

# CHAPTER I

## INTRODUCTION

### 1.1 The Background of the Study

Language is a structure system of communication. A language has an important function in society. Language is also very important tools on establishing and preserving relationship among people. People can learn many things through the language in order to get the existence of life. People also can interact each other using the language to send the message with different purposes such asking agreement, sharing information, and so on. There are so many language in the world. One of them is English. It is use as an International Language.

As one the international languages, English is used and learned by many people in the world. In Indonesia, English is regarded as the first foreign language. In globalization era everyone is competing to master foreign language, especially English as a tool for communication. In Indonesia, English becomes one of the school subjects. It is introduced from playgroup, elementary school, junior high school, senior high school and university. According to Wendy and Lisbeth (1990 : 33) the children able to express emotions, communicate, intentions and reactions, explore the language and make fun on it, so they expect to be able to do the same in English.

In English, there are four skills that should be master by the students such as listening, reading, speaking, and writing. There are also some language components such as pronunciation, spelling, vocabulary, and grammar that should be taught to support the language skill development. Those are language

skills and components must be learned and taught integrate in teaching and learning process. It is almost impossible to learn language without words, because communication between human beings is based on words.

Vocabulary is one of the important language, because vocabulary is the central of language teaching and learning. Vocabulary is very essential for success in comprehending the language well, speaking better, and composing a good writing. Vocabulary is important tool in communication, so it is important for a teacher to be creative and innovative in teaching vocabulary. Richard (2002 : 255) states that vocabulary is core component of language proficiency and provides some basics for how well learners can speak, listen, read and write. Without vocabulary, students will not be able to understand and speak English well because they do not know the meaning of words. By mastering the vocabulary, learners will be able to express so many sentences verbally and in writing.

Vocabulary learning is an essential part in foreign language learning as the meaning of new words are vey often highlighted, whether in book or in classrooms (Alqahtani, 2015:21). Learning vocabulary used to every level of school is very important, because vocabulary is the basic one of knowledge to master all language skill in a higher study for the further knowledge and it depend on the each teacher in every school to teach vocabulary as interest as possible. Vocabulary is an important tool for communication, so the teachers must be creative and innovative in teaching English especially vocabulary. Teacher can make the students attracted used technique to avoid students become bored and one of them is using Game.

Games are part of the steps that teachers need to teach in the learning and teaching process. In terms of vocabulary, games can also help students understand new words and new meanings. Wright, *et. Al* (2006:2) states that “Games also help the teacher to create context in which the language is useful and meaningful”. Some expert argue that teaching vocabulary by using games gives students motivation in they are amusing and that same time challenging.

Based on the writer’s experiences at SMP Swasta Methodist Aeknabara during teaching practice, the writer found that the students had trouble in vocabulary mastery. The writer gave students test of vocabulary to find out their problem in vocabulary mastery. The writer’s found the following result.

**Table 1.1**

**The List of Vocabulary Score at SMP Swasta Methodist Aeknabara**

No.	Initial of Students	R	N	S
1.	ABS	11	20	55
2.	ACD	9	20	45
3.	ACG	12	20	60
4.	BNT	12	20	60
5.	CAS	9	20	45
6.	CER	7	20	35
7.	CDM	11	20	55
8.	DAT	9	20	45
9.	DMT	8	20	40
10.	DGD	9	20	45
11.	EST	13	20	65
12.	EGR	5	20	25
13.	ETR	12	20	60
14.	EWS	14	20	70
15.	GHN	13	20	65
16.	HRT	12	20	60
17.	HMA	9	20	45
18.	JNI	16	20	80
19.	JRT	14	20	70
20.	JAD	7	20	35

$$S = \frac{R}{N} \times 100$$

Where :

S = Score number of test

R = Number of the correct answer

N = Number of question

$$\begin{aligned} \text{Mean} &= 55 + 45 + 60 + 60 + 45 + 35 + 55 + 45 + 40 + 45 + 65 + 25 + 60 \\ &+ 70 + 65 + 60 + 45 + 80 + 70 + 35 = 1060 : 20 = 53 \end{aligned}$$

From the result of the test is shown that they still lack in vocabulary. The writer gave 20 items of multiple choice about verb. The writer choose the topic about verb because in junior high school the students learn about tenses where verb is part of tenses so the students should know about the verb. The writer found only one student that get 80 score, another students just in 25-70 score and from the result the mean of the score of the students is 53. Based on the score of the observed above, the writer conclude that the students faced many problems dealing with vocabulary. Those problems are: first, most learners do not like learning English. Second, students are lazy to memorize all the unfamiliar words that they heard or read in the text. Third, students are bored and unmotivated to learn. Forth, usually teacher teaches vocabulary with traditional technique so the learners feel bored during the study. The conventional technology which is applied by the teacher seemed to force them to memorize new vocabularies without the help of media. It made students tend to show low attention on acquiring new vocabularies.

Learning English vocabulary using games has an important role for Junior High School teacher and students. The first, as students, they have strong and

good motivation to depend English language. The second, they are easy to accept the English language because they learn by playing games that nowadays has been grown and developed in Indonesia. The third, teaching English vocabulary using game can help teacher in teaching learning process. Because of that, the writer makes the teaching and learning process interesting and fun, so one of the good learning techniques is using Game.

Teaching vocabulary by using games will attention. It will make the learners feel more relax in learning and then the learners will be happy and enjoy with the learning process. When the learners happy and enjoy it, so it will be easier for them to learn it. One of the games that can be used is Fly Swatter Game. The game is very easy to apply in the class.

In this study, the writer chooses Fly Swatter game as the teaching technique to affect students' vocabulary mastery for making easy to do. Indeed, a fly swatter game is an interesting game, which is full of any challenge to play. Based on the reason, the researcher would like to conduct a reserach entitled "The Effect of Using Fly Swatter Game Into Students' Vocabulary Mastery".

## **1.2 The Problem of the Study**

Based on the background of the study, the problem of the study can be formulated as follows :” Does the Fly Swatter Game affect the students' vocabulary mastery in eight grade students of Junior High School ?

## **1.3 The Objective of the Study**

The objective of the study is to know whether the Fly Swatter game affect on students' vocabulary at eight grade students of Junior High School.

#### **1.4 The Scope of the Study**

The scope of this study is limited on the effect of Fly Swatter game in teaching Vocabulary at eight grade students of Junior High School. There are several kinds of vocabulary namely, noun, adjective, verb, preposition, adverb, gerund and infinitive. The writer only focus on verb.

#### **1.5 The Significances of the Study**

The finding of this study is expected to be theoretically and practically significant and relevant for some matters.

1. Theoretically, the finding of this study is expected to give a reference about the result of Fly Swatter Game on Students' Vocabulary Mastery. The result of this study is expect to be useful for the students to enrich their vocabulary and the researcher, for further study.
2. Practically, the finding of the study are expected to be useful for :
  - a. For teacher, as a reference to choose the best strategy in teaching especially in teaching vocabulary.
  - b. For other researcher, to use the result of this research as comparative study.

