



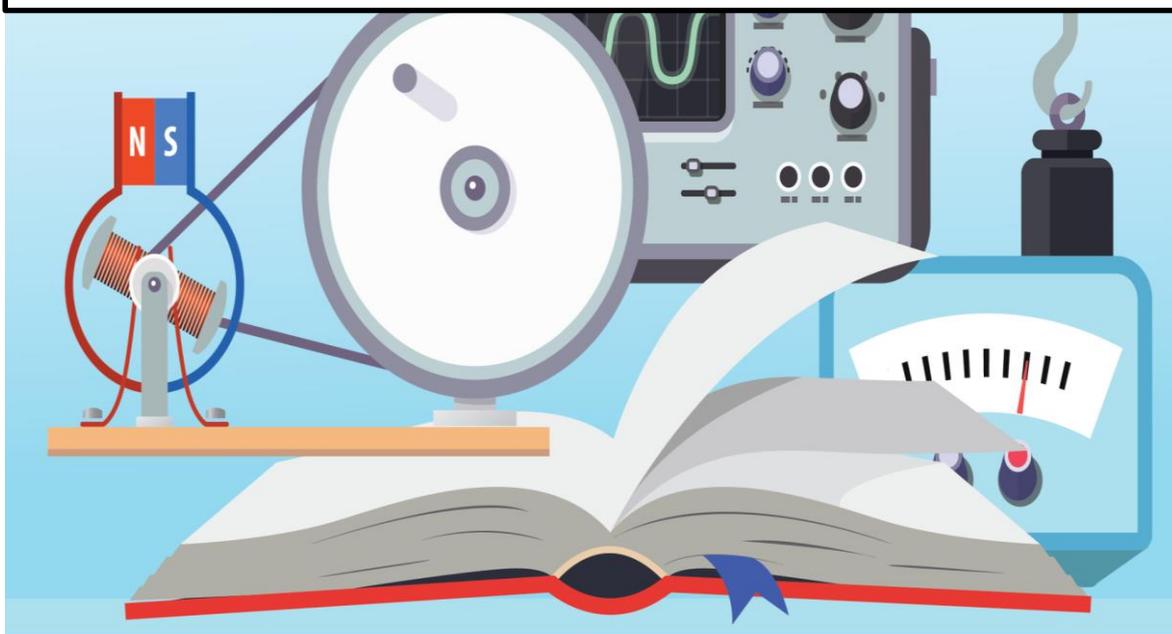
Subject - Science

Grade - 8

Competency - 01

Competency Level - 1.8

**Lesson – 12 “Life Cycle of living
Organisms ”**



Life Cycle of Living Organisms

- ❖ Introduction of Life cycle
- ❖ Comparison of Man's and Butterfly's life cycles.
- ❖ Metamorphosis
- ❖ Complete Metamorphosis and Incomplete Metamorphosis
- ❖ Life Cycle of flowering Plants
- ❖ Importance of learning the life cycles for pest controlling.

Activity 01

- ❖ Read the following paragraph and try to understand it.

We think that you have learnt about life cycles when you were in grade 5. You know more facts about the life cycles of butterfly, mosquito, cockroach etc. All living organisms that live on earth have a life cycle.

The sequence of events in stages of development as a cyclic process, which a living organism passes from its birth to death is termed as a life cycle.

- ❖ Read the first four pages of this lesson and try to study the life cycles of animals in these web links if you have enough facilities.

01. <https://www.youtube.com/watch?v=jivWeOrCaeI>
02. <https://www.youtube.com/watch?v=AMs3waaW75g>
03. <https://www.youtube.com/watch?v=wFfO7f8Vr9c>
04. <https://www.youtube.com/watch?v=XGOpeXgbsro>

❖ Draw life cycles of 4 animals using words and arrows.

