CONTENT

		page
Legitii	mation Sheet	i
Biogra	phy	ii
Abstra	ect	iii
Ackno	wledgment	iv
Content		vi
List of Figure		ix
List of Table List		X
List of	Appendix	xi
CHAPTER I INTRODUCTION		1
1.1. Background		1
1.2. Identification Problem		2
1.3. Limitation of Problem		2
1.4. Formula of Problem		3
1.5. Purpose of Research		3
1.6. Si	gnificance of Research	3
CHAF	PTER II LITERATURE REVIEW	4
2.1.	Theoretical Framework	4
2.1.1.	Definition of Learning	4
2.1.2.	Achievement	5
2.2.	Problem Based Learning Model	6
2.2.1.	Definition of Model Learning	6
2.2.2.	Definition of Problem Based Learning	6
2.2.3.	Specific Characteristics of Problem based Learning	7
2.2.4.	Benefit of Problem Based Learning	8
2.2.5.	Syntax of Problem Based Learning Model	9
2.2.6.	Learning Environment and Management Assessment	10
2.3.	Subject Matter	10

2.3.1.	Definition of Light	10
2.3.2.	Reflection	11
2.3.2.1	The Law of Reflection	11
2.3.2.2	Regular and Diffused Reflection	11
2.3.3.	Optical Instrument	15
2.4.	Conceptual frame	17
2.5.	Hypothesis of Research	18
CHAP	TER III RESEARCH METHOD	
3.1.	Location and Time of Research	19
3.1.1.	Population and Sample of Research	19
3.1.2.	Population of Research	19
3.1.3.	Sample of Research	19
3.2.	Variable of Research	19
3.3.	Type and Design of Research	19
3.3.1.	Type of Research	19
3.3.2.	Design of Research	20
3.4.	Research Procedure	20
3.5.	Research Instrument	21
3.5.1	Regulation of Instrument	22
3.6.	Technique of Collecting Data	22
3.6.1.	Beginning Phase	22
3.6.2.	Phase Collecting Data	22
3.7.	Techniques of Data Analysis	23
3.7.1.	Calculating mean and standard deviation	23
3.7.2.	Normality Test	23
3.7.3.	Homogeneity Test Data	23
3.7.4.	Test of Hypothesis	24
3.7.4.1	Test of similarity mean pretest (test t both of side)	24
3.7.4.2	Test of similarity mean posttest (test t of one side)	25

CHAP	TER IV RESULT OF RESEARCH AND DISCUSSION	
4.1.	Result of Research	26
4.1.1.	Description of Research Data	26
4.1.1.1.	Pretest Data of Experiment and Control Class	26
4.1.2.	Testing of Data Analysis	27
4.1.2.1	Normality Test of Pretest Data	27
4.1.2.2	Pretest Data Homogeneity Test and Different	
	Test of Student's Initial Ability	27
4.1.2.3.	Posttest Data of Experiment and Control Class	29
4.1.2.4.	Normality Test of Posttest Data	29
4.1.2.5.	Homogeneity Test of Posttest Data and Hypothesis Test	
	of Research (t-test of two sides)	30
4.2.	Discussion	31
CHAP'	TER V CONCLUSION AND SUGGESTION	
5.1.	Conclusion	33
5.2.	Suggestion	33
REFERENCES		