#### **1.6 Hypothesis of the Study**

This research is to answer the question about the significance different between teaching Vocabulary Mastery by using Fly Swatter Game and teaching Vocabulary Mastery without using Fly Swatter Game. Therefore, writer proposed hypothesis as follows:

**Alternative Hypothesis (Ha):**

The using of Fly Swatter Game significantly affects students' vocabulary Mastery.

**Null Hypothesis (Ho):**

The using of Fly Swatter Game does not significantly affect students' vocabulary Mastery.

## **CHAPTER II**

### **REVIEW OF LITERATURE**

#### **2.1 Language**

Language is an effective tool to get communication, interaction, and to get information from others. Language is the system of words or signs that people use to express thoughts and feelings to each other. A language that is a means of human communication consists of words that have a structure that is used together by a particular community or country in a conventional way. Without language, people find it difficult to understand each other because they find it difficult to understand the meaning of the words. It is one of the media that cannot be separated from human life. Therefore, language is the most important for human life.

According to Gonzales (2004:2) said that “ language is more than skill, they are the medium through which communication of people engage with. Zaenuri (2001:9) Language helps you to understand yourself and the world around you. Without language, people will be confused to understand each other. There are some components of language like vocabulary. By mastering vocabulary people will be easy to understand each other.

#### **2.2 Skills in English**

There are four skills in English that should be mastered by the students such as listening, reading, speaking and writing. The fourth of the skill in English must be learned by the students to increase their knowledge in English.



### 1. Listening Skill

Listening skill is the ability to identify and understand what the speaker is saying through understanding the accent, pronunciation, grammar and vocabulary and grasping the meaning. Listening is key to all effective communication. Without the ability to listen effectively, we will be misunderstood in communicating.

### 2. Speaking Skill

Speaking skills are the skills that give us the ability to communicate effectively. By speaking skill we can express our ideas orally to each other. These skills allow the speaker to convey his message in a passionate, thoughtful, and convincing manner. Speaking skills also help to assure that one won't be misunderstood by those who are listening.

### 3. Reading Skill

Reading skills are the ability of an individual to read, comprehend and interpret written words. Reading skills are the cognitive processes that the reader embarks on to make sense of a text. Reading skill will help us to improve our understanding of the language and build our vocabulary.

### 4. Writing Skill

Writing skill is the ability to express ideas through written word. Writing skills are an important part of communication. Through writing skill, will help writers put their thoughts into words in a meaningful form and to mentally interact with the message.

The fourth of skills in English above are the important thing that the learners must master. By mastering skills in English will determine the learners' communicative competence in the target language.

### **2.3 Writing**

Writing is one of the language skills that should be taught besides the other skill. Writing is regarded as a productive skill it aims at assisting students in expressing their ideas written. Writing is the most difficult skill among other language skills. Learning to write in either the first second or second language is one of the most difficult tasks for learners. Because of that, to make a good writing, learners need a hard thinking and they must have an extent knowledge to get correct writing. Through writing learners can express thought, feeling, ideas, experiences, etc to convey a specific purpose. The purpose of writing is to give information. According Harmer (2007:79) Writing is a form of communication to deliver through written form. According to Oktavia R and Saun (2012:3) Writing is a process that the writer think and organize the ideas the rethink and organize it. It means that the writers think, plan, and write a draft after that rethink and write until they are satisfied.

According to Randal (2004:160) states that writing is an ability to make a form of words that in general it may have a higher truth value than the fact that it has set it down. It means that the product of writing should be truly acceptable by the readers. Besides that, it must contain meaningful value so that the readers can get benefits from the writing. Furthermore, Sudaryanto (2001:64) says that writing skill is a person's ability to express his/her mind and feeling which is expressed in a written language, in graphic symbols so that the readers are able to understand

the message inside. From the statement, it can be said that writing is a skill where the writer can set his/her idea down in the form of words, sentences and paragraphs which are easy to understand for the readers.

In making good writing, we must use correct grammatical rules, choose appropriate vocabulary and the meaning can be easy to understand. Vocabulary is one of the important things in writing. According to Nagy (1981:1) Vocabulary knowledge is fundamental to writing comprehension, one cannot understand text without knowing what most of the words mean. Increasing vocabulary knowledge is a basic part of a process of writing. Learners need to master vocabulary to convey the ideas in written form and to communicate to each other.

From the explanation above the writer concludes that writing is one of the skills in English which can be learned by anyone who wants to express their thoughts, ideas, feelings, experiences and to convey a specific purpose. In writing, we need to master vocabulary, because vocabulary is the important thing in writing. If we have many pieces of knowledge in vocabulary we can choose the word or arrange the words to become good writing. So, if we master the vocabulary we can convey our ideas and the people can understand with what we write.

## **2.4 Vocabulary**

Learning language cannot be separated from learning vocabulary. Vocabulary supports the speaker to express their opinions, ideas, and feelings in communication. Vocabulary is the most important component of language because it affects the four language skills, there are listening, speaking, reading, and writing.

According to Richards (2002 : 255) states that vocabulary is the core component of language proficiency and provides much of the basis for how well learners speak , listen, read, and write. Without an extensive vocabulary and strategies for acquiring new vocabulary, learners often achieve less than their potential and may be discouraged from making use of language learning opportunities around them such as listening to the radio, listening to native speakers, using the language in different contexts, reading, or watching television.

According to Syafrizal and Haerudin (2018, p. 41-42) outline that “ Vocabulary can be defined, roughly, as the words we teach in foreign language. No matter how well the students learn grammar, no matter how successfully the sounds of second language are mastered, without words to express a wide range of meanings, communication in second language just cannot happen in any meaningful way.

Vocabulary is a very important component of four skills in English such as listening, speaking, reading, and writing. Learning vocabulary can help the students understand and increase their knowledge. It can also help learners use English faster and become proficient in English. Vocabulary is a group of words with meaning, and words appear in oral and written forms.

Based on the definition above, the writer can assume that vocabulary plays an important role in communication. One way to master language skills is to master vocabulary, because it is easier for humans to express their thoughts and ideas. Vocabulary is a very important aspect of our lives. This is because people need vocabulary when expressing their ideas in both native and foreign languages. Vocabulary has always become an important part of English as a foreign

language. Everyone who learns a language must learn the vocabulary of that language to simplify the learning process. In language learning, vocabulary plays an important role.

To master oneself means great skill or knowledge, control or power. In addition, mastery is an outstanding skill or passing knowledge. Therefore, the meaning of vocabulary mastery is a situation in which people master the skills and knowledge of words (especially foreign words). When a person is told that he has high vocabulary mastery, it means that he understands many words.

