



BIOLOGY

BOOKS - SARAS PUBLICATION

LIVING WORLD



1. Which one of the following statement about

virus is correct?

A. Possess their own metabolic system

B. They are facultative parasites

C. They contain DNA or RNA

D. Enzymes are present

Answer:

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2. Identify the incorrect statement about the

Gram positive bacteria

A. Teichoic acid absent

B. Hig percentage of peptidoglycan is

found in cell wall

C. Cell wall is single layered

D. Lipopolysaccharide is present in cell wall

Answer:

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3. Identify the Archaebacterium

A. Acetobacter

B. Erwinia

C. Treponema

D. Methanobacterium

Answer:

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4. The correct statement regarding Blue green

algae is

- A. lack of motile structures
- B. presence of cellulose in cell wall
- C. absence of mucilage around the thallus
- D. presence of flordiean starch

Answer:

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5. Identify the correctly matched pair

6. Prokaryotic animals are included in the kingdom

A. Monera

B. Protista

C. Fungi

D. Plantae

Answer:

7. Viruses are

A. Unicellular

- B. Multi cellular
- C. Acellular
- D. Bicellular

Answer:



8. Viruses are considered as non-living

organisms because of

A. Crystalline nature

B. Presence of chitin.

C. Absence of chloroplasts

D. Absence of polysacchardes.

Answer:

9. Euglena and Amoeba belong to

A. Monera

B. Protista

C. Fungi

D. Plantae

Answer:



10. Kingdom animalia includes

- A. Unicellular organisms
- B. Multicellular organisms
- C. Microorganisms
- D. Invertebrates.

Answer:

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11. Mycoorhiza is correctly described as

A. Parasitic association between roots and

some fungi

B. Relation of fungi with stem of trees

C. Symbiosis of algae and fungi

D. Symbiosis of fungi and roots of higher

plants.

Answer:

12. Bacteria without flagella are known as

A. Monotrichous

B. Lophotrichous

C. Peritrichous d. Atrichous

D.

Answer:

13. A fully formed infectious viral particle is called as

A. Viroid

B. Virusoid

C. Virion

D. Prion

Answer:

14. The protein coat of virus is called

A. Nucleoid

B. Capsid

C. Capsomere

D. Envelope

Answer:



15. Tobacco mosaic virus is

- A. Spherical shaped
- B. Rod shaped
- C. Cuboidal shaped
- D. Oval shaped.

Answer:

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16. Infectiou RNA particles without protein

coat

A. Viroid

B. Virion

C. Virusoid

D. Prion

Answer:

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17. Which of the following plant virus has DNA

in it?

- A. Tobacco mosaic virus
- B. Potato mosaic virus
- C. Tomato mosaic virus
- D. Cauliflower mosaic virus.

Answer:



18. Which of the following pair of diseases is

caused by virus?

- A. Rabies, Measles
- B. Typhoid, Tetanus
- C. Cholera, Tuberculosis
- D. AIDS, Syphilis

Answer:

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19. Which of the following has a complex symmetry?

A. TMV

- B. Bacteriophage
- C. Adenovirus
- D. Influenza virus

Answer:

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20. Who is known as father of botany?

21. Bacteria cell wall is made up of

A. Chitin

B. Cellulose

C. Dextron

D. Peptidoglycan

Answer:

22. Membranous infolding in bacteria that

initiate DNA replication is

A. Mesosomes

B. Carboxysome

C. Magnetosome

D. Nucleosome.

Answer:

23. Which of the following group is consideredas a link between bacteria and virus? [A]Mycoplasma [B]Spirochaetes

[C]Actinomycetese [D]Rickettsia

A. Myxoplasmas

B. Spirochaetes

C. Actinomycetese

D. Vibrios

Answer:

24. Surface appendage of bacteria meant for cell-cell attachement during conjugation is

A. Flagella

B. Pili

C. Spine

D. Cilia

Answer:

25. Extra chromosomal, circular, double stranded self-replicating DNA molecule in bacteria is called

A. Cosmid

B. Phagemid

C. Plasmid

D. Phasmid

Answer:

26. A cluster of polar flagella is called

A. Lophotrichous

B. Amphitrichous

C. Monotrichous

D. Peritrichous

Answer:

27. The cocci which from a bunch and irregular

pattern are

A. Diplococci

B. Streptococci

C. Staphylococci

D. Sarcina

Answer:

28. The common word fro bacteria which are

straight rod in shape is

A. Cocci

B. Bacilli

C. Spirilla

D. Vibrio

Answer:

29. The transfer of genetic material from one

bacterium to another via virus is called

A. Transformation

B. Conjugation

C. Recombination

D. Transduction

Answer:

30. Mycology is a branch which deals with the study of

A. Algae

B. Fungi

C. Bacteria

D. Virus

Answer:

31. The cell wall of fungi is made up of

A. Chitin

B. Cellulose

C. Pectin

D. Suberin

Answer:

32. The fungus that may cause disease in human beings is

A. Puccinia

B. Aspergillus

C. Albugo

D. Colletotrichum

Answer:

33. Which of the following is the

charactersitics feature of ascomycetes?

A. Hyphae

B. Spores

C. Zoospores

D. Ascospores

Answer:

34. Citric acid is produced by

A. Aspergillus niger

B. Candida

C. Penicillium notatum

D. Acetobacter xylinm

Answer:

35. Which of the following is an edible fungi?

A. Mucor

B. Rhizopus

C. Agaricus

D. Penicillium

Answer:

36. Which is not true for fungi?

A. They can be saprophytic

B. They can be multicellular

C. They can be photosynthetic

D. They can be anaerobic

Answer:

37. Which pair of the following belongs to basidiomycetes?

A. Puffballs and claviceps

B. Prezzia and stinkhorns

C. Morchella and mushroom

D. Birds nest fungi and puffballs

Answer:

38. The bread mold Rhizopus belongs to which

of the following fungal divisions?

A. Ascomycetes

B. Zygomycetes

C. Deuteromycetes

D. Oomycetes

Answer:

39. Which of the following is a fungal disease?

A. Dermatitis

B. Cholera

C. Jaundice

D. Indigofera

Answer:

40. Match the following and choose the

correct option

Column I

A- Athlete's foot 1. Viral disease C- Rabies D-Amoebic dysentery

Column I

- B- Diphtheria 2. Protozoic disease
 - 3. Bacterial disease
 - Fungal disease

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41. The symbiotic association between algae

and fungi is called

A. Mycorrhiza

B. Lichen

C. Ascomycetes

D. Mycoplasma

Answer:

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42. The fungal partner in lichen is called mycobiont whereas algal partner is called

A. Algobiont

B. Algal partner

C. Phycobioint

D. Lycobiont

Answer:

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43. Lichens growing on rocks are called

A. Corticolours

B. Saxicolous

C. Terricolous

D. Lignicolous

Answer:

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44. Foliose lichens are

A. Crust like

B. Shrub like

C. Leaf like

D. Scale like

Answer:

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45. Usnic acid is obtained from

A. Bacteria

B. Fungi

C. Algae

D. Lichen

Answer:



46. Which of the following lichen is called as the reindeer moss?

A. Cetraria islandica

- B. Cladonia rangiferina
- C. Evernia
- D. Rhizoctonia

Answer:



47. Which of the following organism is pollution indicator?

A. Bacteria

B. Lichens

C. Fungi

D. Algae





48. Seven kingdom classification was proposed

by

A. Carl Woese

B. Thomas Cavalier

C. Ruggiero

D. R.H. Whittaker





49. Prions were discovered by

A. T.O. Diner

B. Stanley B. Prusiner

C. J.W Randles

D. Iwanowski

Answer:



50. Identify the odd one

A. Chikungunya

B. Measles

C. Mumps

D. Tetanus

Answer:

51. The term bacterium was coined by

A. G. Ehrenberg

B. Robert Koch

C. Christian Gram

D. David H. Bergy

Answer:

52. Transformation was demonstrated by

A. Lederberg and Tatum

B. Frederick Griffith

C. Anton van Leeuwenhoek

D. Christian Gram

Answer:

53. Which of the following causes food spoilage?

A. Mucor

B. Agaricus

C. Saccharmyces

D. Aspergillus

Answer:

54. Ergot is produced from

A. Acremonium

B. Claviceps

C. Aspergillus

D. Penicillium

Answer:



