

## CHAPTER V

### CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Conclusion

Based on the results of data analysis and observation results, the following conclusions can be drawn:

1. Student learning outcomes using problem-based learning models is in the category of pretty good which has an average posttest score of 72.74 while the average score before being given treatment is only 42.35.
2. Student learning outcomes using the conventional learning model have a lower average value than the physics learning outcomes of students taught by the problem-based learning model, namely the posttest average score of 66.08 from the pretest average score which is only 40.98.
3. Based on hypothesis testing by using one side t-test on posttest data, it is known that there is a significant effect of the problem based learning model to improve student physics learning outcomes.

#### 5.2 Recommendations

Based on the results and conclusions of this study, the researcher has the following suggestions:

1. For teachers and prospective teachers who want to use the problem-based learning model so that they prepare more problems related to the material being taught in everyday life so that students can more easily understand these problems and be more interested in taking lessons
2. Future researchers should carry out simulations before applying the problem-based learning model to students so that students can better understand and be trained in how the pbl model works so that learning with this model can be completed promptly.
3. Future researchers should be more assertive in controlling the class when carrying out group discussions so that the class becomes more conducive