key essential question or problem being explored. | By the end of Grade 6, students will be able to independently identify and express in a complete sentence the key essential question or problem being explored. |
| By the end of Grade 2, Students will be able to collectively make simple predictions. | By the end of Grade 3, Students will understand and discuss predictions and outcomes. | By the end of Grade 4, students will be able to collectively predict an outcome and support them through evidence. | By the end of Grade 5, students will be developing the ability to individually predict and express an outcome in writing. | By the end of Grade 6, students will be able to individually predict and express an outcome in writing. |
| By the end of Grade 2, Students will begin to understand what the relevance of data is and how it is used. | By the end of Grade 3, students will use data in problem solving and will display simple data. | By the end of Grade 4, students will be able to collaboratively analyze their collected data to express their findings and check their predictions. | By the end of Grade 5, students will be developing the ability to independently collect data and display it in a data table. | By the end of Grade 6, students will be able to independently collect data and display it in a data table. |
| By the end of Grade 2, students will understand that there are different ways of displaying data to express information. | By the end of Grade 3, Students will understand how to gather and express findings and use the collected data. | By the end of Grade 4, students will be able to collaboratively organize and display data for the purpose of analysis related to the essential question. | By the end of Grade 5, students will be developing the ability to collaboratively analyze their collected data to express their findings and check their predictions. | By the end of Grade 5, students will be able to collaboratively analyze their collected data to express their findings and check their predictions. |
| By the end of Grade 2, students will work collectively to gather and display simple data. | By the end of Grade 3, students will be able to organize and display simple data. | By the end of Grade 4, students will be able to organize and display more complex data collaboratively. | By the end of Grade 5, students will be developing the ability, in small groups, to organize and display data for the purpose of analysis related to the essential question. | By the end of Grade 6, students will be able to organize and display data for the purpose of analysis related to the essential question. |
| By the end of Grade 2, students will be introduced to concepts of inferring and finding outcomes. | By the end of Grade 3, students will be able to collectively infer meaning and find outcomes. | By the end of Grade 4, students will be able to collaboratively infer meaning and outcomes related to their analysis of the data related to the essential question. | By the end of Grade 5, students will be developing the ability, in small groups, infer meaning and outcomes related to their analysis of the data related to the essential question. | By the end of Grade 6, students will be able to independently infer meaning and outcomes related to their analysis of the data related to the essential question. |