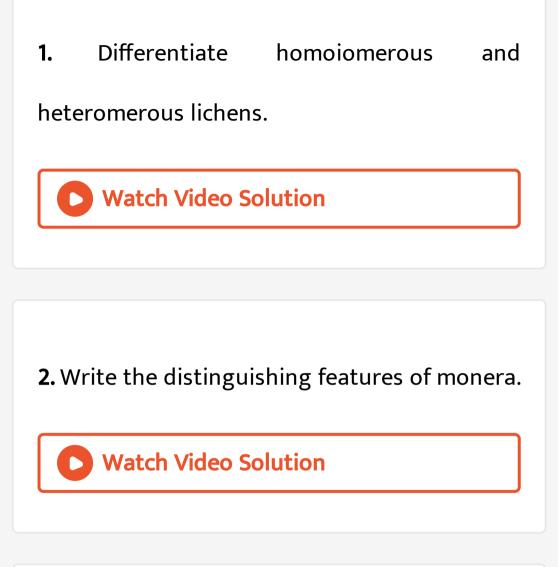
55. SARS is a

A. Viral disease

- **B. Bacterial disease**
- C. Fungal disease
- D. Lichen disease

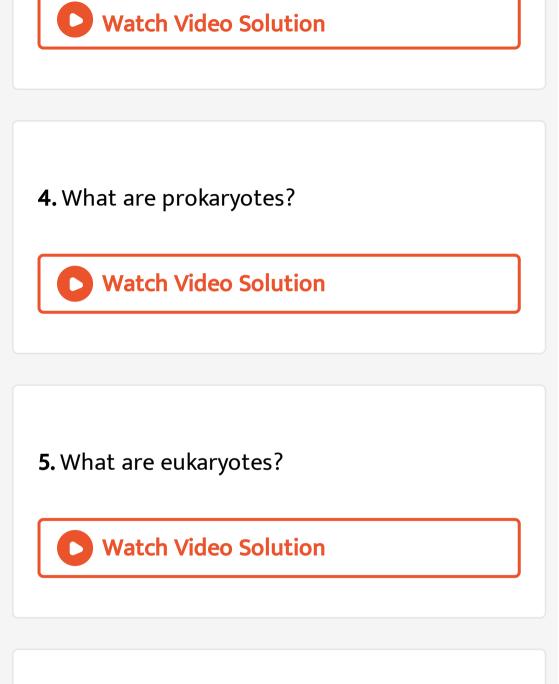
Answer:



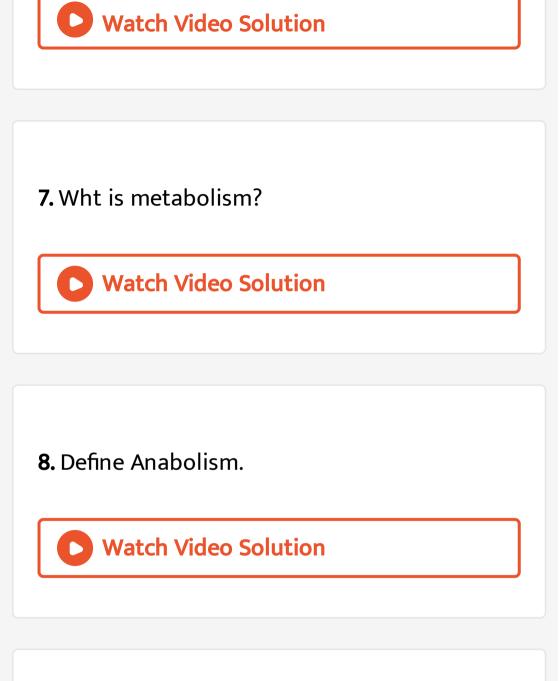


3. Briefly discuss on five kingdom classification.

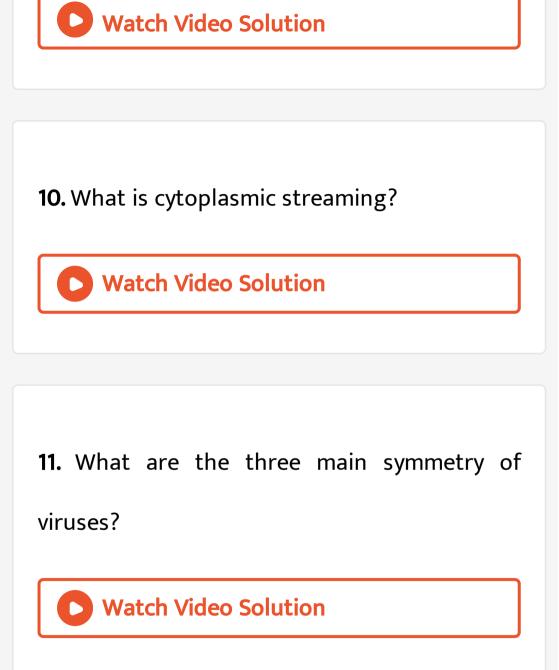
Add a note on merits and demerits.



6. What do you mean by irritability?



9. Define Catabolism.



12. What are the two types of multiplication of

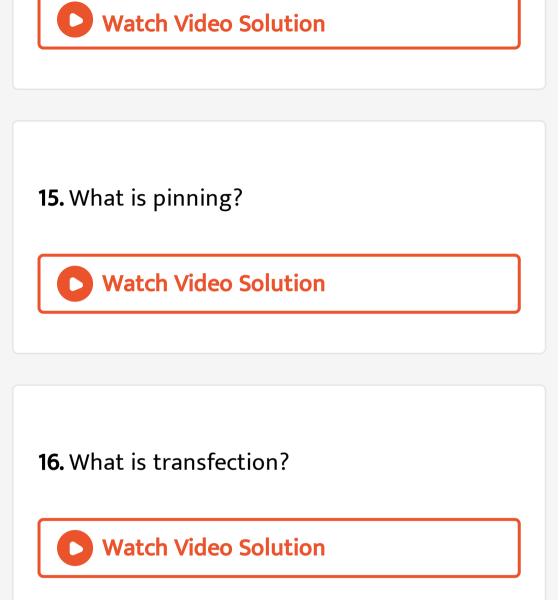
phages?

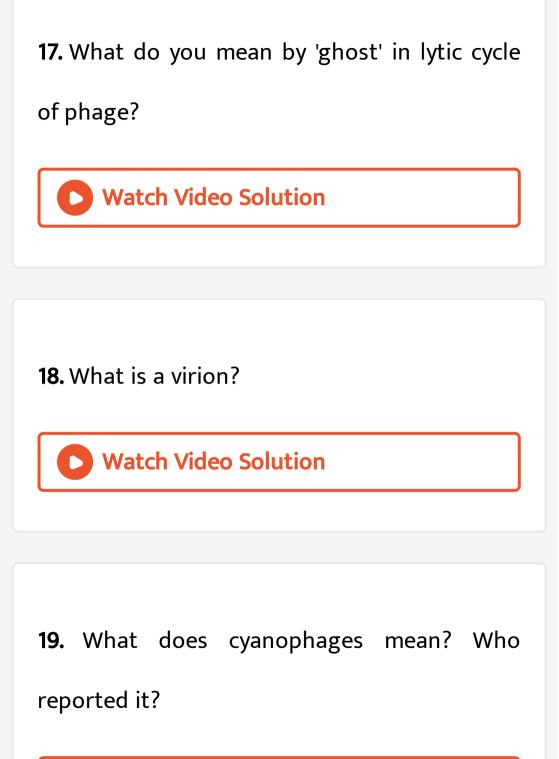
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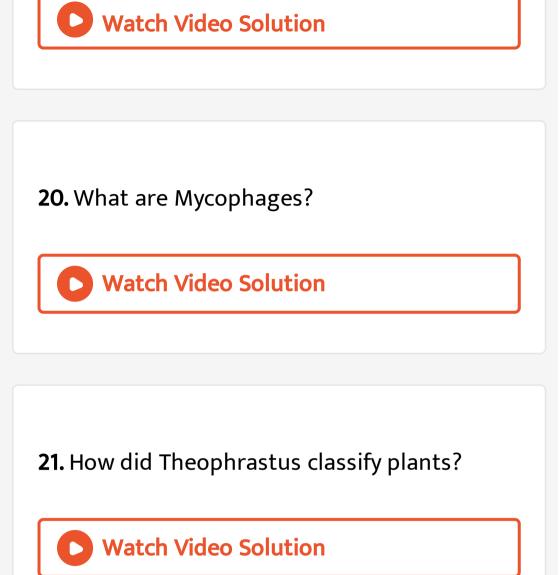
13. What is the end result of lytic cycle of multiplication?

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14. What is landing?

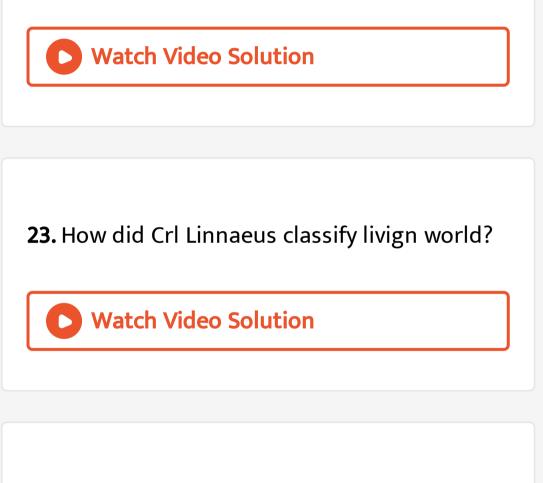






22. How did Aristotle classify animals based on

the presence or absence of red blood?



24. What are the drawbacks of Linnaeus classification?



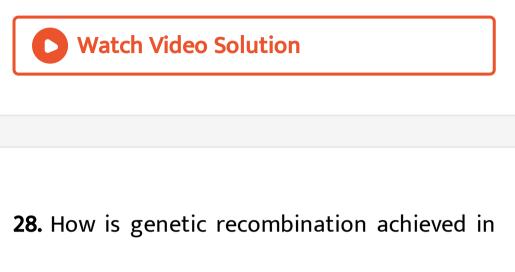
25. Write a short ntoe on Carl Woese's classification?

