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Ordinary mathematical practice is most compatible with the predicativism philosophy. In this paper we explore how core mathematics can be developed within a predicative setting. Unlike previous works, where in order to stay within the predicative realm either the universe was restricted or some semantical considerations were made, the main novelty of this work is that it uses a syntactical machinery to encompass the predicative realm. Our approach is therefore much more appropriate for mechanization and offers a more congenial environment for practicing standard mathematics. We construct user-friendly systems which are easy to use as they reflect real mathematical practice in making an extensive use of statically defined abstract set terms. We explore what parts of everyday mathematics can be carried out within the systems, and at which level of convenience.