



## *Biology Lab Report*



*What is a lab  
report?*

- A lab report is how you explain what you did in your experiment, what you learned, and what the results meant. In other words, lab reports are written to describe and analyze a laboratory experiment that explores a specific concept.
- These reports and all scientific writing are generally written in the past. The information is objective and written in a way that is short and concise.



# ***Biology Lab Report***

## ***Biology Lab Report Format:***

A good lab report for biology has a specific structure:

### ***Title:***

A title is important to any lab report and it must be clear and specific, it should be to the point, descriptive, accurate, and concise. It should consist of a well-chosen words indicating the subject of the report.

### ***Abstract:***

An abstract is a concise summary of your experiment. It should include information about the purpose of the experiment, the problem being addressed, the methods used for solving the problem, overall results from the experiment, and the conclusion drawn from your experiment.



# ***Biology Lab Report***

## ***Biology Lab Report Format:***

A good lab report for biology has a specific structure:

### ***Introduction:***

- In biology lab reports, the introduction is like a framework for the whole text and it shows that you fully understood the topic and the purpose of the experiment. In this part, it is helpful to jot down facts and references and you can use lecture notes. The introduction should not be too long and it has to contain the specified terminology related to the subject.
- The hypothesis should be included in the introduction, as well as a brief statement about how you intend to test your hypothesis.



# ***Biology Lab Report***

## ***Biology Lab Report Format:***

A good lab report for biology has a specific structure:

### ***Materials and Methods:***

- The materials and methods section thoroughly describes how you carried out your experiment and should provide the reader with sufficient information to replicate the experiment. In this part, the methods of how data was analyzed should also be explained.
- The explanation - of the study that was conducted - should all be in past tense and written in paragraph form instead of lists.

*We used*

*added*

*Removed*

*Blender*

*Pressed*



# ***Biology Lab Report***

## ***Biology Lab Report Format:***

A good lab report for biology has a specific structure:

### ***Results:***

- The results include all data found, observations made, figures, tables, and graphs. In addition to tables and figures, the results section should have a brief paragraph in which you give the results in written form. Do not explain them in this section, just report them.
- The written description should simply summarize the results illustrated in graphs and figures, but should not include explanations or opinions. For example do not use the phrase “these results were significant” unless you have done statistical analysis to prove they are statistically different.



# ***Biology Lab Report***

## ***Biology Lab Report Format:***

A good lab report for biology has a specific structure:

### ***Discussion and Conclusion:***

- It is considered as the most significant section of the lab report. The results are analyzed and related to the hypothesis and purpose. They are compared to what was expected and any differences should be explained.
- All errors in the experiment, including human errors, are mentioned and it is explained how they had an impact on the results.
- Even if the experiment failed, the lab report can be saved by explaining the errors, showing what they did to the results, and explain what should be done differently next time to prevent failure. Further questions on the subject or improvements in the lab should be mentioned in this section.



## ***Biology Lab Report***

### ***Biology Lab Report Format:***

A good lab report for biology has a specific structure:

#### **. References:**

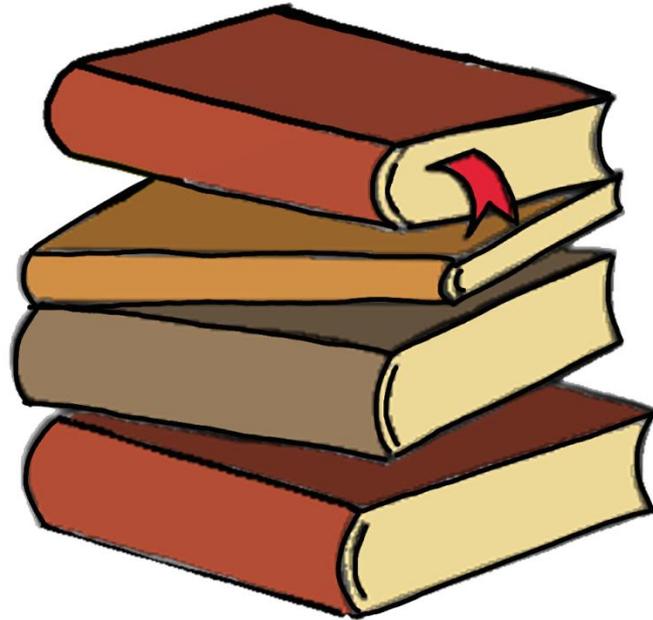
The last part of your work is to cite all the references used in the lab report. These sources might include books, articles, lab manuals, etc.

**Savorelli F, Manfra L, Croppo M, Tornambè A, Palazzi D, Canepa S, Trentini PL, Cicero AM, Faggio C (2017)** Fitness evaluation of *Ruditapes philippinarum* exposed to Ni. *Biol. Trace Elem. Res* 177: 384-393

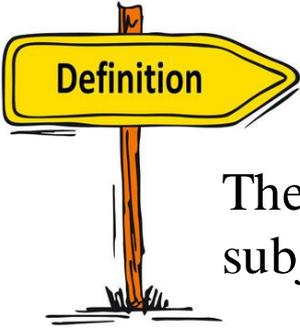
**Pardo MT (2000)** Sorption of lead, copper, zinc, and cadmium by soils: Effect of nitriloacetic acid on metal retention. *Commun. Soil Sci. Plant Anal* 31: 31-40

**ISO (2006)** ISO 15952:2006 Soil quality-Effects of pollutants on juvenile land snails (Helicidae)-Determination of the effects on growth by soil contamination .International Organization for Standardization, Geneva. <https://www.iso.org/standard/37667.html>

# TERMINOLOGY



# *Terminology Meaning*



## Definition

The technical or special terms used in a business, art, science, or special subject

### **Who requires terminology? Who needs to know about terminology?**

➔ The use of terminology starts from very simple occasions in our ordinary life and develops to the higher communicative levels. However, if terminology for non-professionals is an option, for specialists is a necessity!

