



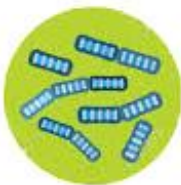
Work Sheets

CHAPTER 2 Parents and Offspring



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Grade 5

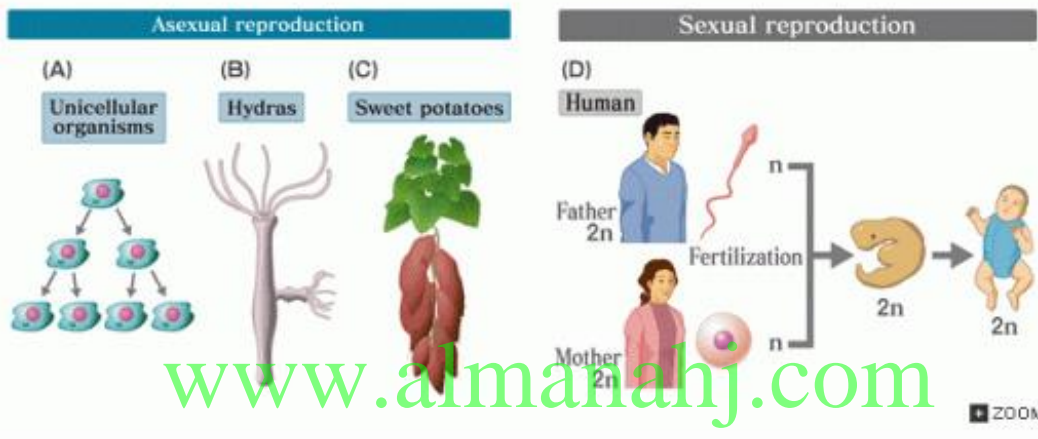


By : Lina Zenda

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.

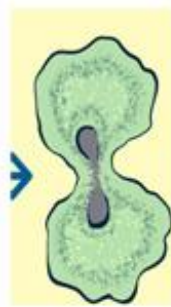
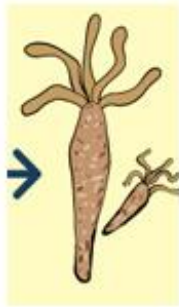


Comparison Asexual and Sexual Reproduction

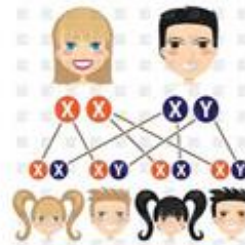
	Asexual	Sexual
Number of parents	One parent	2 parents
What do offspring look like?	Identical to parent	Different from parents but still similar
DNA	Same as parent	Combined DNA of 2 parents

Write the Scientific name under the pictures from below box?

Runners fertilization splitting
 sexual reproduction pollination
 metamorphosis budding heredity



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Name _____

Date _____

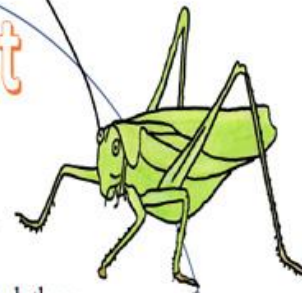


Compare and Contrast

Complete Metamorphosis

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

Incomplete Metamorphosis

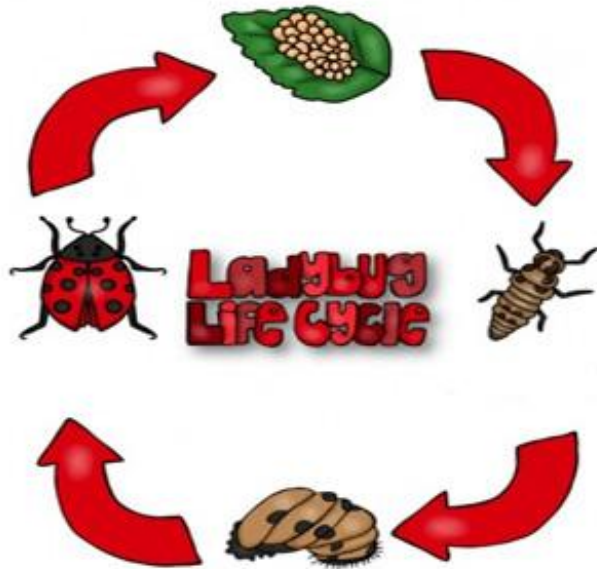


- Both lay eggs.
- Both have an adult stage.

- Goes through three stages in its life cycle.
- Gradual Change
- Has a Nymph stage (nymph usually looks like a wingless adult)
- Ex. Dragonfly, grasshopper, roaches, stinkbugs, and praying mantis.

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Complete the following life cycles ?