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26. How did Ernst Haeckel classify the living

world?

27. How did Copeland classify the living world?

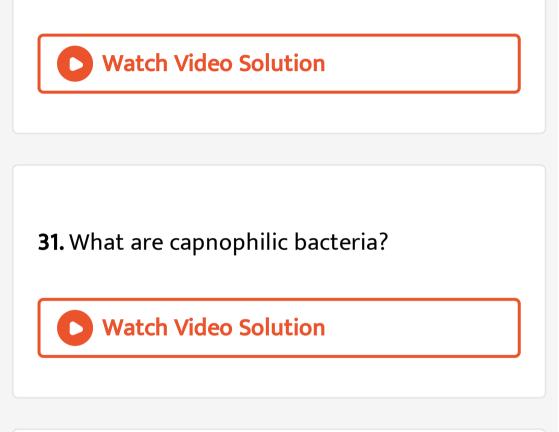


bacteria?

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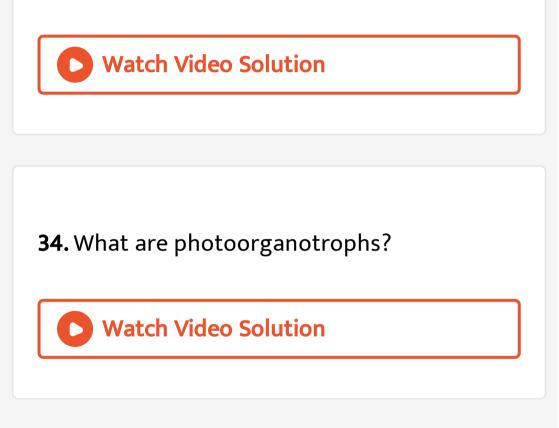
29. What are obligate aerobes?

30. What is anaerobic respiration?



32. What are autotrophic bacteria?





35. What are chemoautotrophic bacteria?

36. What are cehmolithotrophs? Give examples



37. What are cehmoorganotrophs? Give examples.

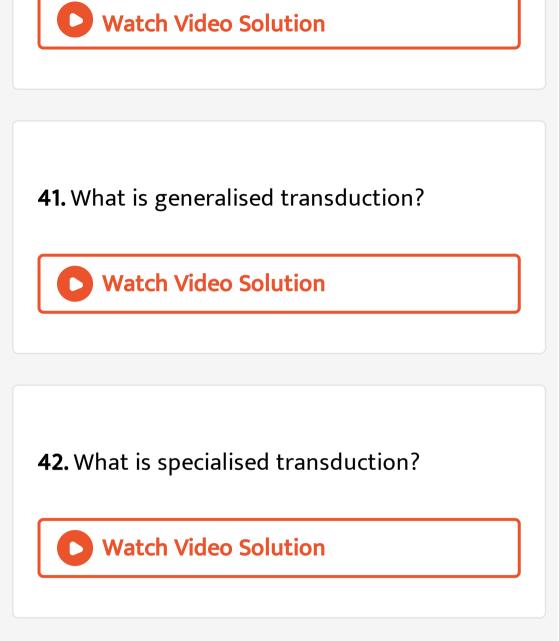
38. Reason: It reproduces asexually by fragmentation whereas the others reproduce a sexually by Budding



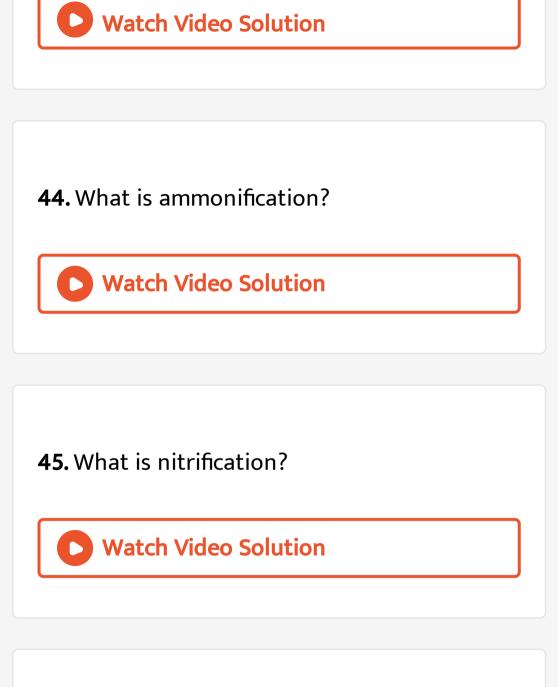
39. Who demonstrated transformation first?



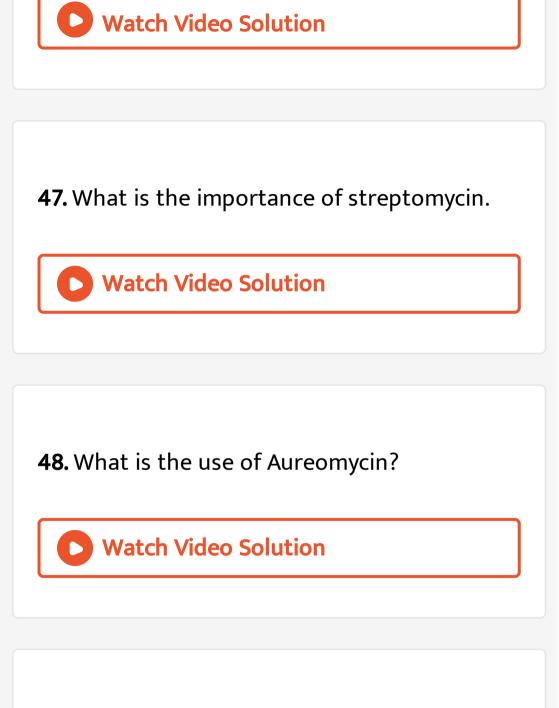
40. What is transduction? Mention the types.



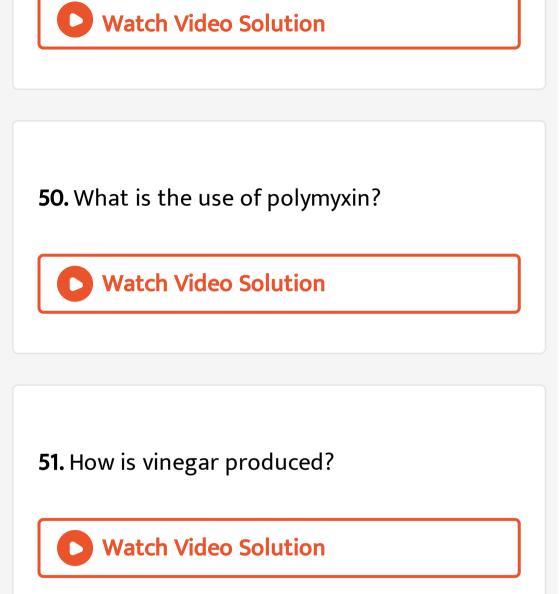
43. Discuss the role of bacteria in soil fertility.



46. What is nitrogen fixation.



49. How is Bacitracin useful?



52. What is the role of bacterium in alcohol

and acetone preparation?

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53. What is retting of fibres?

Watch Video Solution

54. Give an account on the vitamin production.

55. What is the role of bacteria in production

of Tea?



56. What are probiotics? Give examples



57. What are conidia?

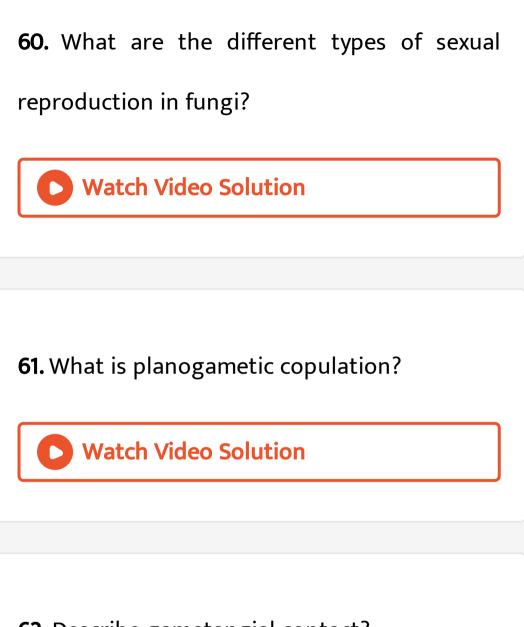


58. Why was Alexander Fleming awarded Nobel

Prize in Medicine in 1945?

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59. What are zoospores?



62. Describe gametangial contact?





64. What is spermatization?

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65. What is a pycnidium?

66. Name the structure in which conidia are produced.



67. Give examples of edible mush rooms.



68. Baking and brewing industry is dependent

on fungi especially yeast. Explain.

