



JAFFNA HINDU COLLEGE

Risk Holiday Self - Education Worksheet - 2020

Grade - 09 | Science

Name/Index No :

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Unit 01 - APPLICATIONS OF MICROORGANISMS

1. What is microorganism?

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2. Give the five type of microorganisms?

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3. Write down 4 characteristics of virus?

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4. Give 3 structures for locomotion of protozoan and give suitable example to each one?

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5. State 4 beneficial effects of microorganisms in agriculture field?

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6. State 3 beneficial effects of microorganisms in medical field?

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7. What is industrial microbiology?

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8. Give 5 instances that the microorganisms used in industries?

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9. What do you meant by bioleaching?

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10. What is bio remediation?

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11. Give 3 instances where bio remediation is used?

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12. Write down three adverse effects of microorganisms?

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13. Name 3 diseases that are caused by bacteria?

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14. Give 3 diseases that are spread by mosquito bites?

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15. State 3 diseases caused by microorganisms to plants?

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16. What do you meant by food spoilage?

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17. What are the physical changes in food when spoiled?

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18. What are the chemical changes in food when spoiled?

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19. State the internal factors that are affecting food spoilage?

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20. State the external factors that are affecting food spoilage?

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21. What do you meant by biological weapons?

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22. Name the main gas in biogas?

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Unit 02 - EYE AND EAR

01. State the locations of human eye?

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02. Write down some protective measures to protect the human eye?

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03. Draw the cross section of human eye and denote the parts?

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04. Write down three layers of eye wall of human?

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05. Write down the functions or function of following parts?

1. Sclerotic layer -
2. Choroid layer -
3. Retina -
4. Iris -
5. Vitreous humour -

06. Name the two types of cells that are found in retina?

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07. Explain how the eye perceives visionary senses?

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08. What do you meant by long sight?

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09. Write down two reasons for long sight?

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10. Draw the ray diagram for correction of short sight?

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11. What do you meant by binocular vision?

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12. State 2 common eye diseases that can be identified today?

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13. Write down two reasons for cataract?

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 14. Give 5 precautionary measures should be followed to prevent health problems?

 15. Draw the cross section of human ear and denote the parts?

 16. Write down the function of following parts of human ear?
 1. Ear lobe
 2. Tympanic membrane
 3. Eustachian tube
 4. Auditory nerve
 5. Semi circular canal
 17. Explain to how the ear perceives auditory senses?

 18. Write down the parts of ear that are arranged order in transmission of sound?

 19. Write down some defects of human ear?

 20. State the audibility range of the human ear?

 21. State the bones in ossicles?

 22. Write down 5 precautions should be taken to protect the human ear?

Unit 03 - NATURE AND PROPERTIES OF MATTER

01. What do you meant by elements?

 02. What do you meant by compounds?

 03. State the symbols of following elements?
 1. Calcium 2. Sulphur 3. Chlorine 4. Sodium 5. Argon

6. Silver 7. Gold 8. Iodine 9. Zinc 10. Iron

04. Write down the latin name of elements?

1. Sodium 2. Mercury 3. Copper 4. Silver 5. Lead

05. What do you meant by molecules?

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06. Who was discovered the planetary model?

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07. What is atomic number?

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08. What is mass number?

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09. If an element contains 13 protons and 14 neutrons, find the atomic number and mass number of that element?

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10. What do you meant by homo atomic molecules?

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11. What do you meant by hetero atomic molecules?

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12. Write down the chemical formula of following compounds

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|----------------------|--------------------|
| 1. Calcium carbonate | 2. Copper sulphate |
| 3. Ethanol | 4. Acetic acid |
| 5. Glucose | 6. Acetylene |
| 7. Benzene | 8. Sucrose |

13. What do you meant by mixture?

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14. Write down two type of mixtures and give 3 examples to each one?

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15. Give 6 physical methods of separating constituents in a mixture and give an example to each one?

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Unit 4,5 - BASIC CONCEPTS ASSOCIATED WITH FORCE AND PRESSURE EXERTED BY SOLID

01. What do you meant by force?

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02. What is the SI unit of force?

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03. Write down some changes on an object that can be done by applying force?

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04. What is vector quantity and give 3 examples to each one?

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05. Write down three factors that are determining a force?

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06. What is point of application of force?

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07. State the factors of a force that can be graphically represented by following segment of straight line?

- 1. Length of straight line
- 2. Arrow head of straight line
- 3. Dot at the starting point of the segment of straight line

08. What do you meant by pressure?

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08. What is the pressure exerted on a surface of 2.5m^2 , when a normal force of 400 N is acting on it?

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09. The pressure was 600 Pa, when a normal force was applied on a surface area of 1.5m^2 . Find the amount of force applied on it?

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11. The pressure was 1000 Pa, when a normal force of 200 N was applied on a surface Find the amount of area?

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12. The pressure was 1200 Pa, when a normal force was applied on a surface area of

4 m² find the amount of force applied on it?

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13. What is the pressure exerted on a surface of 200cm², when a normal force of 40 N is acting on it?

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14. The pressure was 600 Pa, when a normal force of 150 N was applied on a surface
Find the amount of area?

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16. Give 3 instances in day to day activities for increasing pressure by decreasing area?

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17. Give 3 instances in day to day activities for decreasing pressure by increasing area?

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