#### **2.4.1 Kinds of Vocabulary**

According to Kamil and Hiebert ( 2005:3) there are two kinds of vocabulary in teaching vocabulary:

##### **a. Productive vocabulary**

Productive vocabulary or active vocabulary is the set of words that an individual can use when writing or speaking. According to Zhou ( 2010:15) Productive vocabulary means the knowledge to produce a word when the learner can use it in their writing or speech. They are words that are well-known, familiar, and used frequently. Productive vocabulary is also the words which the students understand, can pronounce correctly and uses constructively in speaking and writing. For example, if someone understand the contents of the conversation in someone else's English he is also able to provide a response or an answer from what he has left then his vocabulary is classified as productive vocabulary.

b. Receptive or recognition vocabulary

Receptive or recognition vocabulary is that set of words for which an individual can assign meanings when listening or reading. These are words that are often less well known to students and less frequent in use. Individuals may be able assign some sort of meaning to them, even though they may not know the full subtleties of the distinction. Typically, these are also words that individuals do not use spontaneously. However, when individuals encounter these words, they recognize them, even if imperfectly. According to Zhou (2010:15) Receptive vocabulary means the capability to comprehend a word when the learner hear or to see it. Usually receptive vocabulary refers to language items that can recognized and understood in the context of reading or listening. For example, someone is able to understand others to speak English well and really not able to provide a response or answer to these words, the ability to master this person is receptive vocabulary.

Based on the defenition above, the writer conclude that on vocabulary there are two kinds of vocabulary namely productive and receptive vocabulary, where productive vocabulary is a set of the familiar word and usually use in speaking and writing and different with receptive vocabulary is a set of word are often less known to students and less frequent in use and usually receptive vocabulary use in reading and listening.

#### **2.4.2 Classification of Vocabulary**

The classification of English vocabulary means that we have learned part of speech in the first step of grammar learning. By learning parts of speech, we

understand the function of words and how to use words as sentences in words. Good and meaningful communication. The fact is that most students cannot use grammar correctly because students do not use this feature in every part of the speech. Therefore, we must learn English parts of speech better.

According to Harmer (1998:36), when considering sentence structure the teacher needs to know various things. Below is the part of speech :

### **1. Noun**

A noun is defined as a set of words that is the name of the person, places, things, animals, and behaviors. Nouns can be used as the subject or object of a verbs. Noun can be divided into sub classes. Olivia et al., ( 2018:4) Noun can be modified by an adjective and take a determiner. Example of nouns ( Book, Hotel, Bag, etc). According to Gobetti et al., (2008:11) Noun is a word that indicates a person, animal, thing, or idea; it can be accompanied by an article. Moreover, Nouns can be the subject or the object of a verb; they can be modified by an adjective and can take a determiner. Cyssco (2009:10) Noun is refers to the name of a place, person, thing, and idea. For instance; mother, pen, singer, record, etc. According to Yule(2006:82) nouns are words used to refer to people (boy), object (backpack), creatures (dog), places (school), qualities (roughness), phenomena (earth-quake), and abstract ideas (love), as if they were all “things”. According to Frank (1993:6) the noun is one of the most important part of speech. Its arrangement with the verb helps to form the sentence core which is essential to every complete sentence.

Based on the explanation above, the writer concludes that noun is the name of a person, place or thing. Noun is one of the important word that should be

learn by students to be mastered vocabulary, because noun has the ability to take an action or be subject to an action not only that vocabulary that shows the names of person, place, things, ideas, action, feeling, that has function as a subject and object in a sentence.

## **2. Verb**

It is defined as a group of word which is used to three kinds of verb, they are auxiliary verb ( shall, be, etc), main verb is the verb that carries the meaning ( sit, arrive, eat, etc), and phrasal verb is the verb that is formed by adding adverb or preposition to a verb to create a new meaning ( traffic light, sit down, go on, etc). Verb is kind of a part of speech that tells about an action or a state. According to Marthin and Jurafsky ( 2005:4) Verb class includes most referring to action and processes, including verb like draw, provide, differ, and go. According to Gobetti et al., (2008:12) Verb is words that shows an action, an event, or state an event or a state being. According to Altenberg and Robert ( 2010:35) there are kinds of verb like action verb, linking verb, transitive and intransitive verb and etc.

### **1. Transitive Verb**

Transitive verb is action verbs that act upon something. It describes an action that is happening to someone or something. This person or thing is known as the direct object of verb. Transitive verb can be used with direct object or indirect object. The object need in here to receive the action of the verb. There are three kinds of transitive verb by Sujatna (2009:69).

#### **a. Mono-transitive verb**



A mono-transitive verb takes a single direct object. The verbs are buy, kill and bite are mono-transitive verb in the following English sentences. For example: They *buy* a new car, he *kill* the bird, the dog *bithim*.

b. Ditransitive verb

Ditransitive verb in English, takes two objects. Some of linguistics call them as a direct and indirect object or primary and secondary. The indirect object or the secondary refers to the living creature, and the direct object or primary refers to non-living creature. For example: They give *Amelia a golden robe*.

c. Complex transitive

Complex transitive is that contains a complex transitive verb as a main verb. If a monotransitive verb is followed by an object and a ditransitive verb followed by two object, complex transitive verbs are group of verbs that can be followed by both an object and a complement or an adverbial. For example: You should *buy the book before joining the class*.

2. Intransitive Verb

Intransitive verb is action verbs that do not act upon something. The verbs that do not act on something and appear in sentence that do not have a direct object. There are maybe other information after the verb such as one or more prepositional phrase or an adverb. Intransitive verb is a verb which can be followed by nothing or adverbial (s) only. For example: Dina sits on the chair, he runs, he sleeps.

### 3. Adjectives

It is defined as a word which describes or gives information about nouns and pronouns. Adjectives describe nouns in terms of such qualities and size, color, number and kind. According to Morley G. David (2000:39) Adjectives have the role of ascribing an attribute or feature to a noun. According to Olivia et al (2018:4) The main function of adjectives is to modify nouns and pronouns. They describe the qualities of people, things and abstractions. The adjective is commonly used in the first time. These examples of adjectives : (good, young, sad, happy, etc). According to Novia (2009:28), Adjectives are words that are used to limit the use of nouns by giving certain properties to nouns. Furthermore, Downing (2006:440) says that “ Adjectives as classifiers are frequently derived from nouns and restrict the noun head in relation to another referent. Adjective is a word that describes a noun, a name, or a pronoun Gobetti (2008:11).

Based on the explanation above, the writer concludes that adjective is a word class that changes nouns or pronouns, usually by explaining them or making them more specific.

