

## Numeracy Scope and Sequence

### Rationale

Daily Wonder curriculum is concept based and competency driven. That means that we use activities (competencies for doing and knowing) to gain understanding of key concepts. We build our curriculum up over the months in themes. Some of the months will have a math focus, some a science focus, and so on. Generally, we integrate two or up to four subjects in one theme. Our priority is to inspire young people to unfold and develop through age appropriate themes and activities over time. We are thoughtful about what themes and focuses should come, and when, based on our study of the developmental needs of children.

### Daily Wonder Math

We will guide you to bring broad concepts of math to your child through monthly units. There will usually be between two and four math focused units in a year for each grade. Below you'll see a list of the units that bring the major math themes. The list will tell you the grade, month, unit and concepts covered.

*Math is a **foundational skill** and must be practiced every day, not for just two to four months of the year. We recommend that you follow your curriculum guide to bring 2 - 10 minutes of math activities everyday through games and so forth, and that you also have your child work in a math practice book for 15 - 30 minutes each day either within or following the morning lesson. **Math workbooks will cover all concepts for a grade and can be purchased at most bookstores.** We suggest you look for one that is specific to your country/province/state. We recommend that you avoid concepts in the math practice books that have not been covered in your themed units until after you have brought them to your child in a hands-on, engaging way. The list below will help guide your intention with math. Some provincial/state learning outcomes will be covered in other themed units and/or in the math workbooks.*

Grade	Month #	Unit Names: Wonder of...	Concepts
1	1	Patterns	<ul style="list-style-type: none"> <li>Repeating elements in patterns can be identified</li> <li>Objects and shapes have attributes that can be described, measured and compared</li> </ul>
1	3	Numbers	<ul style="list-style-type: none"> <li>Numbers to 20 represent quantities that can be decomposed into 10s and 1s</li> </ul>
1	5	Math	<ul style="list-style-type: none"> <li>Numbers to 20 represent quantities that can be decomposed into 10s and 1s</li> <li>Addition and subtraction with numbers to 10 can be modelled concretely, pictorially, and symbolically to develop computational fluency</li> </ul>
1	7	Math2	<ul style="list-style-type: none"> <li>Numbers to 20 represent quantities that can be decomposed into 10s and 1s</li> <li>Addition and subtraction with numbers to 10 can be modelled concretely, pictorially, and symbolically to develop computational fluency</li> </ul>
1	9	Shapes	<ul style="list-style-type: none"> <li>Objects and shapes have attributes that can be described, measured and compared</li> </ul>

			<ul style="list-style-type: none"> <li>Concrete graphs help us to compare and interpret data and show one-to-one correspondence</li> </ul>
2	1	Patterns	<ul style="list-style-type: none"> <li>The regular change in increasing patterns can be identified and used to make generalizations</li> <li>Objects and shapes have attributes that can be described, measured and compared</li> </ul>
2	2	Place Value	<ul style="list-style-type: none"> <li>Numbers to 100 represent quantities that can be decomposed into 10s and 1s</li> <li>Development of computational fluency in addition and subtraction with numbers to 100 requires an understanding of place value</li> </ul>
2	4	Math	<ul style="list-style-type: none"> <li>Numbers to 10000 represent quantities that can be decomposed into 1000s, 100s, 10s and 1s</li> <li>Development of computational fluency in addition and subtraction with numbers to 100 requires an understanding of place value</li> </ul>
2	6	Math2	<ul style="list-style-type: none"> <li>Numbers to 100000 represent quantities that can be decomposed into 100000s, 10000s, 1000s, 100s, 10s and 1s</li> <li>Development of computational fluency in addition and subtraction with numbers to 100 requires an understanding of place value</li> </ul>
2	8	Graphs	<ul style="list-style-type: none"> <li>Concrete items can be represented, compared, and interpreted pictorially in graphs – including intro to measurement</li> </ul>
3	3	Shelters	<ul style="list-style-type: none"> <li>Regular increases and decreases in patterns can be identified and used to make generalizations</li> </ul>
3	4	Measurement: Linear	<ul style="list-style-type: none"> <li>Standard units are used to describe, measure, and compare attributes of objects' shapes</li> </ul>
3	6	Measurement: Weight and Volume	<ul style="list-style-type: none"> <li>Standard units are used to describe, measure, and compare attributes of objects' shapes</li> <li>The likelihood of possible outcomes can be examined, compared and interpreted</li> </ul>
3	8	Measurement: Time	<ul style="list-style-type: none"> <li>Fractions are a type of number that can represent quantities</li> <li>Regular increases and decreases in patterns can be identified and used to make generalizations</li> </ul>
3	10	Measurement: Money	<ul style="list-style-type: none"> <li>Fractions are a type of number that can represent quantities</li> <li>Development of computational fluency in additions, subtraction, multiplication, and division of whole numbers requires flexible decomposing and composing</li> <li>Regular increases and decreases in patterns can be identified and used to make generalizations</li> </ul>
4	3	Fractions	<ul style="list-style-type: none"> <li>Fractions are a type of number that can represent quantities.</li> </ul>

			<ul style="list-style-type: none"> <li>Numbers describe quantities that can be represented by equivalent fractions.</li> </ul>
4	6	Fractions 2	<ul style="list-style-type: none"> <li>Fractions are a type of number that can represent quantities.</li> <li>Numbers describe quantities that can be represented by equivalent fractions.</li> </ul>
4	9	Fractions 3	<ul style="list-style-type: none"> <li>Fractions are a type of number that can represent quantities.</li> <li>Numbers describe quantities that can be represented by equivalent fractions.</li> </ul>
5	3	Decimals	<ul style="list-style-type: none"> <li>Fractions and decimals are types of numbers that can represent quantities.</li> <li>Mixed numbers and decimal numbers represent quantities that can be decomposed into parts and wholes.</li> </ul>
5	8	Freehand Geometry	<ul style="list-style-type: none"> <li>Closed shapes have area and perimeter that can be described, measured, and compared.</li> <li>Polygons are closed shapes with similar attributes that can be described, measured, and compared (BC grade 4 concept)</li> <li>Computational fluency and flexibility with numbers extend to operations with larger (multi-digit) numbers.</li> </ul>
6	3	Geometry	<ul style="list-style-type: none"> <li>Properties of objects and shapes can be described, measured, and compared using volume, area, perimeter, and angles.</li> <li>The constant ratio between the circumference and diameter of circles can be used to describe, measure, and compare spatial relationships (BC grade 7 concept)</li> </ul>
6	4	Economics	<ul style="list-style-type: none"> <li>Computational fluency and flexibility with numbers extend to operations with whole numbers and decimals.</li> </ul>
6	7	Astronomy	<ul style="list-style-type: none"> <li>Data from the results of an experiment can be used to predict the theoretical probability of an event and to compare and interpret.</li> </ul>
6	8	Continental Geography	<ul style="list-style-type: none"> <li>Linear relations can be identified and represented using expressions with variables and line graphs and can be used to form generalizations.</li> </ul>
7	6	Algebra	<ul style="list-style-type: none"> <li>Computational fluency and flexibility with numbers extend to operations with integers and decimals.</li> <li>Decimals, fractions, and percent are used to represent and describe parts and wholes of numbers.</li> </ul>