ABSTRACT The study examined teacher’s perception of factors which determine effective teaching of mathematics in secondary schools in Benue State. It has been observed by mathematics educators all over the world that competent teachers, adequate workshops and instructional materials are indispensable in the teaching of mathematics. These are factors adjudged to be capable of causing a decline in the standard of performance of students in mathematics examinations. Therefore, this study is designed to ascertain teachers’ perceptions of factors determining effective teaching of mathematics in secondary school in Ogbadibo LGA of Benue State. A random sample of 11 qualified and 3 non-qualified mathematics teachers from 10 secondary schools in Ogbadibo were sampled from 23 teachers that teach the subject and t-test was used for the analysis and it was show that; the instructional materials are grossly inadequate in our schools and even where they are available, teachers hardly make use of them and secondary school management is ineffective in enhancing the effective teaching and learning of mathematics. It is recommended among others that; teachers should be assisted to improve their skills and develop positive attitudes towards these identified factors. (Received January 05, 2014)