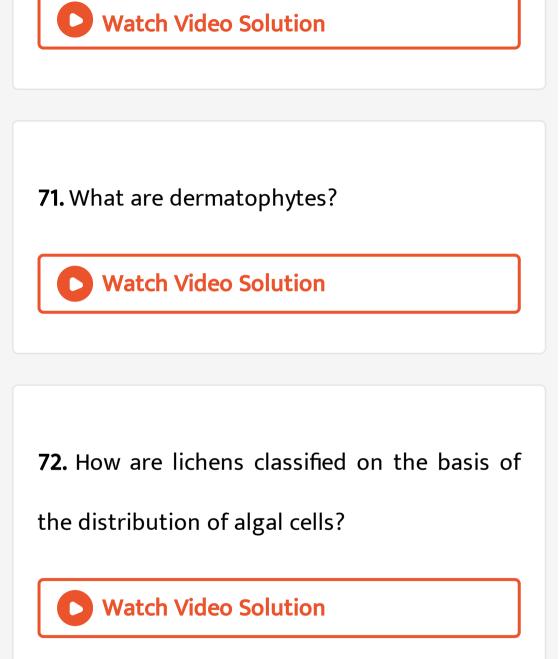
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69. Describe the use of fungi in the production

of enzymes.



70. What is the use of Rennet?

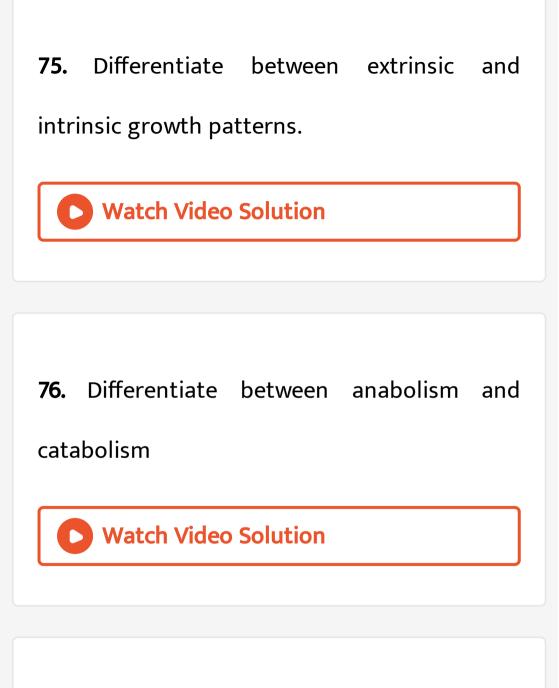


73. How are lichens classified based on the

type of fungal partner?

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74. What are the different types of asexual reproduction in living organisms.?



77. What do you mean by 'consciousness'?



78. Why are viruses considered to be a biologist's puzzle?

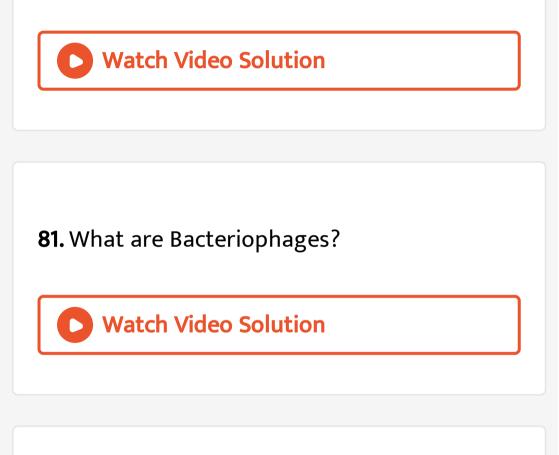
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79. What are the features based on which

David Baltimore classified viruses?

80. Write a short note on the symptoms of

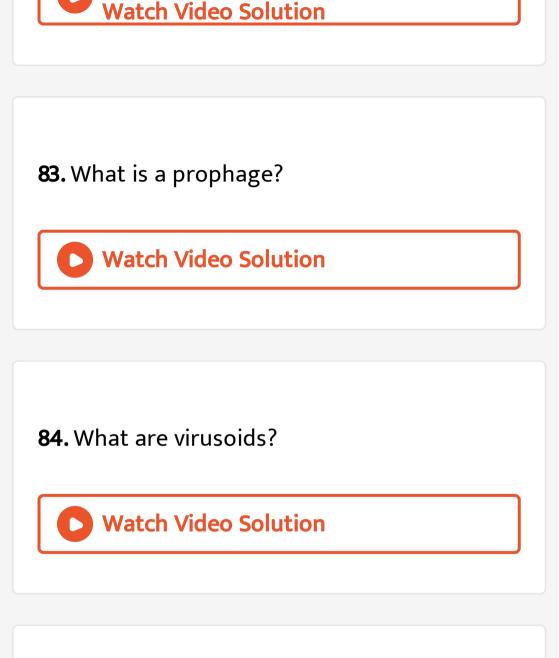
Tobacco Mosaic Disease.



82. What happens to the phage DNA in the

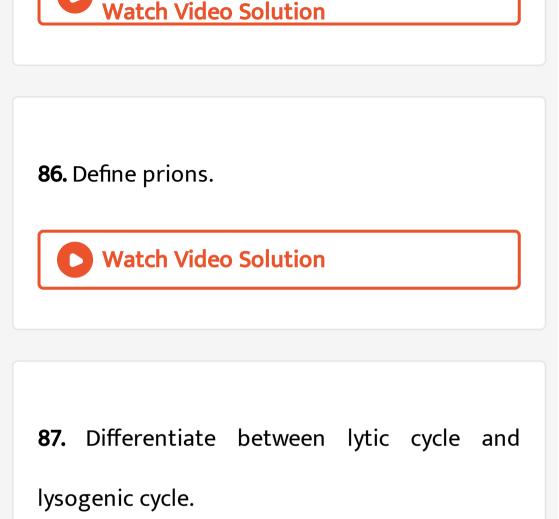
lysogenic cycle of multiplication?



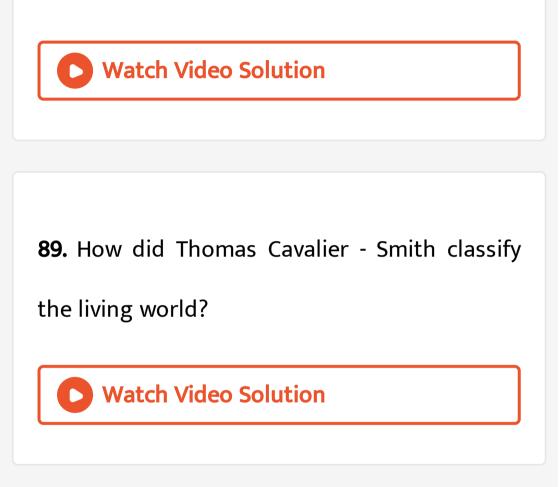


85. What is a viroid?





88. What is the need for classification?



90. Are bacteria friends or foes? Justify

91. Write short notes on cytoplasm of bacteria

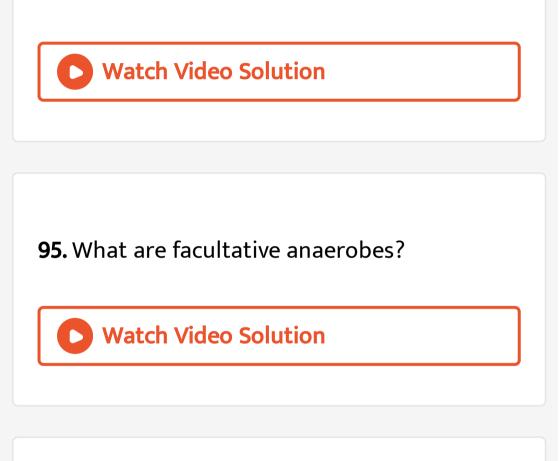


92. What are mesosomes?

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93. Write short ntes on polyribosomes.

94. What is Gram staining method?



96. What are photoautotrophic bacteria?

97. Differentiate between green sulphur

bacteria and purple sulphur bacteria.



98. What are heterotrophic bacteria?



99. What are Endospores?



100. Write notes on the sexual reproduction of

bacteria.

Watch Video Solution

101. Give the names of five antibiotics.

102. Give an account of the industrial uses of

bacteria.

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103. Give a detailed account of the dairy uses

of bacteria.



104. What are stromatolites?



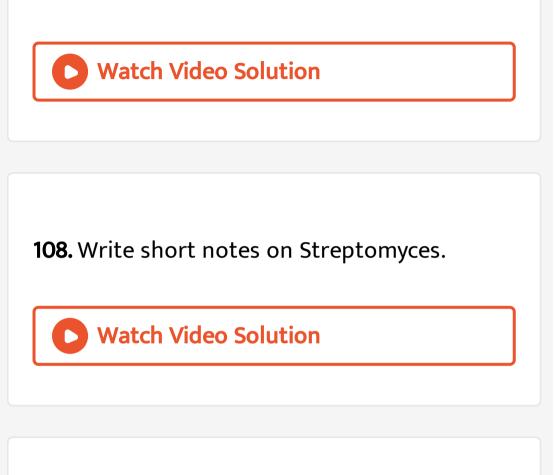
105. What are the different methods of reproduction in cyanobacteria?

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106. Explain the general characteristic features

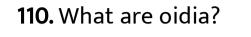
of Actinomycetes.

107. Write short notes on Frankia



109. What are the differtent types of asexual

reproduction?





