Math 4-5 yo (prerequisites for Math 0)

- Numbers name and counting up to 10.
- Compare numbers. Understand addition and subtraction as putting together or taking away.
- Recognize the attributes of size, length, area, weight, and capacity of everyday objects
- Identify relative position of objects in space.
- Identify colors.
- Identify various two-dimensional shapes. (squares, circles, triangles, rectangles).
- Sort, categorize, and classify objects.
- Compare three-dimensional shapes with the shapes of real objects.
- Time – put pictures in order. Before and after.
- Analogies
- Patterns
- Simple logic problems.
- Develop attention, memory and fine motor skills.
- Games. Blocks.

Math 0 (Kindergarten) (prerequisites for Math 1)

- Numbers name and counting up to 20. Number line. Zero.
- Count to 100 by ones and by tens.
- Compare numbers.
- Decompose numbers less than or equal to 10 into pairs in all possible ways (e.g., 5=5+0, 5 = 1 + 4,   5 = 2 + 3).
- Solve addition and subtraction word problems, and add and subtract within 10. Use number line.
- Separate numbers 11-19 in group of 10 and number from1 to 9.
- Identify and describe shapes. Compose simple shapes to form larger shapes.
- Compare objects by measurable attributes, such as length or weight
- Name relative positions of objects.
- Sort, categorize, and classify objects. Introduction to set.
- Analogies.
- Patterns.
- Simple logic problems.
- Develop attention, memory and fine motor skills.
- Games. Blocks.

Math 1 (prerequisites for Math 2)

- Different types of word problems involving addition and subscription up to 20.
- Place value: ones, tens. Graphic form of numbers larger then 10.
- Addition and subscription for numbers more then 20 without regrouping.
- Introduction to multiplication and division. Pifagore table. Simple word problems involving multiplication.
- Introduction to simple equations of the form x-a=b, x+a=b, a-x=b. Balance. Parts of a whole.
- Time
- Geometry. 3D geometry.
- Challenge analogies and patterns.
- Combinatory problems.
- Logic problems.
- Games. Blocks. Tangram

Math 2 (prerequisites for Math 3)

- Place value: ones, tens, hundreds.
- Addition and subscription with regrouping.
- Different types of word problems involving several steps of addition and subscription. Expressions with variables - putting the basic word problems into expression form.
- Multiplication and division. Word problems involving multiplication.
- Simple equations of the form x-a=b, x+a=b, a-x=b, ax=b
- Order of operations
- Introduction to sets.
- Algoritms.
- Geometry. 3D geometry.
- Combinatorial problems.
- Logic problems.

Math 3 (prerequisites for Math 4)

- Sets
- Order of operations , including parentheses
- Division with remainder.
- Long multiplication and division.
- Equations of the form ax+b=c and equations with parentheses
- Negative numbers
- Fractions
- Money (as a model for decimals)
- Angles
- Circus
- Special quadrilaterals. Perimeter and area.
- Logic.