



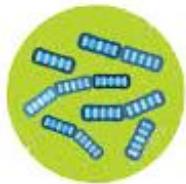
Work Sheets



CHAPTER 2 Parents and Offspring



Grade 5



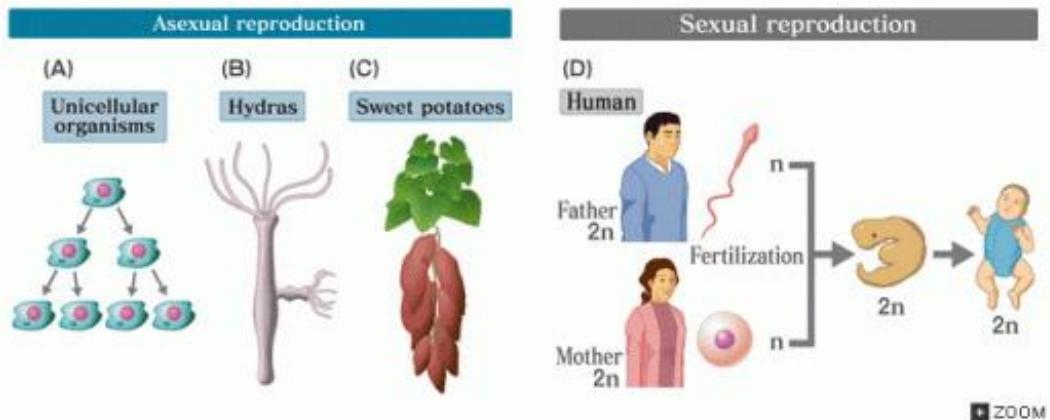
By : Lina Zendah



Complete the following sentence using the words in the box below.

sexual reproduction	asexual reproduction	vegetative propagation
pollination	metamorphosis	herdity
fertilization	splitting	budding
runners		

- 1-are plant stems that lie on or under the ground and sprout up as new plants.
- 2- Most unicellular protists and bacteria reproduce simply by into cells.
- 3-.....is the production of new organism from two parents.
- 4-.....the passing down of inherited traits from one generation to the next.
- 5-a series of distinct growth stages that are different from one another.
- 6-the transfer of a pollen grain to the egg-producing part of plant.
- 7-.....is a form of asexual reproduction of a plant. Only one plant is involved and the offspring is the result of one parent. The new plant is genetically identical to the parent.
- 8-.....the production of a new organism from a female sex cell and a male sex cell.
- 9-.....the production of a new organism from only one cell.
- 10-.....In this type of asexual reproduction, the parent organism divides itself into two unequal parts. it can occur in both unicellular and multi-cellular organisms.



Comparison Asexual and Sexual Reproduction

Asexual Sexual

Number of parents	One parent	2 parents
What do offspring look like?	Identical to parent	Different from parents but still similar
DNA	Same as parent	Combined DNA of 2 parents

Write the Scientific name under the pictures from below box?

Runners

fertilization

splitting

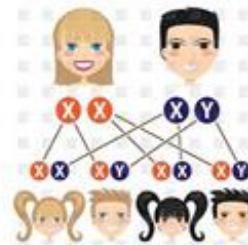
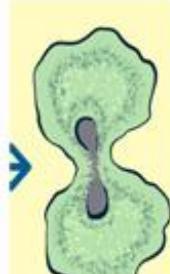
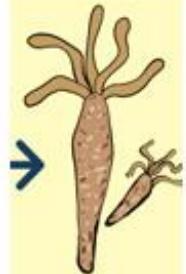
sexual reproduction

pollination

metamorphosis

budding

heredity



Name _____

Date _____



Compare and Contrast

Complete Metamorphosis

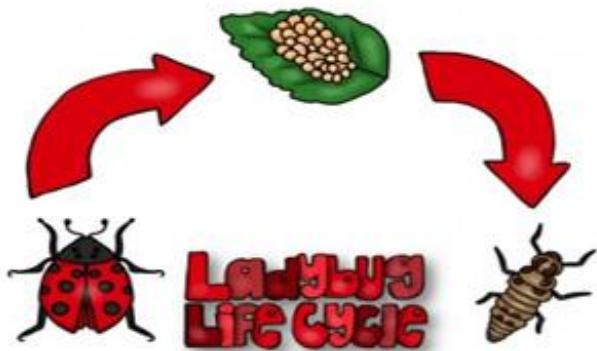
- Goes through four stages in it's life cycle.
- Goes through the pupa or chrysalis stage.
- Drastic change or dramatic change.
- Ex: Ladybugs, Butterflies, moths, wasps, and bees.

Incomplete Metamorphosis



- Goes through three stages in it's life cycle.
- Both lay eggs.
- Both have an adult stage.
- Ex. Dragonfly, grasshopper, roaches, stinkbugs, and praying mantis.

Compleate the following life cycles ?