111. What is budding?

Watch Video Solution

112. What are chlamydospores?

113. How are the fruits classified based on the

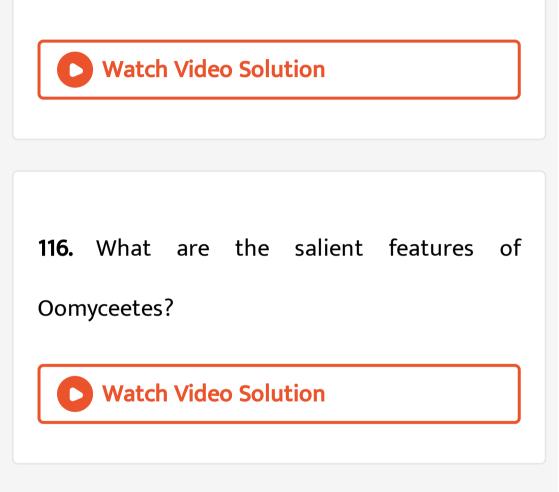
formation?

Watch Video Solution

114. How did Constantine J.Alexopoulos and

Chalres W.Mims classify fungi?

115. Can bacteria reproduce sexually. Justify.



117. How are fungi used as food?

118. Give an account of the medicinal uses of

fungi.



119. How are fungi used in industries?



120. Give an account of the harmful activities

of fungi?

Watch Video Solution

121. Give an account of the contribution of E.J.

Butler.



122. What is dolipore septum?



123. Write a note on the significance of mycorrhizae.

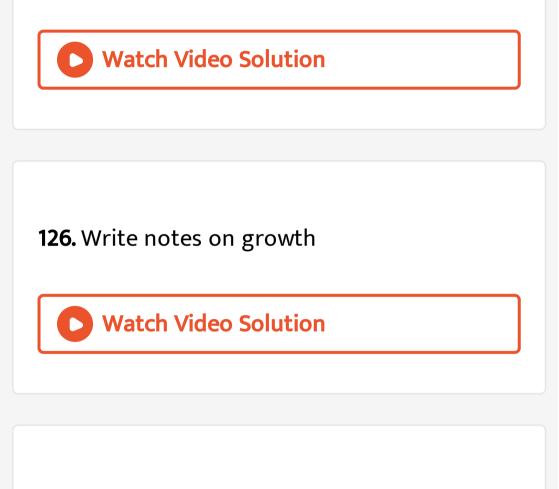
Watch Video Solution

124. How are lichens classified based on the

habitat?

125. How are lichens classified on the basis of

the morophology of the thallus?



127. Describe homeostasis.

128. What are the charactersitics features of

viruses?

Watch Video Solution

129. Draw the levels of organization and integration in living organisms.

130. Viruses connect the living and non-living world. Justify. Watch Video Solution **131.** What rae the milestones in virology? Watch Video Solution

132. Write short notes on the nucleic acids present in viruses.



133. Write short notes on Tobacco Mosaic Virus (TMV).

Watch Video Solution

134. Describe the structure of T_4 phage.

135. What is the end result of lytic cycle of

multiplication?

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136. New phages are not formed in lysogenic cycle. Explain.

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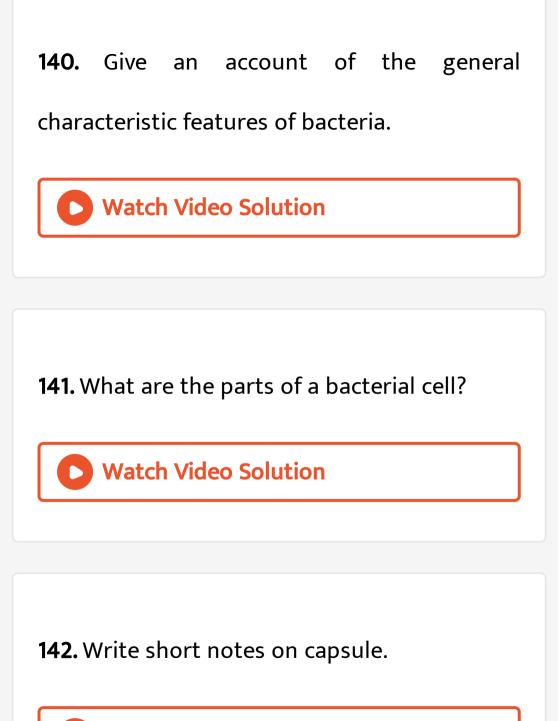
137. Name two viral diseases affecting Humans.



138. Write short notes on Ruggierio's classification.

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139. List out the milestones in Bacteriology.



143. Give a short account of the cell wall of bacteria.



144. Describe plasma membrane of a bacterium.



145. What are plasmids?



146. Write short notes on flagella of a bacterium.

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147. Write short notes on pili.

148. How are bacteria classified on the basis of

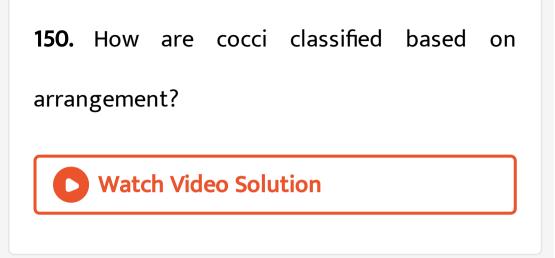
shape?



149. How are bacteria classified base on the

number and position of flagella?





151. What is the cause of the different results

in the Gram staining?



152. A Danish Physician, Christian Gram developed a staining procedure to differentiate bacteria. List the various steps involved in that procedure.

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153. Differentiate Gram positive and Gram

negative bacteria.

154. Describe the structure of cell wall of Gram

positive bacteria.



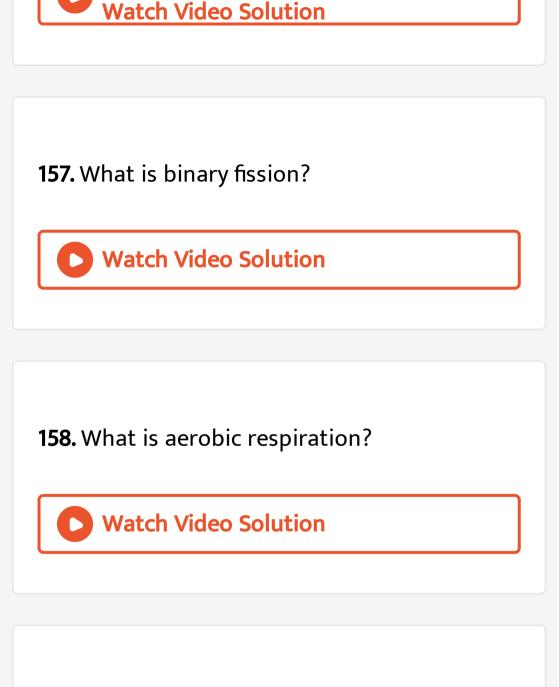
155. Describe the structure of the cell wall of

Gram negative bacteria.

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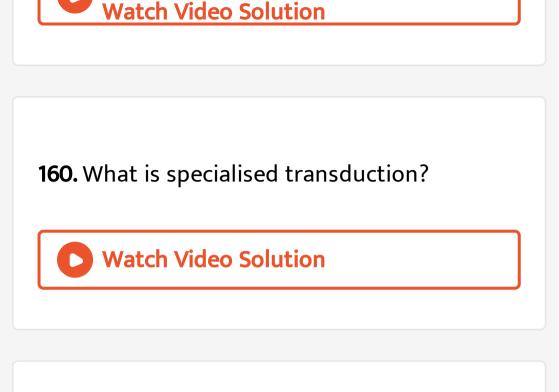
156. Define Conjugation.





159. What is generalised transduction?





161. Draw a flow chart about the bacterial nutrition.

162. Explain transformation in bacteria as

experimented by Griffith.

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163. Write down the characteristics features of

Archaebacteria.



164. Write notes on mycoplasma?



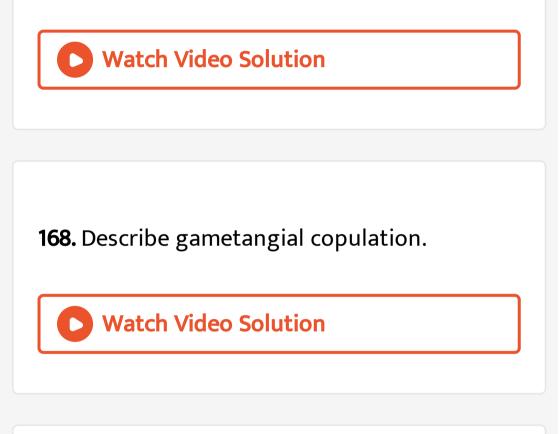
165. List out the salient features of Cyanobacteria. Watch Video Solution

166. What is the cause for the 'earthy odor'

after rain?

167. What are the charactersitics features of

fungi (=Kindom Myceteae)?



169. Give the salient features of the class Zygomycetes.





170. Write down the salient features of

Ascomycetes.