For example :

I'm carrying a *heavy* box

I think he is **guilty**

The situation is **serious**

### 4. Pronoun

It is defined as a group of words that is used in the place of a noun or noun phrase. We use pronouns very often, so that we don't have to keep on presenting it. The example of pronoun: (they, him, her, it, etc). Pronouns are a structure class whose

members serve as substitution forms for noun phrases. The noun phrases for which a pronoun substitutes is called the antecedent of the pronoun. Based on the explanation, the writer conclude that pronoun is a word that is used instead of a noun or noun phrase. Pronouns refer to either a noun that has already been mentioned or to a noun that does not need to be named specifically.

## **5. Adverb**

It is usually defined as word that gives more explanation about verb, an adjectives, and adverbs in the term of such qualities as time, frequence and manner. These examples of adverb: (slowly, quickly, hardly, etc). Olivia B. Maria ( 2018:5) Adverbs add information about the circumstances of a situation or an event. They complete the meaning of verbs stating how, when, where, how often, something happens. Nestifield (2016:12) says, Adverb is a word that qualifies a verb, adjectives, noun, another adverb, or a sentence derived. Moreover, According to Swick (2005:16) Adverb is also modifiers, but also modify verb, adjective, and other adverb. Based on the explanation above, the writer conclude that adverb is give information to other words, such verb, adjectives, which are not nouns.

For Example :

I learned German *quickly*

She was *here earlier today*

Leave *straightaway!*

## 6. Conjunction

It is defined as a word that connects word, phrase, clauses or sentences. The example: (moreover, therefore, but, so, etc). According to Olivia B. Maria (2018:9) Conjunctions is when you combine two clauses in a sentence, you may use a conjunction to link them and to indicate the relationship between them. There are two kinds of conjunctions, namely subordinating conjunction and coordinating conjunction. They indicate the different kinds of relationship between clause in a sentence.

For Example :

The boys shouted **and** rushed forward

I asked if I could borrow her bicycle **but** she refused

## 7. Preposition

It is often defined as a word that shows the way in which other words are connected. The relationship includes direction, place, time, manner and amount. For example (in, at, on, etc ) in the class, on the floor, at school. The preposition is the link which connects the words phrases of a sentence in various relationships.

## 8. Determiner

It is the word such as a, an, the. An article word is usually used before noun or noun phrase. Determiners are words which specify the range of reference of noun. Determiners always precede the noun they determine, but they have different positions relative to one another ( Leech and Svatic, 1975:224-226). According to Aarts (1982:106) determiners are distinguished into three sub functions namely pre-determiner, central determiner and post-determiner.

From the explanation above, the writer conclude that determiner is a word that introduces a noun. A determiner always comes before a noun, not after and it also comes before

### **2.4.3 Roles of Vocabulary**

Vocabulary has an important role in the language learning. Thornbury (2002:13) stated that “ without grammar very little can be conveyed, without vocabulary nothing can be conveyed.” One should know a certain amount of vocabulary orally, but also in written form. A large vocabulary allows for communicating in ways that are precise, powerful, persuasive, and interesting.

Based on the explanation above the writer conclude that the learners have to pay a greater attention to the vocabulary teaching because the knowledge of vocabulary is very important. The teacher must have an effective and efficient technique in order to make the goal of teaching of vocabulary successful. Someone will be able to improve achievement and enhance communication if she/he can master well.

### **2.4.4 Source of Vocabulary**

To improve vocabulary the students have to know where the source of vocabulary comes from. So, the students will be easier to learn English. According Harmer ( in Lestari 2013 ), there are some sources vocabulary studies, they are:

1. Word List

Word List on economical way of recognizing vocabulary for learning and it is does not matter deal if they are put together in a random ways. The

students can learn vocabulary mastery wherever they are, because it is easy to bring.

2. Vocabulary Book

It is also integrated into skill work, typically in the form of a pre-task or a post task vocabulary book which can be exercise for the students.

3. The Teacher

The teacher is a potential fruitful source of vocabulary input not only in terms of in accidental learning. But also as a means of introducing vocabulary through teacher talk.

4. Leader

Each learner can contribute to the shared class lexicon through activities as brainstorming. Leaders can improve their vocabulary from other learner by discussion and sharing with their friends

5. Short Text

Short text for vocabulary building purposes whether spoken or written have enormous advantages over learning word form list. From the statement above, we know that the teacher and learners have the great influence in improve students “ vocabulary mastery, especially in teaching learning process. Teacher must make students feel happy and enjoy in learning vocabulary. So, they will be easier in remembering new vocabulary that they have got. Therefore, the students with poor vocabulary need to build their vocabulary.

#### **2.4.5 Vocabulary Mastery**

Vocabulary is one of the language aspects that should be learned. Learning it is important because in order to be able to speak, write and listen, learners must first understand vocabulary. A person said to „know“ a word if they can recognize its meaning when they see it (Cameron, 2001: 75). It means that when learning a vocabulary, the learners must understand its meaning, and must understand and be able to use it in the context of the sentence.

According to John (2000: 16), vocabulary is knowledge of knowing the meanings of words and therefore the purpose of a vocabulary test is to find out whether the learners can match each word with a synonym, a dictionary –tape definition, or an equivalent word in their own language. In learning vocabulary automatically they have to know the meaning of words themselves and can use it in sentences.

In brief, vocabulary proficiency can be defined as many vocabulary (words) in a language, which contain information about its meaning, form, and usage in communication. This is the basic knowledge that students should master first before mastering English. Vocabulary learning is the main problem of English learning, because it includes the basic components of English sentences.

Based on the explanation above, the writer conclude that mastering vocabulary is not an easy, spontaneous process. When someone is a baby, they begin to master vocabulary. Basically, the baby's mother tongue is the mother tongue. They will master the vocabulary by listening to the words spoken by others and using simple words. As we all know, without English proficiency

(English skills), English vocabulary learning will not succeed because they are very important in the process of English teaching.

#### **2.4.6 The Problem of Vocabulary**

There are several strong reason for which the vocabulary components of language course needs to be carefully planned. Firstly because different vocabulary gives greatly different return for learning, it is important to make sure that learner have a good control of high frequency words of the language before moving on the less frequent vocabulary. Secondly, most language teaching course make vocabulary learning more difficult that it should be as a result of the way vocabulary in the course is sequenced. Grouping, opposites, synonyms, and items in a lexical set together courses. Interference that result in confusion for the learners it is simple matter to avoid this problem. Thirdly, vocabulary learning opportunities and the quality of vocabulary learning can be greatly increased through the careful design of both vocabulary and other skill activities.

Many problems faced when Indonesian students learn a target language such as English in vocabulary is they cannot understand what the connection between the new vocabulary they have learned with the function of the vocabulary word, then they can not apply their new vocabulary in their mind for communication.

From the explanation above, the writer conclude that There are several strong reason for which the vocabulary components of language course needs to be carefully planned. Secondly, most language teaching course make vocabulary learning more difficult that it should be as a result of the way vocabulary in the course is sequenced. Interference that result in confusion for the learners it is



simple matter to avoid this problem. Thirdly, vocabulary learning opportunities and the quality of vocabulary learning can be greatly increased through the careful design of both vocabulary and other skill activities.

