CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusion

- 1. The feasibility of student worksheets based on STEM (Science, Technology, Engineering, Mathematics) to improve critical thinking skills in the human excretory system material for class VIII SMP according to the validation of material experts with a percentage of 70.16, and linguists & education experts with a percentage of 69.04 and with each of these percentages included in worthy and very worth it.
- 2. The Use of student worksheets based on STEM Science, Technology, Engineering, Mathematics) which are designed effectively to improve students' critical thinking skills on excretory system material in humans with an average pretest score of 32.16, posttest score of 85 and the average N-Gain 0.77 with a high interpretation
- 3. The Responses of use of student worksheets based on STEM (Science, Technology, Engineering, Mathematics) designed by students received an average percentage of 75.97 by small group students and 77.79 by limited group students with worthy and very worth it categories. The teacher's response got an average percentage of 65.32 with worthy category. The teacher also responded that the designed worksheet was very useful for students and prospective teachers to be applied in science learning. In addition to being one of the media, methods, and learning models that are innovative and interesting because they provide tangible results for learning objectives that produce products in the form of projects, improving the implementation of the STEM component itself can also help students think critically.

5.2 Suggestion

Suggestions that can be given by researchers with the results of this study are:

1. This study was only carried out until a limited group trial with a sample of 30 students from class VIII-10. Therefore, if this research is followed up in the future, it is better if product trials can be developed again on a larger scale, applied in several schools and in an optimal period of time to get

optimal results again.

2. In further research, it is suggested that there is a need for learning development, especially in the Science and Technology component that is adapted to the conditions of the school and students to get more optimal