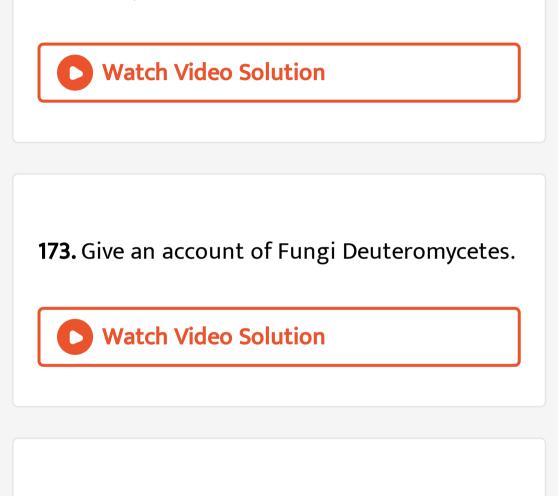


171. Give an account of the development of

Ascus.

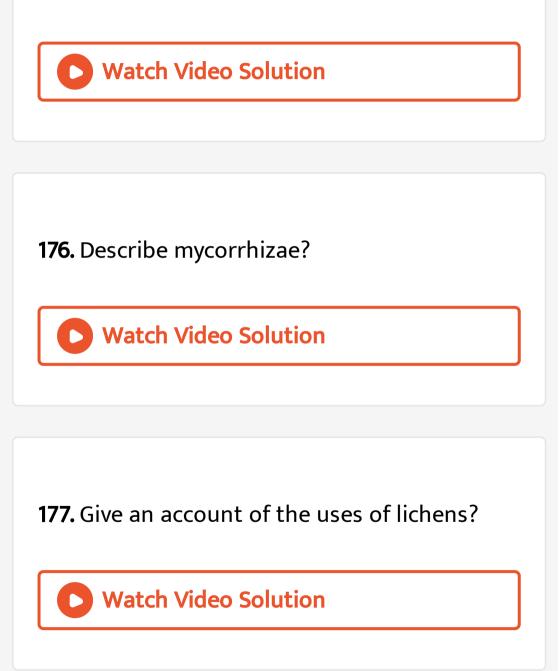
172. Describe the sexual reproduction in

Basidiomycetes.



174. Discuss the economic importance of fungi.

175. How is funig useful in agriculture?



178. Identify the incorrect statement about the

Gram positive bacteria.

- A. Teichoic acid absent
- B. High percentage of pepetidoglycan is

found in cell wall

- C. Cell wall is single layered
- D. Lipopolysaccharide is present in cell wall

Answer:



179. The correct statement regarding Blue green algae is

A. lack of motile structures

B. presence of cellulose in cell wall

C. absence of muvilage around the thallus

D. presence of floridean starch

Answer:

180. Identify the correctly matched pair

A. Actinomycete- Late bligt

- B. Mycoplasma- Lumpy jaw
- C. Bacteria Crown gall
- D. Gungi- Sandal spike

Answer:

181. Citric acid is produced by

- A. Aspergillus niger
- B. Candida
- C. Penicillium notatum
- D. Acetobacter xylinum

Answer:

182. Identify the odd one

A. Chikungunya

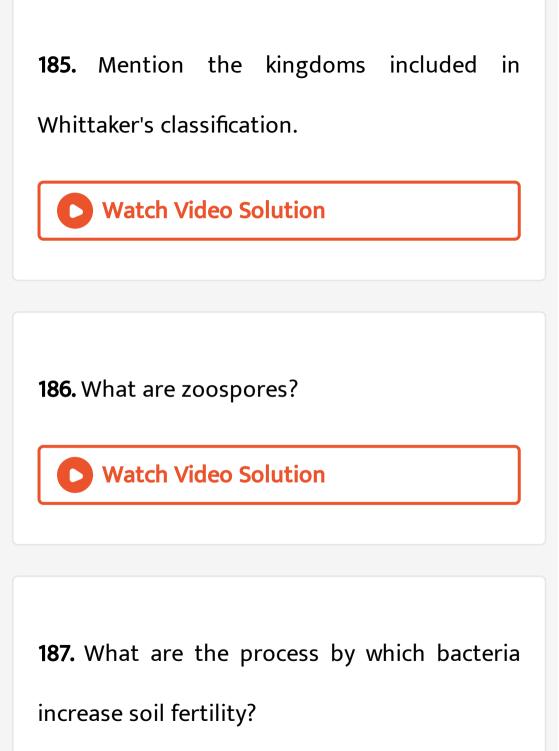
B. Measles

C. Mumps

D. Tetanus

Answer:

183. Write the distinguishing features of monera. Watch Video Solution **184.** Differentiate homoiomerous and heteromerous lichens. Watch Video Solution



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188. Name the structure in which conidia are produced.

Watch Video Solution

189. Give a general account on lichens.

190. Why do farmers plant leguminous crops

in crop rotations/mixed cropping?

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191. Write any two demerits of Five Kingdom classification.



192. What is the need for classification?



193. Explain the general characteristic features

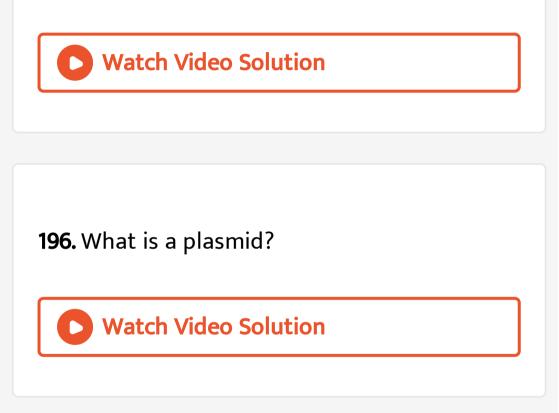
of Actinomycetes.

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194. Write the salient features of kingdom

Monera.

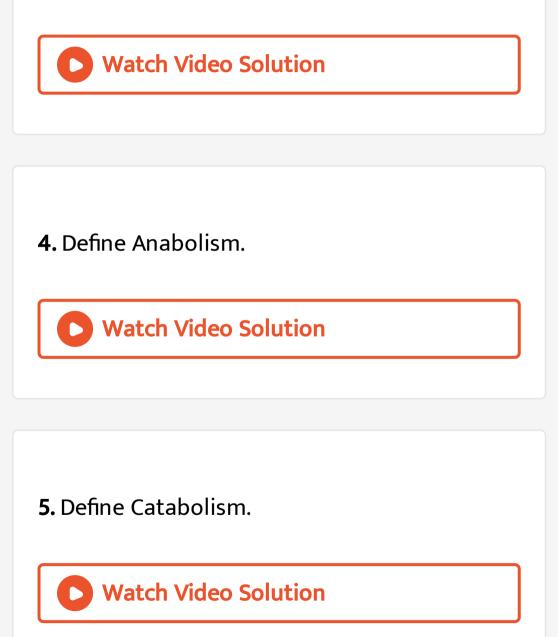
examples



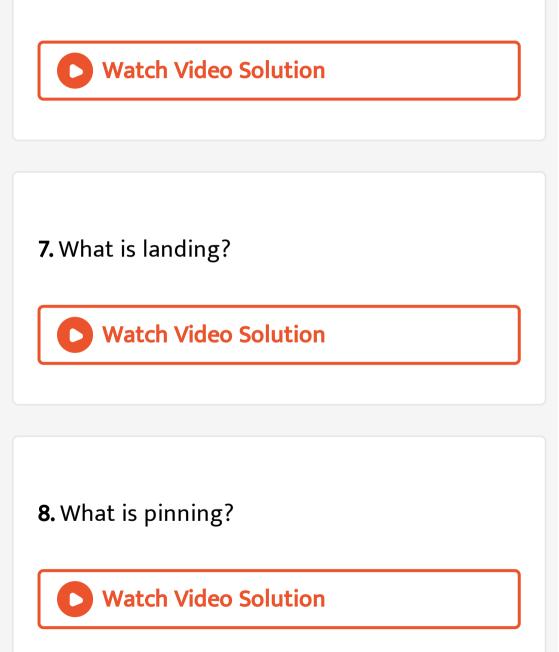
197. Explain binary fission in bacteria.

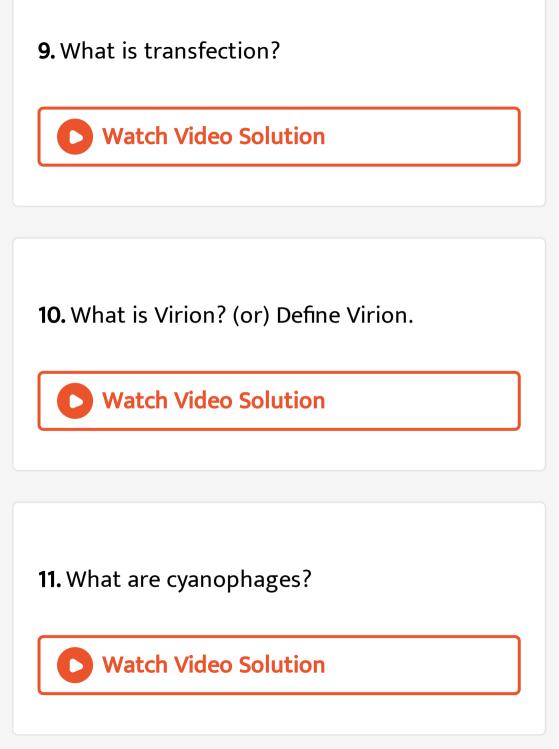
Exercise
1. What are prokaryotes?
2. What are eukaryotes?