#### **2.4.7 The Importance of Vocabulary**

Vocabulary is the main body of words that make up a language, and its importance in reading comprehension cannot be overestimated. Without good operational knowledge of words and their meanings, both written and oral communication will be difficult to understand. Teachers and parents can emphasize reading and verbal interaction with children to help them build a strong working vocabulary. Vocabulary plays a very important role in developing the four language skills: listening, speaking, reading, and writing.

Thornburry (2002:14) states that vocabulary means a large collection of items. He adds that learning vocabulary is important because it enriches someone's knowledge of words. It means that the learner's success in learning a language depends not only on the vocabulary but also on the vocabulary.

Furthermore, Cameron (2001:72) believes that building a useful vocabulary is central to the learning of a foreign language at primary level. Building a vocabulary means not only understanding the meaning of the words, but also learning to decode these words. Then, students can also expand their vocabulary mastery by using vocabulary building. Recognizing them, the writer concludes that vocabulary is the main body of words that make up a language, and its importance in reading comprehension cannot be overestimated.

Vocabulary plays a very important role in developing the four language skills: listening, speaking, reading, and writing.

#### **2.4.8 Learning Vocabulary**

Vocabulary mastery is an important thing in order to master four major skills such as speaking, reading, writing, and listening. According to Wilkins as stated in Thornbury (2002:13), “without grammar very little can be conveyed, without vocabulary nothing can be conveyed.”

Learning vocabulary requires a process. In order to form an effective process, learners should be in an effective state of mastering vocabulary. Further, Thornbury (2002:2) states that the condition should help learners to acquire a critical mass of words to use in both understanding and producing language. In addition, it will enable them to remember words over time and be able to remember them easily.

In addition, it can develop strategies for dealing with word gaps, including dealing with unknown words or using unknown words for strangers. Based on the explanation before, the writer conclude that in learning vocabulary is important to support our knowledge in four skill such as speaking, listening, reading and writing and to learning vocabulary we need a process to know about vocabulary and to understand about vocabulary.

#### **2.4.9 Teaching Vocabulary**

Teaching vocabulary is not easy. Some people think that vocabulary teaching will only waste time, because the number of vocabulary is unlimited. It is better for English teachers to teach English vocabulary first, rather than other

aspects of the language, such as grammar, speaking, reading and writing. If students know more vocabulary, they will easily learn another aspect of English.

Vocabulary is a central of English language acquisition, as according to Celce and Murcia (2001:285) vocabulary learning is a central to language acquisition whether the language is first, second, or foreign. According to Hornby (1995:125), "teaching" is defined as giving instruction to somebody's knowledge, skill, etc. Based on that explanation, teaching vocabulary is an activity where the teacher gives the students knowledge about vocabulary and how to use it in daily life.

#### **2.4.10 Teaching Vocabulary by Using Game**

In teaching vocabulary by using game, usually teacher has some challenges to implementing that. Teaching Vocabulary to Young Learner Although games proved to be a successful method when teaching vocabulary to young learners, they give rise to some challenges for the teacher and the students. The first challenge is the noise and unorganized classroom. Children sometimes move a lot and talk too much when they are excited which makes it hard to control them. In order to manage the class, the teacher must understand the students' characteristics in order to create a good environment for learning.

Teachers of young learners need to choose a variety of creative games to sustain young learners' attention instead of being occupied with something else. The children are not expected to sit down or do the same activity for a long time because they lose interest after several minutes. Moreover, as stated before, young learners have a short attention span, so activities should be as engaging as

possible because they lose interest after ten minutes. Creativity is an important aspect when choosing or designing games to teach vocabulary to young learners.

Another challenge teachers may face is that students sometimes want to speak in their mother tongue during the class and game to communicate with each other and their teachers. Teachers have to respond in English, even if the student is asking the teacher something in their native language. From my own point of view, teachers should use young learners' native language from now and then to encourage the students to speak and participate in the lesson.

Based on the explanation above, the writer conclude that teachers might have a little time after doing the game to drill the vocabularies they gave their students. The students might not have the time to repeat and practice saying the words. The result may be students making wrong guesses about the pictures showed by their teachers. There should be a balance between the type of game, number of vocabularies, time, effort, and the use of the students' native language. Experienced teachers will have no problem balancing all these challenges while using games in teaching vocabulary to their young learners.

## **2.5 Strategy**

Strategy is needed in teaching English. Teachers need certain strategies to teach english vocabulary for students who learn english as a foreign language. It is because of the fact that the students do not use english in their daily activity, while the best strategy in learning a language is by using it all the time. A creative

teacher has strategy in teaching learning process. Teacher makes planning before teach the students and think what strategy will be apply in classroom.

According to Brown (2007:119) strategies are specific methods of approaching a problem or task, modes of operation fo achieving a particular end, plan design for controlling and manipulating certain information. There are several strategies to make students get interested and high motivation in teaching learning process. One of them is group discussion and some game. According to Glendon and Ulrich (2005) , a game can be used to promote critical thinking and reasoning. By using a game as a strategy in teaching is that students have the opportunity for intermediate feedback, through discussion of the correct answer and their rationales. One of the strategy that the teacher can use in teaching is Fly Swatter Game.

Based on the explanation above, the writer conclude that strategy is one of important part in teaching especially in teaching vocabulary. The teacher must use the best strategy in teaching vocabulary to encourage the students to learn. One of strategy that the teacher can use to apply in teaching is by using game.

### **2.5.1 Fly Swatter Game**

Fly swatter game is one of the strategy in teaching vocabulary. In this game, students play in a small groups and they play the game by using Fly Swatter (alat pemukul lalat). In Fly Swatter Game the students have to guess what the teacher says by hitting the answer in the whiteboard. The students who can find the right answer will get the points. Then the students have to speel and say what is the meaning of word.

Rezkiah & Amri (2013) states that Fly Swatter game is a vocabulary game where students have to swat a word on the white board based on the teacher's instruction. Rezkiah & Amri (2013) also states "Fly Swatter Game is a kind of activity that students do in the classroom by using fly swatter, and the students use it to hit the word on the whiteboard that teacher says before". In Indonesia, it is called "alat pemukul lalat". Fly swatter game is the interesting activity for students because they can learn through playing.

Fly Swatter is an object used for killing flies that consist of a flat piece of plastic etc on a long handle. Fly swatter games is a game where the students have to get the word in the blackboard or whiteboard by using the teacher's instruction. Fly Swatter is a device for killing insects. That is why fly swatter game is one of the interesting game to do in teaching process. Fly swatter game make the students can active and attract the students attention to learn.

Based on the explanation above, the writer conclude that Fly swatter game is a game that the students have to swat the word in the whiteboard based on the teacher instruction or what the teacher says before. This game is one of the strategy that the teacher can use to encourage the students in learning process.

