## CHAPTER V CONCLUSION AND SUGGESTION

## 5.1. Conclusion

Based on the objective of the research that was conducted, there are some conclussions that gotten, they are :

- 1. The students achievement by using PBL based on collaborative with macromedia flash is higher than using by direct instructional model. It can be seen from the result of average of post-test and average of the gain. The comparison between experiment class with control class, the experiment class (post-test = 88.82; gain = 5.63) is higher than control class (post-test = 77.23; gain = 0.67).
- 2. The formation of collaborative group can increase the activity of students to working together, it shown from the percentage of observation collaborative which there are 8 indicator of collaborative and the percentage of them is more than 50% students become active in learning process.
- 3. The instrument that used to measure the student's achievement is consisting of cognitive aspect level from C1 to C4. Each of the cognitive aspect level is calculated to know the improvement of students inexperiment class by PBL model based on Collaboratve and it is improve each C1 0.62, C2 0.87, C3 0.77, and C4 0.86. And the most improve in experiment class is the level of cognitive aspect of C2 0.87.

## 5.2. Suggestion

Based on the result of this research, the researcher suggest as follows:

- 1. For teacher, to get the success student's achievement, the teacher is expected to perform the learning by using Problem Based Learning based on Collaboratve because this model can improve the student's achievement.
- 2. For researcher who want to do the same research must be manage the time to implement this model and must be creative in designing the lesson plan and also creative in manage the classroom.
- 3. It is needed to do the research with the same model but apply it in different topic to increase the quality of education especially in teaching students or in teaching-learning process.

