

Chemistry Worksheet Class 7 on Chapter 3 Fibre to Fabric with Answers - Set 2

Q1. Which of the following states have the majority of woollen units?

- (a) Punjab
- (b) Bihar
- (c) West Bengal
- (d) None of the above

Answer: (a) Punjab have the majority of woollen units.

Q2. Which of the following is obtained from plants?

- (a) Cotton
- (b) Silk
- (c) Polyester
- (d) All of the above

Answer: (a) Cotton is obtained from plants.

Q3. Which of the following is not an animal fibre?

- (a) Pashmina
- (b) Jute
- (c) Silk
- (d) All of the above

Answer: (b) Jute is not an animal fibre.

Q4. Which process is used to extract silk thread from the cocoon?

- (a) Reeling
- (b) Shearing
- (c) Sorting
- (d) All of the above

Answer: (a) Reeling is used to extract silk thread from the cocoon.

Q5. Wool is graded according to its

- (a) Length
- (b) Dyeing capacity
- (c) Texture
- (d) All of the above

Answer: Wool is graded according to its length, dyeing capacity and texture.

Q6. The sticky fluid secreted by the larva from its salivary glands is a _____.

Answer: The sticky fluid secreted by the larva from its salivary glands is a protein.

Q7. The four stages in the life of a silk moth are _____, _____, _____ and _____.

Answer: The four stages in the life of a silk moth are **egg, larva, pupa** and **adult silkmoth**.

Q8. The cocoon is put in a pot of _____, which kills the worms and loosens the filaments.

Answer: The cocoon is put in a pot of **boiling water**, which kills the worms and loosens the filaments.

Q9. _____ traps more air in it as compared to cotton.

Answer: **Wool** traps more air in it as compared to cotton.

Q10. The insect in the cocoon is killed before _____ the silk.

Answer: The insect in the cocoon is killed before **reeling** the silk.

Q11. Which is the most common variety of silk?

Answer: Mulberry silk is the most common variety of silk.

Q12. What is fleece?

Answer: The hairs of sheep from which wool is extracted is known as fleece.

Q13. What is selective breeding?

Answer: The selection process of parents which produces special characteristics in their offspring is known as selective breeding.

Q14. What is pashmina?

Answer: Pashmina is one of the finest quality of wool derived from the sheep reared in Kashmir and its surroundings.

Q15. Why is scouring the shredded wool necessary?

Answer: Scouring is a critically important step in wool processing. During the growth of the wool fibre, it becomes coated with grease (called wool wax), sweat salts (or suint) and contaminated with dirt, dust, dung and vegetable matter of various kinds. Scouring enables in cleaning the fleece of sheep. Thus, it is essential.

Q16. What is the significance of moulting?

Answer: Moulting is essential for the larva of a silk moth because it enables the silk moth to grow.

Q17. Why do we kill the silkworm in its cocoon stage?

Answer: We kill the silkworm in its cocoon stage to protect the silk fibre from fluid secreted by the adult moth.

Q18. What is the primary difference between a silkworm and a silk moth?

Answer: A silkworm can be an earlier or previous stage of silkmoth. A silkmoth is an insect that lays eggs to reproduce silkworms which spin silk. In contrast, a silkworm is the larvae caterpillar of a silk moth wound in the form of a cocoon to produce silk.

Q19. What are the risks associated with the sericulture industry?

Answer: Various health hazards workers face in the sericulture industry are mentioned below.

1. The workers are generally infected by respiratory diseases like bronchitis and asthma in the sericulture industry. It is due to inhalation of vapours during cooking, steaming and reeling processes.
2. Headache, body ache, fever, neck pain, low back pain, and eye problems were also observed among the workers in the sericulture industry. It is due to long working hours of 12-16 hours during the reeling process.
3. Skin Infections were also observed among the workers in the sericulture industry. It is due to constant hands dipping in boiling water.
4. Hearing problems were also observed among the workers in the sericulture industry.

Q20. Explain the lifecycle of a silk moth.

Answer: There are four stages in the lifecycle of a silk moth- egg, larva, cocoon and adult.

1. Egg: The female silk moth lays eggs which hatch into black worm-like larvae. The larva of a silk moth is known as a caterpillar or a silkworm.

2. Larva: The larva feeds on mulberry leaves continuously and grows in size. During this time, it sheds its skin four times. Clearing the skin to develop a new one is known as moulting.

3. Cocoon: At the end of this period, it climbs the branch of the tree and attaches itself to it by weaving a net. Then it starts spinning a cocoon.

The salivary glands present in larvae's heads secrete a sticky fluid (protein) wound around their bodies in a long continuous thread. The protein solidifies when it comes in contact with air and forms silk fibre. The head swings from side to side and draws the figure eight (8) like structure while spinning. The process takes 3-7 days to complete. The larva continues to develop inside the cocoon. This stage is called the cocoon stage.

4. Adult: When the worm matures into an adult moth, it secretes a fluid that dissolves the cocoon's silk fibres to emerge out of it.