### **2.5.2 The Procedures of Fly Swatter Game**

There are many ways of teaching new words and teachers need to learn a variety of techniques, because some methods will work better with certain type of words than others. According to Saputra and Hadi (2019) there are some procedures that must be followed in this game :

1. The teacher asks one member from each group to come forward and stand in front with their back facing the whiteboard so they can't read

the words written on the whiteboard.

2. The teacher gives both of them a Fly Swatter.
3. The teacher gives instruction or questions to the players randomly from the words that the students have been learned before from the material.
4. When the teacher finishes reading the instruction, the players at the front can turn around, face the whiteboard and then they have to find the word that is the correct answer. When they find the word, they have to swat it with Fly Swatter. First student that swats the correct answer will get points for his/her team
5. After that, both of the players sit down and change with two new students from each group.
6. The students can end the game either when she/he uses up all the instructions or the definitions or when every student has gotten a chance to play the game.

### **2.5.3 The Advantages of Fly Swatter Game**

There are several advantages of using fly swatter game for student vocabulary mastery. The advantages include:

1. It is not use a monotonous activity.
2. It is fun for students.
3. It helps them learn and acquire new word easily.
4. It involves friendly competition and keeps students interest.
5. It serves students to learn pronouncing and spelling words
6. The students more active than teacher.

Based on the explanation above, the writer conclude that this game actually interesting to do. Using fly swatter game make the students not bored to learn and they more active in learning process and also adding their knowledge about vocabulary.

#### **2.5.4 The Disadvantages of Fly Swatter Game**

There are several disadvantages of using fly swatter game for student vocabulary mastery. The disadvantages include:

1. Needs more preparation for the teacher for time allocation, such as time for divided agroup.
2. The classis noisy.
3. Some students don't care when some students play thegames.

Based on the explanation above, the writer conclude that this game still has the advantages. As we know that the learning process by using game sometimes make the students noisy and as a teacher we need more effort to do this strategy.

#### **2.6 Previous of the Study**

The writer took the review of relate literature from other graduation paper as the principles or comparison with this research. The first one was taken from Retno Supiyanigrum that was "Improving Students' Vocabulary Using Vocabulary Bingo GameStrategy(Classroom Action Research at SMPN 1 Jenangan Ponorogo)". This research explains about the application of Bingo Gamein teaching vocabulary. She conducted the research started on April 4thto April 20th 2011. She used Bingo Games to teach vocabulary in order to



improve the students' vocabulary mastery, because by using this media is more effective than just memorizing the words.

In fact, the result of the data shows that the result score of students' test that had improvement in each cycle. The average score of students' test in cycle I was 78, the next cycle was 80 and the last cycle was 85. It showed that the students were interested in teaching and learning English in using vocabulary Bingo strategy.

The second from Dewi Nurhalimah (2017), untitled "*Improving the students' vocabulary mastery by using story telling.*" This research to find out whether the story telling can improve the students' vocabulary mastery at the seventh grade of SMP Ta'mirul Islam Surakarta. Based on the result of the test, it shows that there is an improvement of students' vocabulary mastery. Using story telling makes the students be active; they know more about words meaning also, how to put the words based on the context. In conclusion, story telling can be as problem solving for learning vocabulary. The writer found that the story telling technique is not significant to see how far the students mastery their vocabulary.

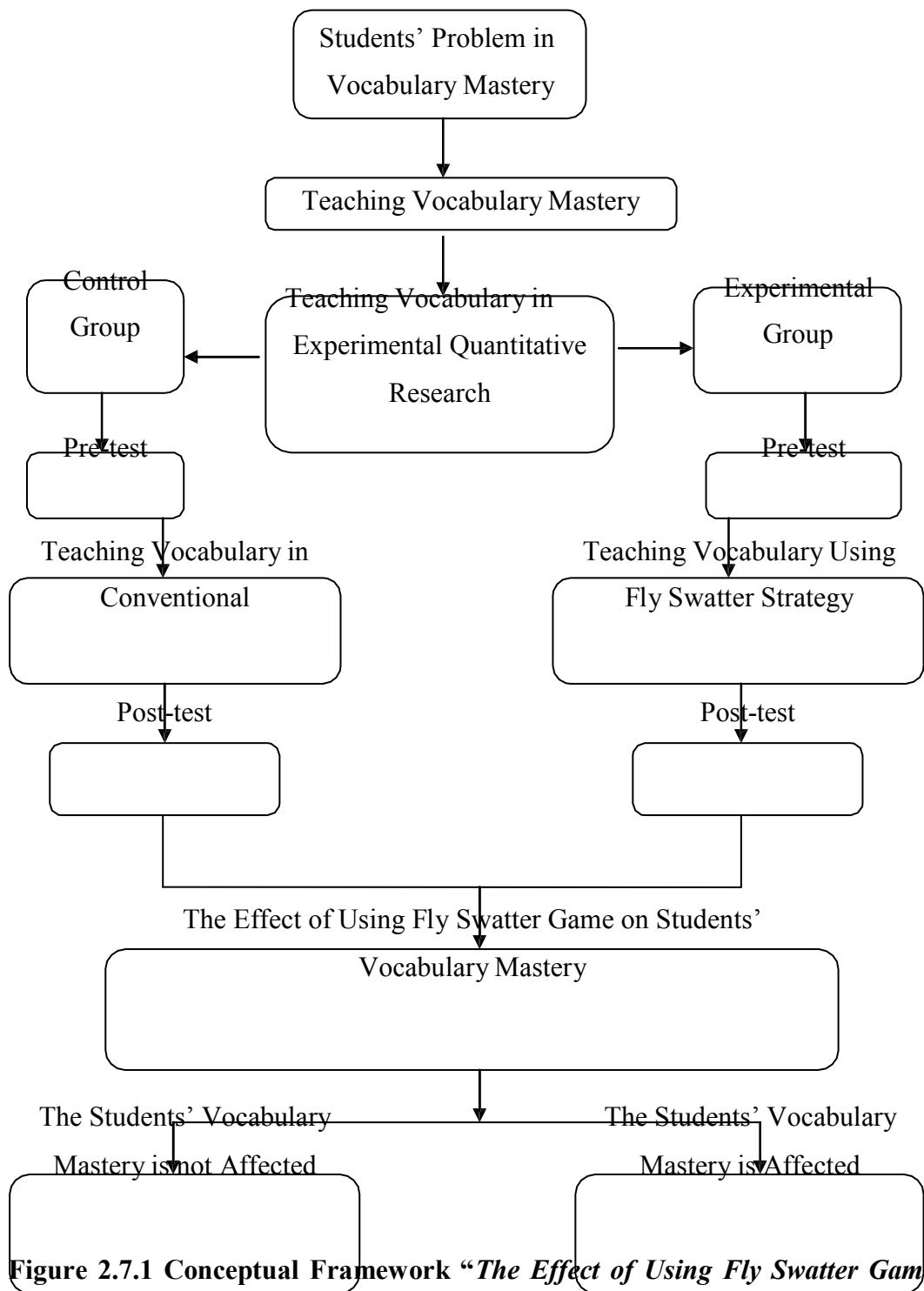
And the third from Ulil Amri (2016), untitled "*Increasing students' vocabulary mastery by using eye-spy game at the second grade.*" This research purpose is to find out the extent to which Eye-Spy Game is affective in increasing students' vocabulary mastery or not at the second grade of SMP Babussalam Selayar. It indicated that the Eye-Spy Game is affective in increasing students' vocabulary mastery. The writer see that the students just enjoying the game and they don't focus to mastery and to remember the vocabulary. The writer realize that teacher must be see the skill of the students to mastery vocabulary.