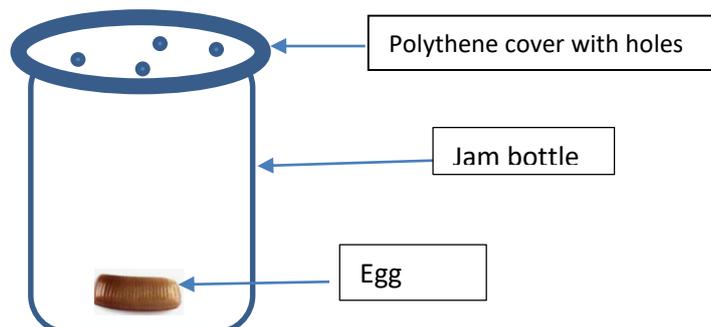
Activity 02

Things required -

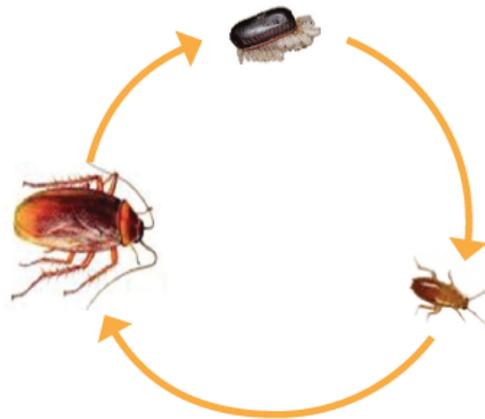
A jam bottle, hand lens, a sack of eggs of cockroach

Method -

- Put eggs sack of a cockroach into the jam bottle and cover it using a polythene cover. Make some holes in the cover.



- Observe the way of hatching eggs and release of nymphs as follows.



- ❖ To observe the development of the nymph stage you have to give some food (Rice/Biscuit) for them.

Date and time	Observation	Special notes

- ❖ Discuss the observations with your friends /class mates and your teachers using a suitable communication method.

Activity 03

Things required -

A jam bottle, hand lens, a piece of cloth or a mosquito net, 2 or 3 caterpillars.

Method -

Put 2 or 3 caterpillars into the jam bottle and insert some plant leaves that they eat and cover the jam bottle using the piece of mosquito net.



❖

- ❖ Observe the changes of the caterpillars daily and complete the table using your observation.

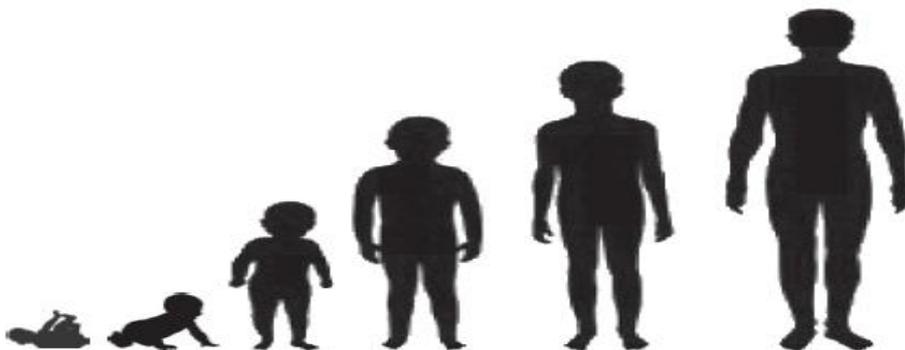
Date and time	Changes seen in caterpillars	Special notes

- ❖ According to the above activity write the stages of the life cycle of a butterfly.

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Activity 04



- ❖ The above represents the life cycle of humans. Write the differences that you can see in the life cycles of human and butterfly.

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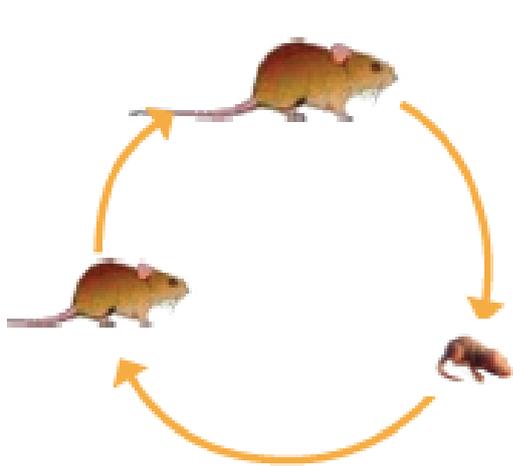
- ❖ Read your text book well. According to that explain what you mean by a life cycle with metamorphosis.