➔ Terminology is a necessity for all professionals involved in the representation, expression, communication and teaching of specialized knowledge.

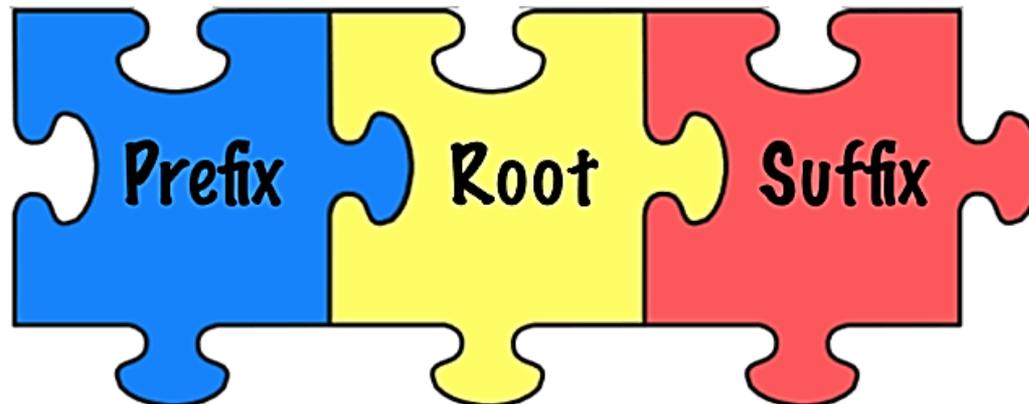
Scientists, technicians or professionals in any field require terms to represent and express their knowledge to inform, transfer or buy and sell their products.

# *Biology Terminology*



Biological terms are sometimes difficult to understand, but most of the words can be broken into parts using their root words by utilizing their **prefixes** and **suffixes**.

**Prefixes** and **suffixes** are letters or group of letters which are added to either the beginning of a word (prefix) or the end of a word (suffix) to change its meaning and /or function. In other words, roots **followed** by a **hyphen** are **prefixes**. Roots **preceded** by a **hyphen** are **suffixes**.



# ***Biology Terminology***



As students of **biology**, you should **learn to recognize** word parts, since they often give a **clue** as to the meaning of a word.

**Greek** and **Latin** root words often are used in **scientific terminology**. Some scientific words are the same in English as they **originally** were in Greek or Latin. For example, the Latin words *species*, *genera*, *spectrum*, *bacillus*, and *coccyx* are still used today in their original form. Other words use Greek or Latin **prefixes** or **suffixes**.

**Prefixes**

- dis**: opposite of
- re**: again
- un**: not

A prefix is added to the beginning of a word to make a new word.

**Suffixes**

- ful**: full of
- less**: without

A suffix is added to the end of a word to make a new word.

Latin or Greek prefix	Meaning
<i>a–, an–, non–, un–</i>	not, without, non, lack of, negative
<i>anti–, contra–</i>	against, opposed to; opposite
<i>auto–</i>	self, automatic, spontaneous
<i>bi–, di–, diplo–</i>	twice, double
<i>bio–, vita–</i>	related to life
<i>cat–, de–</i>	down
<i>chlor–</i>	green
<i>chrom–</i>	color
<i>cyto–</i>	cell
<i>eco–</i>	where one lives, home

Latin or Greek prefix	Meaning
<i>endo-</i>	within, in, inside
<i>entomo-</i> ,	insect
<i>epi-</i>	atop, above, on, over, upon
<i>ex-</i> , <i>ecto-</i> , <i>exo-</i> ,	out, outside, beyond, outer surface
<i>geo-</i>	earth
<i>herb-</i> , ( <i>-phyte</i> )	plant
<i>herpe-</i>	reptile
<i>hetero-</i>	other, different
<i>hyper-</i>	above, excess, more than, over
<i>hypo-</i> , <i>sub-</i>	below, beneath, under

Latin or Greek prefix	Meaning
<i>intra-</i>	in, indoors, inside, interior, within
<i>macro-, mega-</i>	big, huge, large
<i>mar-</i>	sea
<i>medi-, meso-</i>	middle
<i>multi-, myria-, poly-</i>	many
<i>micro-</i>	little, small, tiny
<i>omni-, toti-</i>	all
<i>patho-</i>	disease
<i>phago-, (-troph),(-vore)</i>	To feed or eat
<i>prim-, proto-</i>	first or one

Latin or Greek prefix	Meaning
<i>re–</i>	again
<i>sym–, syn–, sys–</i>	with, together
<i>tax–</i>	arrange
<i>terr–</i>	land
<i>zo–</i>	animal
<i>–cide</i>	kill
<i>–logy</i>	study
<i>–osis</i>	actions, conditions, or states
<i>–phyll</i>	leaf
<i>–phore</i>	carry, to bear
<i>–scope</i>	view, see
<i>–trop, –volv</i>	turn, change