From the previous study, the writer will conduct the research “ The Effect of Using Fly Swatter Game into Students Vocabulary Mastery “.

## **2.7 Conceptual Framework**

As mentioned above, the students should master vocabulary. Vocabulary is one of basic elements in mastering English, because if students cannot master in vocabulary the students automatically will not obtain the four of skills of English, such as listening, reading, speaking, and writing.

Basically, most of the learners lack in vocabulary. It is because the teacher teaches the vocabulary with traditional technique. Traditional technique in teaching difficult in mastering the four basic skills. Therefore, to solve the problem, the teaching using Fly Swatter Game can affect the students' vocabulary mastery. This is very important to make students' progress in their learning and it is considered as one of interesting enjoyable activities. This technique can motivate students to learn more vocabulary and hopefully to be better on meaning.



**Figure 2.7.1** Conceptual Framework “*The Effect of Using Fly Swatter Game into Student’s Vocabulary Mastery at Eight Grade of SMP Swasta Methodist Aeknabara*” ( Dhea Octa Yossaline Sitorus 2020 )

**CHAPTER III**  
**RESEARCH METHODOLOGY**

**3.1 Research Design**

The research design of this study was used experimental quantitative research. Quantitative is research of which the data is numeric or number. Ary et al (2010:22) state quantitative research uses objective measurement to gather numeric data that are used to answer questions or test the predetermined hypotheses. According to Ary et al (2010:265), an experimental is a scientific investigation in which the researcher manipulates one or more independent variable includes the study of the effect of one variable on the systematic manipulation of another variable. Controlled variables are called experimental processing variables or independent variables. Observed and measured variables are called dependent variables. This research was divided into different groups namely the control group and the experimental group. The control group was the group that was not taught by used Fly Swatter Game with experimental was group which used Fly Swatter Game.

Group	Pre-test	Treatment	Post-test
Control	√	Without Treatment	√
Experimental	√	Using Treatment	√

## **3.2 Population and Sample**

The subject of this study was at eight grade of Junior High School.

### **3.2.1 Population**

Arikunto (2010:173) states that population is a set or collection of all elements possessing or more attributes possessing. The Population is the subject that was researched, it means that unlimited the subject. So, to make easy the writer limited before. So, in this study, the population was the eighth grade of junior high school, there were 10 students of VIII-I and 10 students of VIII-II. So the writer chose the eighth grade students of junior high school because some of the students have weak in vocabulary, with the fly swatter game the writer hopes the students proficient in vocabulary.

### **3.2.2 Sample**

According to Arikunto (2010:174), sample is some or the representative of the research. Based on the explanation, a sample is more important because a sample is a subgroup of this research. Determining a sample in doing a study is easier for the writer. Since sample is a part of the population. Arikunto (2006:132) state that to general is made concluded of research that is valid for population. The sample of this research was took by used random sampling technique. Simple random technique can be done through lottery, random number tables or systematic random sampling. Furthermore, the total of number of the sample is 20 students.

The sample in this study is about 20 students from the population of eight grade students. The students then is classified into two classes. Control class is 10 students and experimental class 10 students. So, it consist of 20 students.

### **3.3 The Instrument of Collecting Data**

In this study, the writer used a test as the instrument to obtain the data. The data collected by gave multiple-choice test which consists 50 items about verb to both the control and experimental group in pre-test and post-test. The technique of collecting data has an important role in concluding any kinds of research in order that the result of the study is availed. The time is 50 minutes. Students used the time effectively to finish the test. The researcher gave pre-test and post-test to students and collected the students' answer sheet as the data to be analyzed by the researcher.

### **3.4 The Procedures of Collecting Data**

This research is divided into two groups namely the control group and the experimental group. The process of collecting data consist of three steps, namely pre-test, treatment, and post-test.

#### **3.4.1 Pre-test**

Pre-test administers firstly to both groups (experimental group and control group) before receiving the treatment to know the mean of both group scores. The pre-test contains a multiple-choice test.

#### **3.4.2 Treatment**

The treatment was given after the researcher got the score in the pre-test. If the score in the pre-test is not good. So, it will be done. In the experimental group,

the students achieved the treatment by Fly Swatter Game, while the control group was taught without using Fly Swatter Game. The process of the treatment in the experimental and control group :

**Tabel 3.4.2-1 Teaching Procedure for Control Group**

No.	Step	Teacher Activities	Students Activities	Time
1.	Pre-test	<p>Teacher was given the Pre-test</p> <ol style="list-style-type: none"> <li>1. Teacher greets and checks the students attendance.</li> <li>2. Teacher gives motivation about what the students will do.</li> <li>3. Teacher explained the topic that they learn.</li> <li>4. Teacher explained what the students will do.</li> <li>5. Teacher gives pre-test to the students</li> <li>6. The teacher gives the student's score.</li> </ol>	<ol style="list-style-type: none"> <li>1. Students was given response by give the greeting</li> <li>2. The students pay attention with the teacher said about motivation</li> <li>3. The students did pay attention with the teacher explanation</li> <li>4. The students follow the instruction from the teacher</li> <li>5. The students did the pre-test</li> <li>6. The students collect the pre-test</li> </ol>	60
2.	Treatment	<p>Without Fly Swatter Game or conventional method:</p> <ol style="list-style-type: none"> <li>1. The teacher greets and ask the students to lead the pray in front of the class, after the teacher check the student's attendance.</li> <li>2. The teacher ask the students to open their book and give a topic about vocabulary.</li> <li>3. The teacher read the the example of vocabulary from the book</li> <li>4. The teacher ask the students to translate the</li> </ol>	<ol style="list-style-type: none"> <li>1. The students give respinse to the teacher by give greeting, make ap pray in the class</li> <li>2. The students open their book</li> <li>3. The students pay attention their book and with the teacher said</li> <li>4. The students try to translate the word</li> <li>5. The students present their knowledge about some of the word that they translate before</li> <li>6. The students make a</li> </ol>	60