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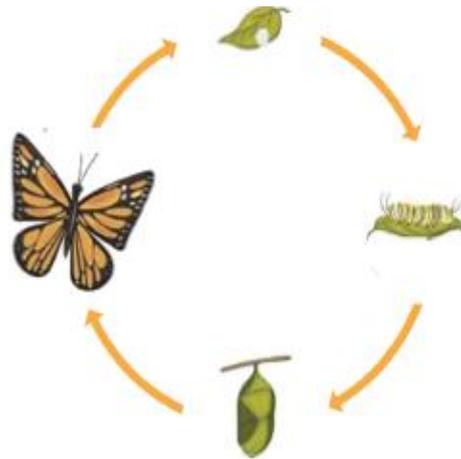
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- ❖ The following represent the life cycles of a rat and a butterfly. Name the life cycle with metamorphosis and without metamorphosis.



The life cycle of a Rat



The life cycle of a Butterfly

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- ❖ **There are 2 common forms of metamorphosis.**

1. Complete metamorphosis
2. Incomplete metamorphosis

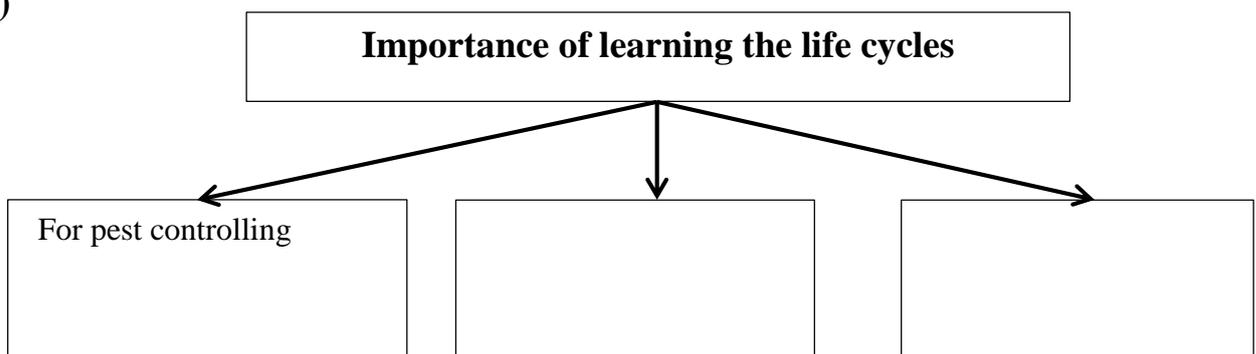
Complete the following table.