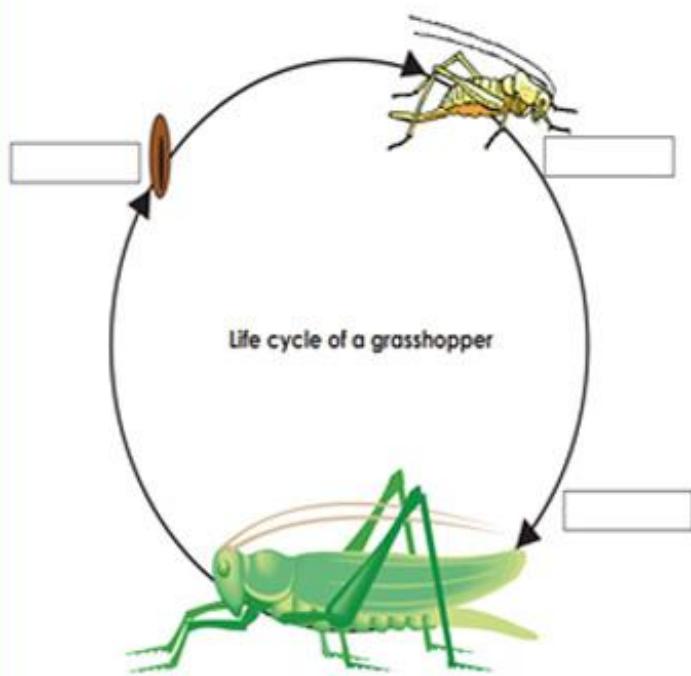


egg

larva

nymph

Adult ladybug



eggs

pupa

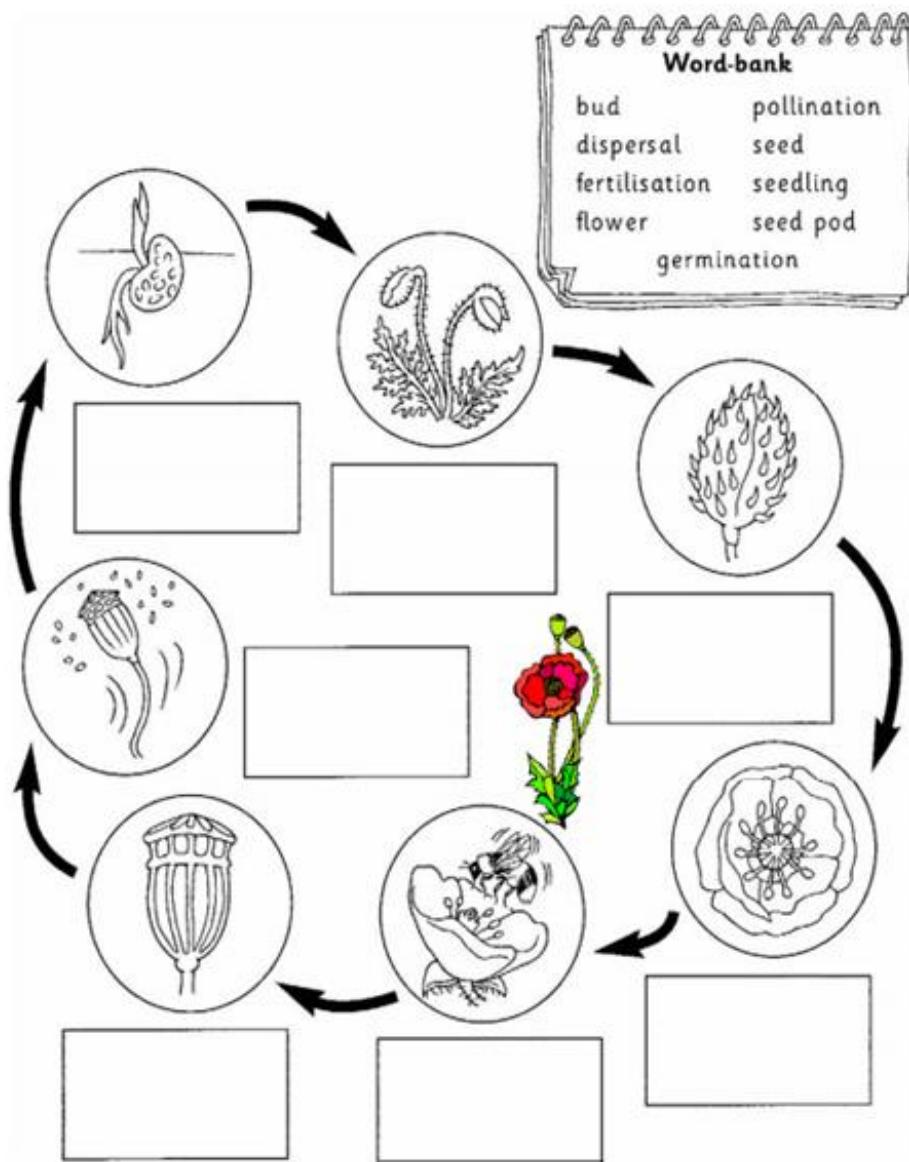
Adult grasshopper



Compleate the following life cycles ?

Plant story

The pictures below show the life cycle of a poppy.
Write a caption for each stage in the life cycle of a poppy. Use the words in the Word-bank to help you.



