Summary of Math Skills
for Grades One through Eight

<u>Commentary</u>: Often parents worry that their child is behind. They can become alarmed if their child isn't proficient with a skill that is being covered in school. Part of the problem can be an assumption that students should learn every skill quickly, and then never forget it. In practice, however, the development of an important skill often follows a three-year progression from introduction to practice/review to mastery. Certainly, we want all of our students to have solid math skills for their future education and career. Waldorf students should have an advantage!

<u>Notes</u>:
- This document shows when each particular skill is introduced, practiced and then mastered.
- There is much more to math class than what is shown with this summary of math skills.
- **The examples are not grade specific** (e.g., under "fractions" we are not saying when 3½ ÷ 5 is covered).

Name of Skill	When is it Introduced?	When is it Practiced?	When is it Mastered?	Example of this Skill
Counting to 100	Grade 1	Grade 1-2	Grade 2	…37, 38, 39, 40, 41…
Times Tables	Grade 1	Grade 1-3	Grade 3	2, 4, 6, 8, 10… 7, 14, 21, 28, 35…
Arithmetic Facts	Grade 1	Grade 2-4	Grade 4	$8 \times 7 =$ $13 - 8 =$
Mental Arithmetic	Grade 1	Grade 1-8	Grade 2-8	$62 - 55 =$ $480 + 30 =$
Basic Measurement	Grade 3	Grade 4-5	Grade 5	How tall is that tree? 4 feet = ___ inches
Vertical Add. & Subtr. (a.k.a. Carrying/Borrowing)	Grade 3	Grade 4-5	Grade 5	$\begin{array}{r} 607 \\ -438 \end{array}$
Vertical (Long) Multipl.	Grade 3	Grade 4-5	Grade 5	$\begin{array}{r} 538 \\ \times 357 \end{array}$
Vertical (Long) Division	Grade 4	Grade 5-6	Grade 6	$47 \overline{)7990}$
Fractions	Grade 4	Grade 5-6	Grade 6	¾ + ⅔ 3½ ÷ 5
Decimals	Grade 5	Grade 5-6	Grade 6	2.6 − 0.17 0.34 x 2.83
Measurement Conversions	Grade 5	Grade 6-8	Grade 7-8	9 miles = ___ feet 450cm = ___ feet
Advanced Mental Math	Grade 5	Grade 5-8	Grade 7-8	$25 \times 18 =$ 15% of 260 =
Percents	Grade 6	Grade 7-8	Grade 8	37% of 2000 25 is what % of 60?
Rates/Ratios/Proportions	Grade 6-7	Grade 7-10	Grade 8-10	similar triangles miles per gallon
Areas & Volumes	Grade 6	Grade 7-10	Grade 8-10	area of a triangle volume of a sphere
Basic Equations	Grade 7	Grade 7-9	Grade 9	$3x - 7 = 8x + 23$
Signed Numbers	Grade 7	Grade 7-9	Grade 9	$-5 + 9 - 3 + 10 =$ $(-6)(-9) =$