Animals with complete metamorphosis	Animals with in-complete metamorphosis

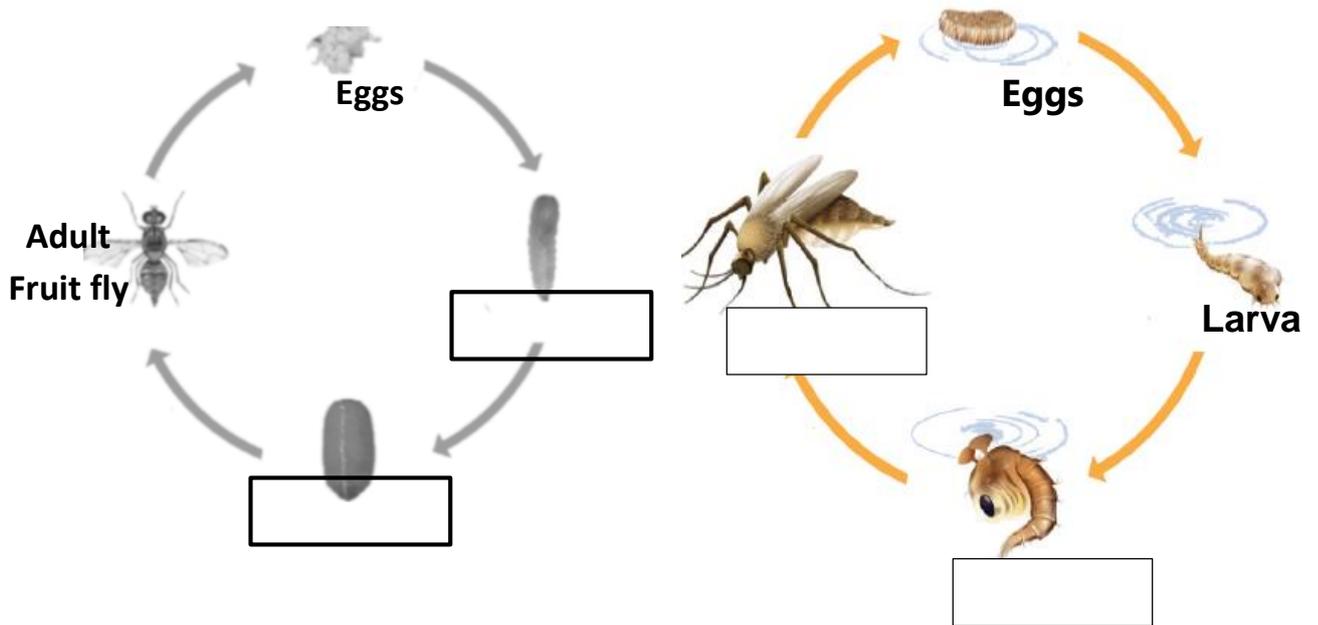
Activity 05

- ❖ Read the unit 12 in your text book well and complete the following chart.

(i)



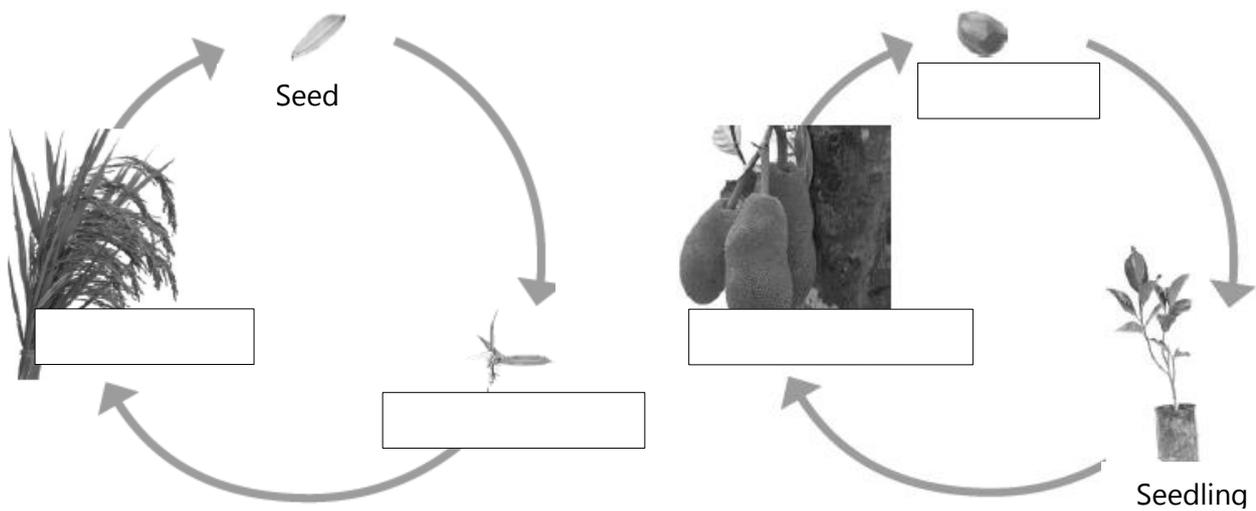
(ii) Complete following life cycles by filling blanks.



❖ (iii) Complete the table using knowledge about life cycles of following pests.

Pest	Easiest controlling stage or stages of the pest
Fruit fly	
Mosquito	

❖ Name the different stages of life cycle in following flowering plants.



❖ Explain what is meant by conservation of biodiversity.

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❖ Briefly explain how we can use life cycles for conservation of biodiversity.

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