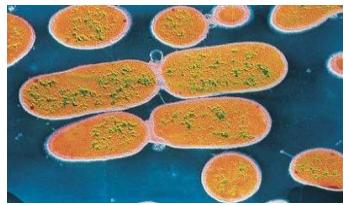
Choose the correct answer"

1-How many parents does asexual reproduction involve?



- a-one
- b-two
- c-three
- d-four

2. The offspring from asexually reproduced organisms are?



- a-Different than their parents
- b-Identical to parents
- c-Like a combination from both parents
- d-A different species

3. If two organisms reproduce sexually, then their offspring will exhibit a genetic makeup that is



- a- identical to only one parent
- b-identical to all of its siblings
- c-a unique combination of traits
- d-the recessive traits of each parent

4- When a starfish grows a new body off a broken arm, what kind of reproduction is this?



- a-Sexual
- b-Differentiation
- c-Asexual
- d-Specialization

5-Where does an off spring get its traits in asexual reproduction?

- a-From both parents
- b-From only one parent
- c-From neither parent
- d-There are no traits handed down

6-What percentage of chromosomes are handed down by a sperm cell?

- 1a-75%
- b-25%
- c-50%
- d-100%

7. What is an advantage of sexual reproduction?

- a-Allows genetic variation
- b-Only needs one parent
- c-Happens very quickly
- d-Offspring are exact copies of parent

8. What is one disadvantage of sexual reproduction?

- Only one parent needed
- Off spring are exact copies of parents
- Happens very quickly
- Needs two parents

9-A type of reproduction in which the genetic materials from two different cells combine, producing an offspring

- a-Asexual Reproduction
- b- Sexual Reproduction

10-Which is a type of Asexual Reproduction

- a-Asexual
- b-Binary fission
- c-Cells

11-Many invertebrate animals, such as the hydra, reproduce asexually. What form of reproduction in this stage of the life cycle of the hydra is shown in the diagram?



- a-binary fission
- b-budding
- c-fragmentation

12-Which of the following is a part of the process of sexual reproduction?

- a-budding
- b- fragmentation
- c-pollination

13-When an egg and sperm form an embryo, the offspring that is formed will have genetic traits that are inherited from only one parent.

passed on from two parents.
learned from siblings.

14.-Genetic Variation allows species to adapt

- Sexual Reproduction
- Asexual Reproduction

15-Does not require fertilization

- Sexual Reproduction
- Asexual Reproduction

16-How many stages does a complete metamorphosis have?

- a-1
- b-2
- c-3
- d-4

17-List the four stages of the complete metamorphosis life cycles in the correct order.

- a-egg, pupa, larva, adult
- b-egg, larva, pupa, adult
- c-adult, egg, larva, pupa
- d-adult, pupa, larva

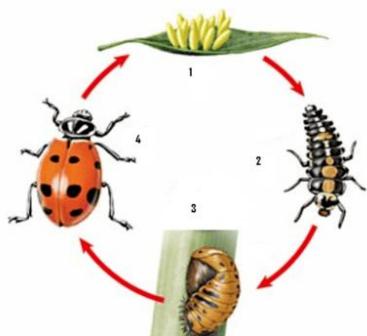
18-How many stages are in an incomplete life cycle?

- a-1
- b-2
- c-3
- d-4

19- List the correct order of the three stages in an incomplete life cycle.

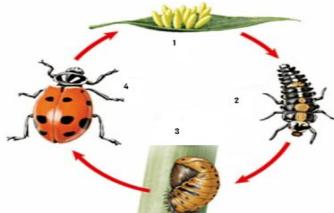
- egg, nymph, adult
- adult, nymph, egg
- egg, adult, nymph
- nymph, egg, adult

20-Complete or Incomplete Metamorphosis



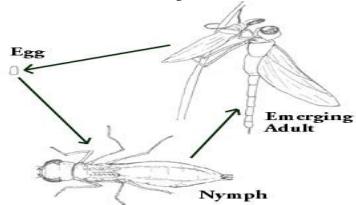
- a-Complete because the stages look the same throughout its life
- b-Complete because the stages look different throughout its life
- c-Incomplete because it looks the same throughout its life
- d-Incomplete because it looks different throughout its life

21- Complete or Incomplete Metamorphosis



- a-Complete because it has 3 stages
- b-Complete because it has 4 stages
- c-Incomplete because it has 3 stages
- d-Incomplete because it has 4 stages

22- How do you know this insect is undergoing incomplete metamorphosis?



- a-The insect changes color when it becomes an adult.
- b-The first stage of the insects development is as an egg.
- c-The insect undergoes more than four stages in its development.
- d-The insect has similar body parts throughout its development.

23- In complete metamorphosis which stage doesn't belong?

- a-egg
- b-nymph
- c-larva
- d-adult

24- In incomplete metamorphosis which stage doesn't belong?

- a-egg
- b-nymph
- c-pupa
- d-adult

25- Which life cycle has nymphs that resemble the adults?

- a-complete metamorphosis
- b-direct development
- c-indirect development
- d-incomplete metamorphosis