1. Why can an electron microscope show ribosomes when a light microscope cannot?

   ☐ It stains the ribosomes

   ☐ It uses living cells

   ☐ It only uses higher magnification

   ☐ It has a much higher resolution

2. Which structures are found in plant cells but not animal cells?

   ☐ Ribosomes

   ☐ Permanent vacuole

   ☐ Cellulose cell wall

   ☐ Chloroplasts

   Tick every correct option.

3. A red blood cell is placed in pure water. What happens?

   ☐ Water enters by osmosis and it may burst

   ☐ Water leaves and it shrinks

   ☐ Nothing happens

   ☐ Its cell wall stops it swelling

4. What is a carcinogen?

   ☐ A healthy food

   ☐ A substance or agent that can cause cancer

   ☐ A type of tumour

   ☐ A cancer medicine

5. Why are antibiotics not used to treat flu?

   ☐ Antibiotics are too expensive

   ☐ Flu is caused by a virus, which antibiotics cannot kill

   ☐ Flu is not serious

   ☐ Flu is caused by a fungus

6. Which type of respiration releases most energy per glucose molecule?

   ☐ They are all equal

   ☐ Aerobic

   ☐ Anaerobic in muscle

7. A short-sighted person cannot see near objects clearly.

   ☐ True ☐ False

8. 9 of 450 users became pregnant in a year. What is the failure rate?

   _____ %

9. Every mutation changes the protein made.

   ☐ True ☐ False

10. Why was Darwin's theory slow to be accepted?

    ☐ Darwin had no observations

    ☐ There was not enough evidence at the time

    ☐ It challenged the idea that God created all living things

    ☐ The mechanism of inheritance was unknown

    Tick every correct option.

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1. **It has a much higher resolution**

   Ribosomes are too small to resolve with light; magnifying a blur does not help.

2. **Permanent vacuole; Cellulose cell wall; Chloroplasts**

   All cells have ribosomes.

3. **Water enters by osmosis and it may burst**

   Animal cells have no cell wall.

4. **A substance or agent that can cause cancer**

   Tar in tobacco smoke is an example.

5. **Flu is caused by a virus, which antibiotics cannot kill**

   Viruses live inside cells.

6. **Aerobic**

   Glucose is fully broken down.

7. **False**

   They see near objects well.

8. **2 %**

   $9 \div 450 \times 100 = 2\%$.

9. **False**

   Most have no effect.

10. **There was not enough evidence at the time; It challenged the idea that God created all living things; The mechanism of inheritance was unknown**

    He had many observations.

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