This study aims to determine students' learning difficulties on inheritance material in IX Grade and factors causing student learning difficulties on inheritance material in SMPN 11 Medan Academic Year 2017/2018. The research design used is descriptive quantitative. Population in this research is all grade IX students with the total number are 225 students. Sample was taken by using purposive sampling with the total sample 69 students which has an average value <75. Data collection techniques use multiple choice test and questionnaire. After analyzed the data, the results showed: (1) On cognitive aspect, the difficulties of students are categorized from moderate into very high difficulties from C1 until C6 level which the highest percentage is on C6 level with 70.29%, (2) On learning indicator aspect, students have difficulties with very high category in explaining the ratio of monohybrid and dihybrid cross as 53.62%, (3) the factor that categorize as very influential in causing student learning difficulties is family with the percentage 71.52%

Keywords: analysis, learning difficulties, factor, Learning indicator