**Content Area App – Science**

**Subject Area:** Science

**App Title**: Sid’s Science Fair

**App Price**: 3.49

**Languages:** English

**Rationale:** Sid’s Science Fair engages players (ages 3 to 6) in experiential learning with core science and math concepts from classification and identifying patterns to charting and sequencing. The app presents three Science Fair games that are:

GABRIELA’S COLLECTION INSPECTION
Use the interactive magnifying glass to discover fascinating patterns among a wide variety of objects, from butterflies and buttons to keys and coins. There are fourteen different collections included with differing patterns every time.

MAY’S CHART IT!
Players organize May’s miniature stuffed animals, balloon creatures, origami, silly faces, and other cool stuff on a chart by observing shared traits. These traits can include color, shape, orientation, and more. May has seven different collections, each of which has ten items and three charts.

GERALD’S TIME MACHINE
Children choose from among Gerald’s fourteen picture collections. Children then order the pictures into a sequence, such as a snowman melting, candles burning down, a flower growing, or an apple being eaten. Once your sequence is in order (forwards or backwards), you can swipe back and forth or tilt your device left or right to watch the time machine in action.

**Standards**

**ISTE Standards for Students**

* **4.d Critical thinking, problem solving, and decision making** Collect and analyze data to identify solutions and/or make informed decisions

**ISTE Standards for Teacher**

* **1.b Facilitate and inspire student learning and creativity** Engage students in exploring real-world issues and solving authentic problems using digital tools and resources

**New York State P-12 Common Core Standards**

* **Standard Strand**: Science
	+ **Grade**: 1
	+ **Topic**: The Physical Setting
	+ **Item number and statement**: 3.1f Objects and/or materials can be sorted or classified according to their properties.
* **Standard Strand**: Mathematics
	+ **Grade**: 1
	+ **Topic:** Operations and Algebraic Thinking
	+ **Item number and statement**: Represent and solve problems involving addition and subtraction. 1. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem
* **Standard Strand**: Mathematics
	+ **Grade**: 1
	+ **Topic:** Number & Operations in Base Ten
	+ **Item number and statement**: Extend the counting sequence. 1. Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.

**Ontario Curriculum Expectations**

* **Standard Strand**: Mathematics Measurement
	+ **Grade**: 1
	+ **Topic**: Attributes, Units, and Measurement Sense
	+ **Item number and statement**: read demonstration digital and analogue clocks, and use them to identify benchmark times (e.g., times for breakfast, lunch, dinner; the start and end of school; bedtime) and to tell and write time to the hour and half-hour in everyday settings
* **Standard Strand**: Mathematics Measurement
	+ **Grade**: 1
	+ **Topic**: Attributes, Units, and Measurement Sense
	+ **Item number and statement**: – estimate, measure, and describe the passage of time, through investigation using nonstandard units (e.g., number of sleeps; number of claps; number of flips of a sand timer);
* **Standard Strand**: Mathematics Number sense and Numeration
	+ **Grade**: 1
	+ **Topic**: Quantity Relationships
	+ **Item number and statement**: demonstrate, using concrete materials, the concept of conservation of number (e.g., 5 counters represent the number 5, regardless whether they are close together or far apart)