The thesis explores creating ideas around numbers with pre-school children using the Montessori method and materials. First, the philosophy and pedagogy of Maria Montessori and her main educational principles are briefly characterized. Conception of pre-math according to the Educational Program for Pre-School Education Framework ("Rámcový vzdělávací program pro předškolní vzdělávání") is mentioned together with its presentation in standard pre-schools. The pathway of a child to the concept of "number" according to contemporary literature is mentioned and the concept of math in the Montessori system. All Montessori math materials for pre-schools are described. In the last chapter, we compare the Montessori method with the current ideas presented in the first chapters, and note potential problems and reservations with using Montessori materials and offer supplementary activities.