3. What do you mean by irritability?

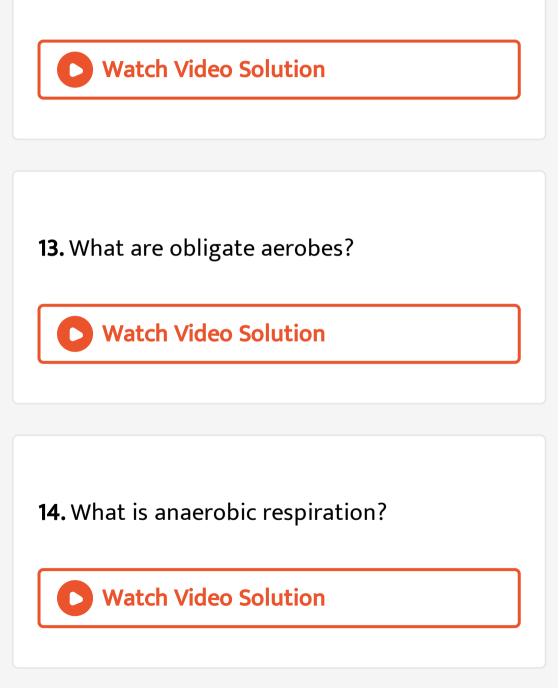


6. What is cytoplasmic streaming?

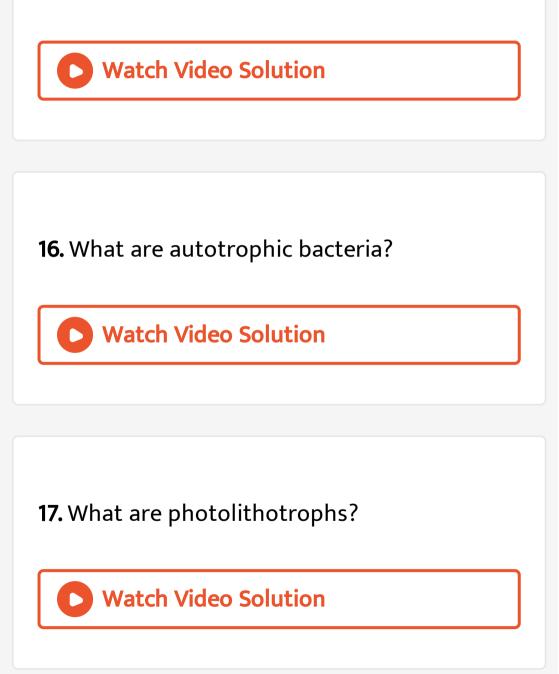




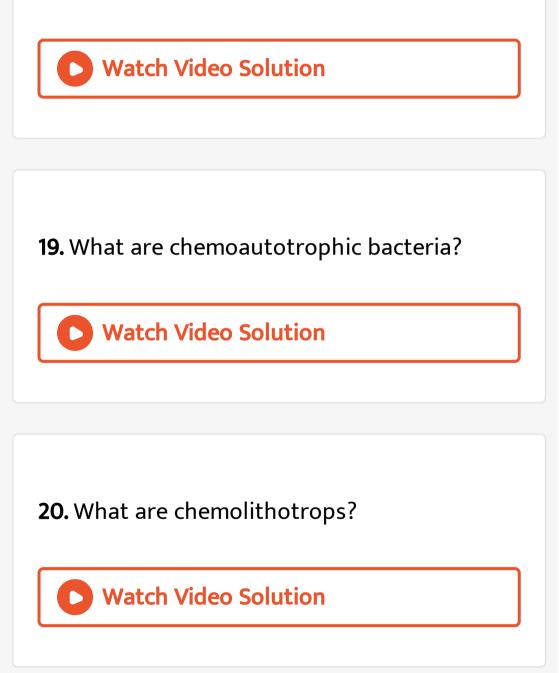




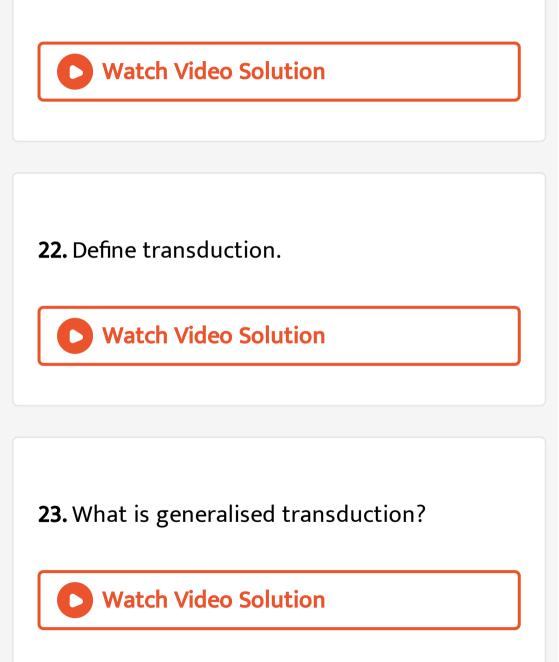
15. What are capnophilic bacteria?



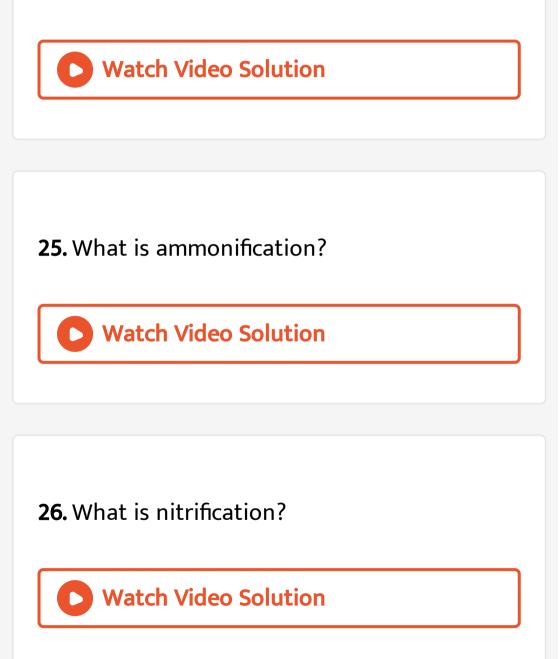
18. What are photoogantrophs?



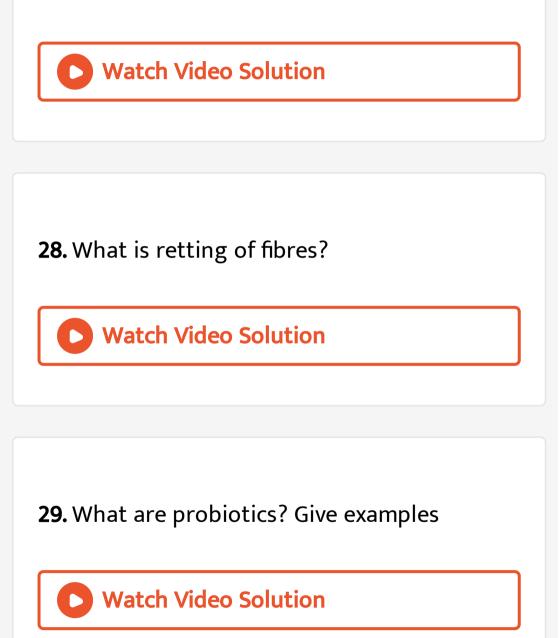
21. What are chemoorganotrophs?



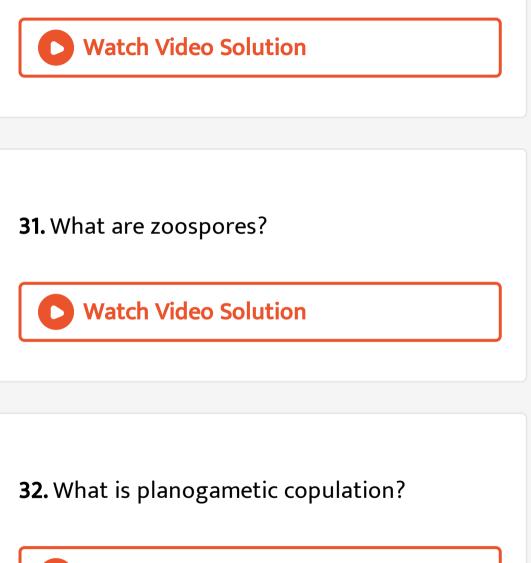
24. What is specialised transduction?