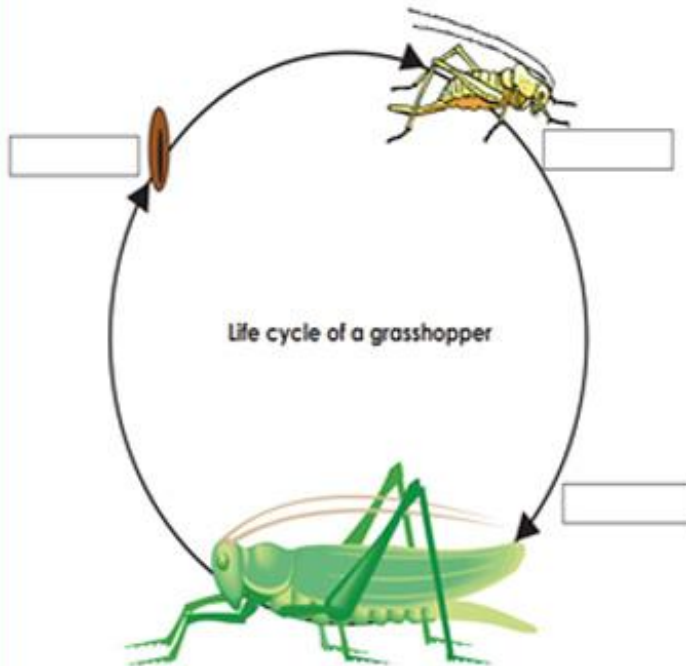
egg

larva

nymph

Adult ladybug

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eggs

pupa

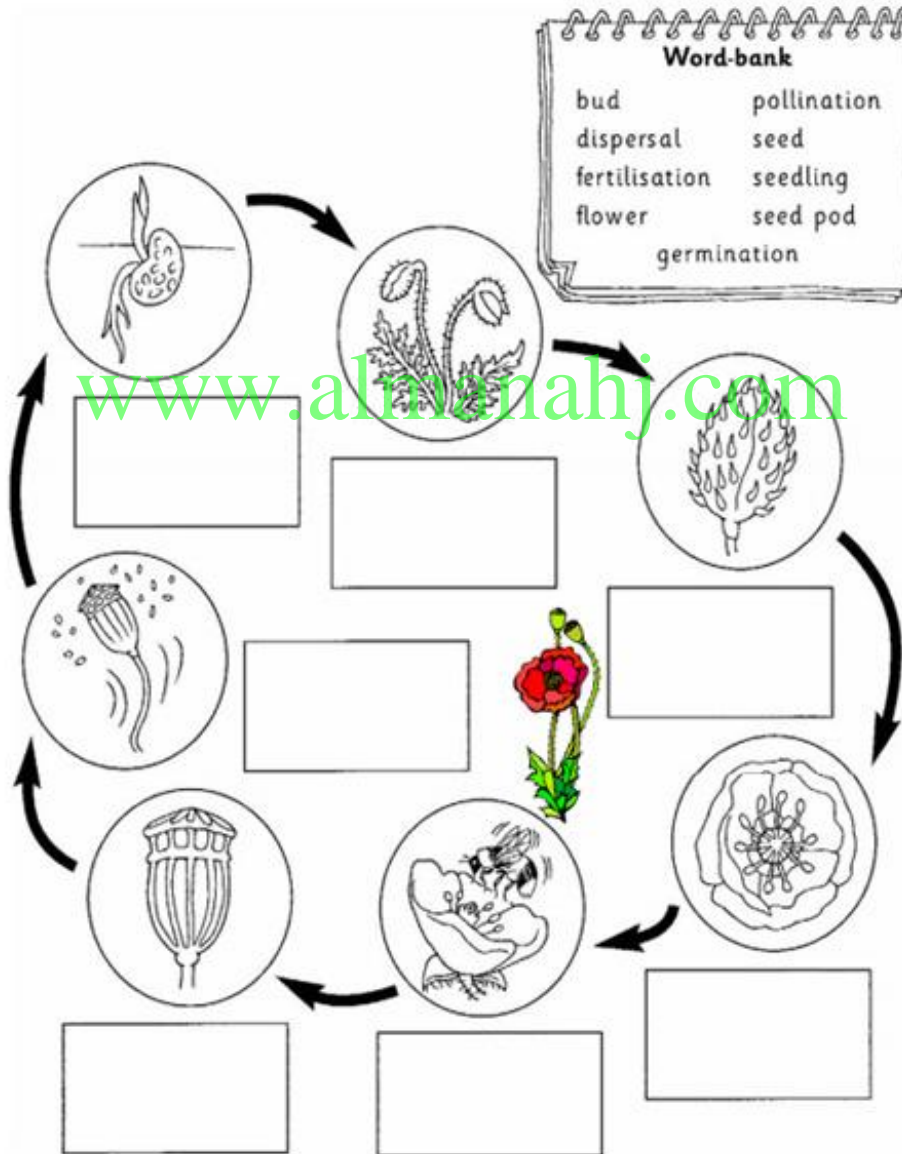
Adult grasshopper



Complete 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.



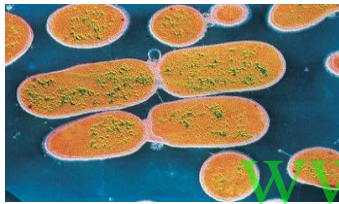
Choose the correct answer”

1-How many parents does asexual reproduction involve?



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

2. The offspring from asexually reproduced organisms are?



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- 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-Sexual
- 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

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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, egg, pupa, larva

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

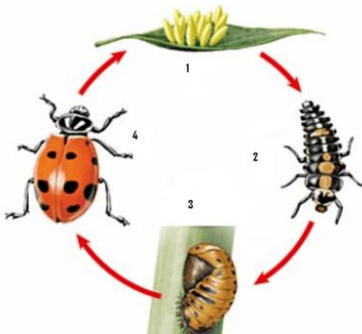
- a-1
- b-2
- c-3
- d-4

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

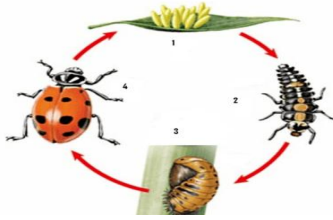
- egg, nymph, adult
- adult, nymph, egg
- egg, adult, nymph
- nymph, egg, adult

20-Complete or Incomplete Metamorphosis



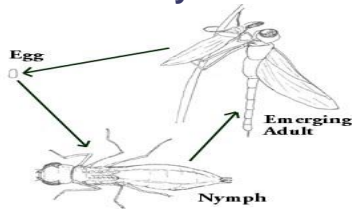
- a-Complete because the stages look the same throughout its life
- b-Complete because the stages look different throughout its life
- c-Incomplete because it looks the same throughout its life
- d-Incomplete because it looks different throughout its life

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