		<p>word and memorize the word</p> <p>5. The teacher ask the students to show their knowledge about vocabulary in front of the class</p> <p>6. After that the teacher ask the students to lead the pray in front of the class.</p> <p>7. Teacher closed the learning process and say goodbye.</p>	<p>pray to close the class</p> <p>7. The students give greetings to the teacher to close the class</p>	
3.	Post Test	<p>1. Teacher greets the students and check the student's attendance.</p> <p>2. The teacher will give a topic to the students and ask them to do it by themselves.</p> <p>3. The teacher give the post-test to the students</p> <p>4. The teacher check the students test and then give the score of the test</p> <p>5. Teacher says good bye to end the lesson</p>	<p>1. The students greets the teacher and give response to the students</p> <p>2. The students pay attention with the teacher explanation about the topic</p> <p>3. The students do the test that the tyeacher gave</p> <p>4. The students collect their test to the teacher</p> <p>5. The students give response to the teacher.</p>	60



**Tabel 3.4.2-2 Teaching Procedure for Experimental Group**

No.	Step	Teacher Activities	Students Activities	Time
1.	Pre-test	1. Teacher greets and checks the students attendance.  2. Teacher gives motivation about what the students will do.  3. Teacher explains the topic that they learn.  4. Teacher explains what the students will do.  5. Teacher gives pre-test to the students  6. The teacher gives the student's score.	1.Students will give response by give the greeting  2.The students pay attention with the teacher said about motivation  3.The students do pay attention with the teacher explanation  4.The students follow the instruction from the teacher  5.The students do the pre-test  6.The students collect the pre-test	60
2.	Treatment	1. Teacher teaches about vocabulary by using Fly Swatter Game	1.Students pay attention with teacher	

		<p>2. The teacher ask the students to make a group</p> <p>3. The teacher asks one member from each group to come forward and stand in front with their back facing the whiteboard so they can't read the words written on the whiteboard.</p> <p>4. The teacher gives both of them a Fly Swatter.</p> <p>5. The teacher gives instruction or questions to the players randomly from the words that the students have been learned before from the material.</p> <p>6. When the teacher finishesreading the instruction, the players at the frontcan turn around, face the whiteboard and then they have to find the word that is the correct answer. When they find the word, they have to swat it with Fly Swatter. First student that swats the correct answer will get points for his/her team.</p> <p>7. After that, both of the players sit down and change with two new students from</p>	<p>instruction about fly swatter game vocabulary.</p> <p>2.The students make some group</p> <p>3.The students choose one person from their team to stand in front of the class</p> <p>4.The students take the Fly Swatter that the teacher give</p> <p>5.The students pay attention with the teacher explanation about the information of the word on the whiteboard.</p> <p>6.The students fly the word on the whiteboard which have relation with the</p>	60
--	--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----

		<p>each group.</p> <p>8. The students can end the game either when she/he uses up all the instructions or the definitions or when every student has gotten a chance to play the game.</p>	<p>teacher explanation</p> <p>7.The students change with their friend from their team</p> <p>8.The students do the game until the last person from their team.</p>	
3.	Post-test	<p>1. Teacher greets the students and check the student's attendance.</p> <p>2. The teacher will give a topic to the students and ask them to do it by themselves.</p> <p>3. The teacher give the post-test to the students</p> <p>4. The teacher check the students test and then give the score of the test</p> <p>5.Teacher says good bye to end the lesson</p>	<p>1.The students greets the teacher and give response to the students</p> <p>2.The students pay attention with the teacher explanation about the topic</p> <p>3.The students do the test that the tyeacher gave</p> <p>4.The students collect their test to the teacher</p> <p>5.The students</p>	60

			give response to the teacher.	
--	--	--	-------------------------------	--

### 3.4.3 Post-test

The post-test was given after the students treated by Fly Swatter Game for the experimental group and for the control group without a Fly Swatter Game. The writer delivered a test to all students as a sample and asked them to do the test individually carefully at a certain given time. Finally, students' results are treated as the data of the study. The test was similar to the pre-test.

### 3.5 Scoring System

It is necessary to know the indicators before giving the test. In assessing writing, it is needed to decide the criteria of scoring. By deciding the criteria of scoring, it is easy to get information about how far the students' improve in vocabulary mastery. In scoring the test, the score ranging from 0-100 is used to count the correct answer and apply in this formula.

$$S = \frac{R}{N} \times 100$$

Where:

S : Score the test

R : Number of Correct Answer

N : Number of Question

### 3.6 The Validity of the Test

Validity is a measurement which shows the levels of the instruments' validity Arikunto (2014:211). It means that the test which is valid give the

appropriate information that is needed by the tester. There are four types of validity, namely, content validity, construct validity, concurrent validity, and preictif validity. This research was conducted with content validity. Content validity considers whether a test was the necessary and appropriate content to measure what is supposed to.

**Table 3.6.1. The Test Spesification**

Content		Items	Kind of test	Score
V E R B	Denotation	20	Multiple choice	$2 \times 20 = 40$
	Synonym	20	Multiple choice	$2 \times 20 = 40$
	Antonym	10	Multiple choice	$2 \times 10 = 20$
Total		50		100

The writer was given 50 test items, multiple choice. Every test gave a score 2. It means that, if they answer all the correct answers they got highest score 100

### 3.7 The Reliability of the Test

According to Arikunto (2014: 221) states that a test can be measured more than once and its result is stable. It is reliability; a test must be consistent in its measurements in order to reliable.

$$KR_{21} = \frac{K}{(K-1)} \left[ 1 - \frac{M - (-M)}{K(S^2)} \right]$$

Where :

$KR_{21}$  : Coefficient reliability

K : The number of item

M : The mean of the score

$S^2$  : Various total

According to Arikunto (2010:187), the categories of coefficient correlation are as the following :

0.00 – 0.20 = the reliability is very low

0.21 – 0.40 = the reliability is low

0.41 – 0.60 = the reliability is fair

0.61 – 0.80 = the reliability is high

0.81 – above = the reliability is very high

### 3.8 Technique of Analyzing Data

After taught vocabulary by applying the Fly Swatter Game, the writer used a statistical analysis to analyze data. In order to find out the result of the test whether it is statistically significant, the writer applies t-test.

Arikunto (2010:345) states that to test the hypothesis, the T-test formula was used. This formula is to know the effect of this research, the writer used test,

the test was also used to know whether yes or not teaching vocabulary through Fly Swatter Game.

$$t = \frac{M_x - M_y}{\sqrt{\left[ \frac{dx^2 + dy^2}{N_x + N_y - 2} \right] \left[ \frac{1}{N_x} + \frac{1}{N_y} \right]}}$$

Where :

t = The effect

$M_x$  = Mean of experimental group

$M_y$  = Mean of control group

$dx^2$  = The deviation score of experimental group

$dy^2$  = The deviation score of control group

$N_x$  = The sample of the experimental group

$N_y$  = The sample of control group