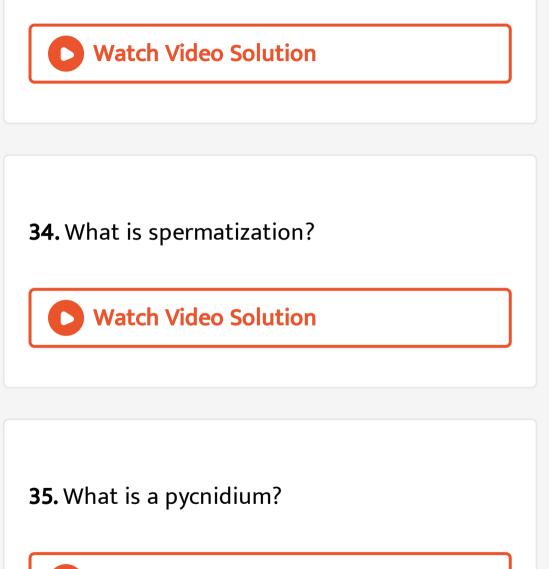
27. What is nitrogen fixation?



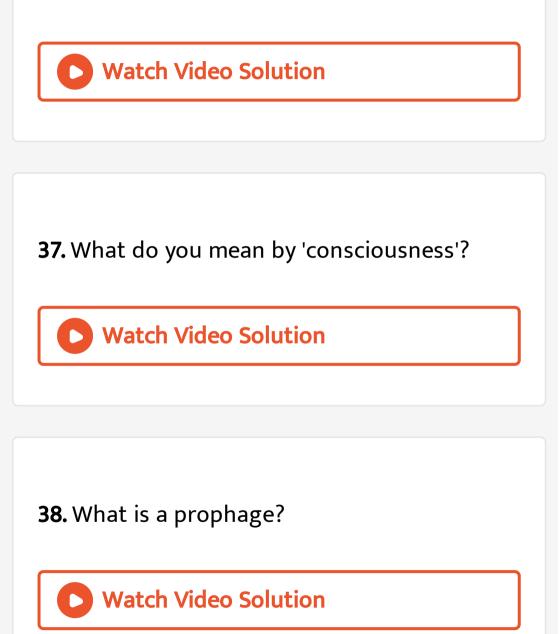
30. What are conidia?



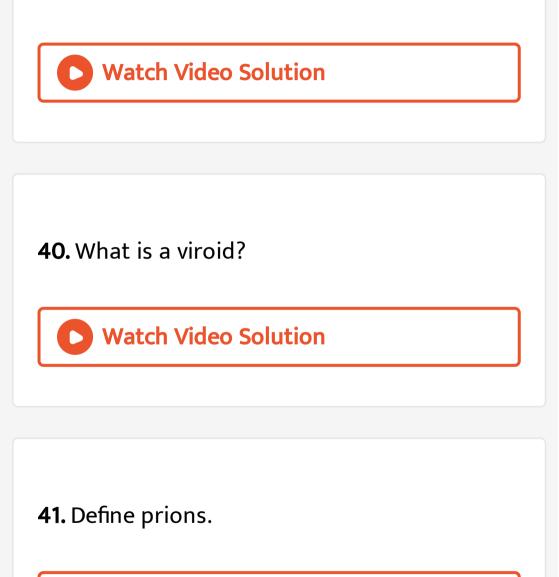
33. What is somatogamy?

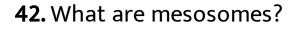


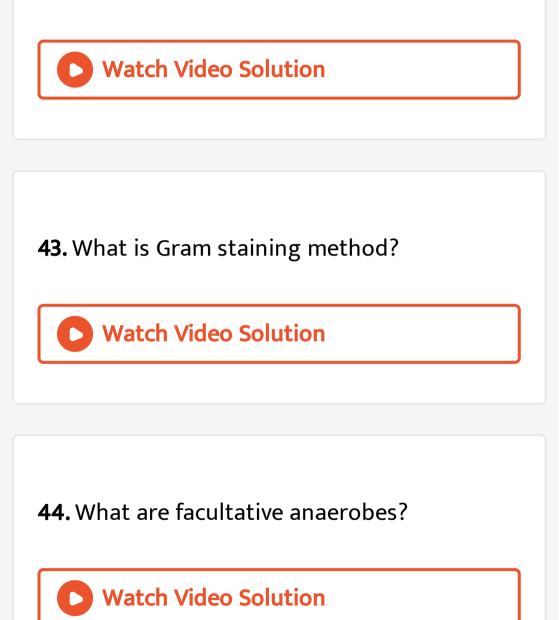
36. What are dermatophytes?



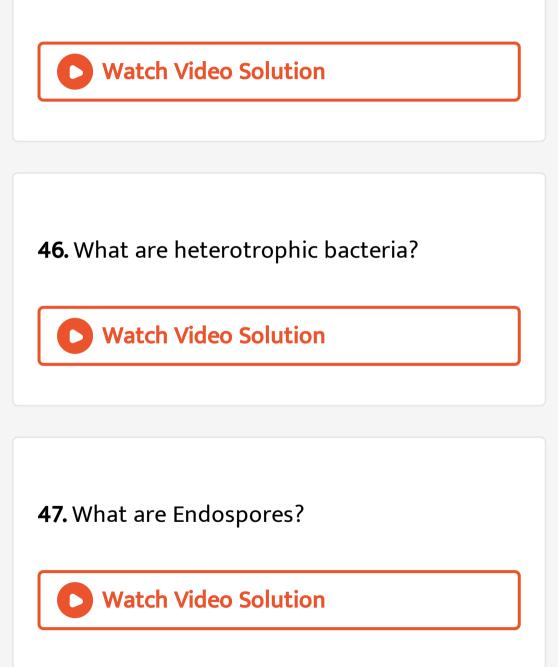
39. What are virusoids?



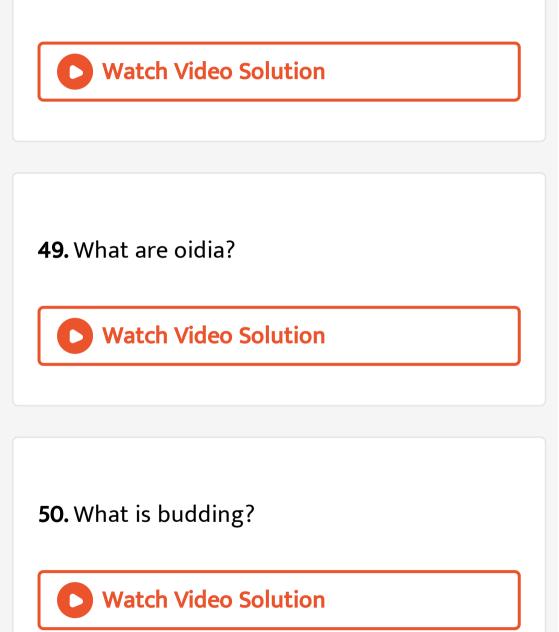




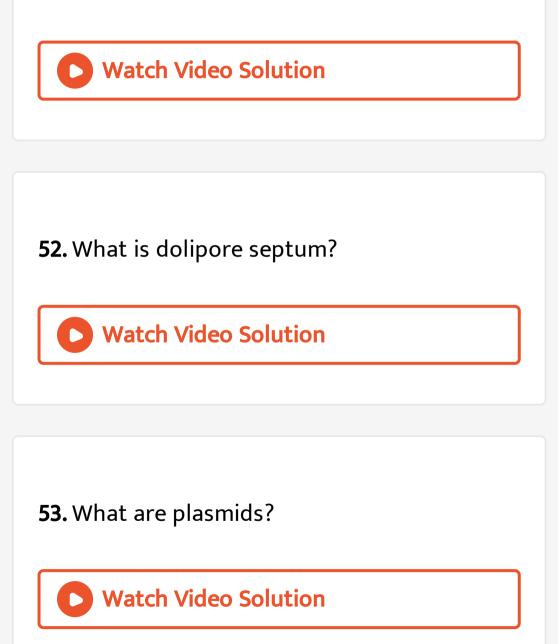
45. What are photoautotrophic bacteria?

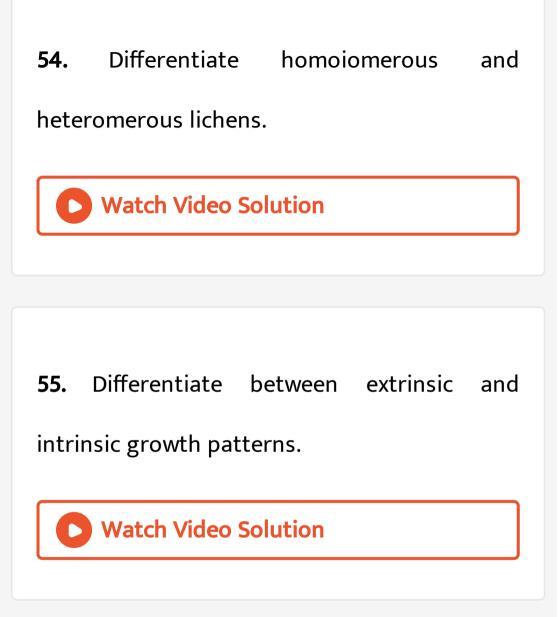


48. What are stromatolites?



51. What are chlamydospores?





56. Tabulate the difference between anabolism

and catabolism.

Watch Video Solution

57. Differentiate between lytic cycle and

lysogenic cycle.

58. Differentiate between green sulphur

bacteria and purple sulphur bacteria.



59. Differentiate Gram positive and Gram

negative bacteria.

