**KENDRIYA VIDYALAYA NO.2, AFS, KALAIKUNDA**

**HOLIDAY HOMEWORK FOR SUMMER BREAK 2023-24**

**SUBJECT: SCIENCE**

**CLASS:VI**

**INSTRUCTION:**

1. **Do each activity of your Holiday Homework in activity file only.**
2. **submit your holiday homework 16th June 2023.**

Q-1 Name some major nutrients in our food.

Q-2 Write some diseases caused by deficiency of vitamin A,

 Vitamin B, vitamin C, vitamin D, calcium, iron and iodine.

Q-3 What do you mean by balanced diet

Q-4 Write some properties of materials

Q-5 Define the term -

a) opaque

b) transparent

c) translucent

Q-6) Scientific Competitions

Choose any topic from the given themes

Topics/Themes:

1. Advancement in information and communication technology
2. Eco-friendly materials
3. Health and cleanliness
4. Transport and innovation
5. Environmental concerns
6. Historical development with current innovation
7. Mathematics for use.

**In a separate sheet, give a brief write-up of your idea and its uses. Submit it along with your holiday homework. Your ideas will be selected for Regional level or for National Level Scientific Competitions.**

**KENDRIYA VIDYALAYA NO.2, AFS, KALAIKUNDA**

**HOLIDAY HOMEWORK FOR AUTUMN BREAK 2023-24**

**SUBJECT: SCIENCE**

**CLASS: VII**

**INSTRUCTION:**

1. **Do each activity of your Holiday Homework in activity file only.**
2. **submit your holiday homework 16th June 2023.**

Q-1 What do you mean by nutrition? Explain their mode of nutrition.

Q-2 What do you mean by symbiosis.

Q-3 What do you mean by cell? Draw the structure of cell.

Q-4 Draw the diagram of human digestive system.

Q-5 Explain digestion in amoeba.

Q-6) ) Scientific Competitions

Choose any topic from the given themes

Topics/Themes:

1. Advancement in information and communication technology
2. Eco-friendly materials
3. Health and cleanliness
4. Transport and innovation
5. Environmental concerns
6. Historical development with current innovation
7. Mathematics for use.

**In a separate sheet, give a brief write-up of your idea and its uses. Submit it along with your holiday homework. Your ideas will be selected for Regional level or for National Level Scientific Competitions.**

**KENDRIYA VIDYALAYA NO.2, AFS, KALAIKUNDA**

**HOLIDAY HOMEWORK FOR AUTUMN BREAK 2023-24**

**SUBJECT: SCIENCE**

**CLASS: VIII**

**INSTRUCTION:**

1. **Do each activity of your Holiday Homework in activity file only.**
2. **submit your holiday homework 16th June 2023.**
3. Write the difference between fertilisers and manure.
4. Define sprinkler system and drip system methods of irrigation.
5. Write any three human diseases which are caused by:
6. Bacteria
7. Virus
8. Write 5 lines on the usefulness of microorganism in our lives.
9. Draw Nitrogen cycle.
10. Scientific Competitions

Choose any topic from the given themes

Topics/Themes:

1. Advancement in information and communication technology
2. Eco-friendly materials
3. Health and cleanliness
4. Transport and innovation
5. Environmental concerns
6. Historical development with current innovation
7. Mathematics for use.

**In a separate sheet, give a brief write-up of your idea and its uses. Submit it along with your holiday homework. Your ideas will be selected for Regional level or for National Level Scientific Competitions.**

**KENDRIYA VIDYALAYA NO.2, AFS, KALAIKUNDA**

**HOLIDAY HOMEWORK FOR SUMMER BREAK 2023-24**

**SUBJECT: SCIENCE**

**CLASS: IX**

**INSTRUCTION:**

**Activity-1:-**

1. **Do your Project work in separate A4 size paper and maintain it in proper file.**
2. **On 1st page there should be the name of your school, your name, project name and various other details.**
3. **On 2nd page there should be the certificate stating that the project is your original work and you have not copied it from anywhere else having designated place at the bottom left and right of the page for the signature of subject teacher and Respected Principal sir.**
4. **Index on page 3. Start your project from 4th page. At the end there should be references.**
5. **Project 1 Water (For Roll No. 1 to 10)**

**Write 5 points and make drawings/Sketches/Paintings/Graffiti/collage/any 2d art form on the following points on separate A4 Sheets.**

**i) Water**

**ii) Importance of water.**

**iii) Water as a Habitat**

**iv) Water pollution.**

**v) Impact of water Pollution on biotic & abiotic factors.**

**vi) Prevention of water pollution.**

**vii) Rainwater Harvesting**

**viii) Water cycle.**

1. **Project 2 Air (For Roll No. 11 to 20)**

**Write 5 points and make drawings/Sketches/Paintings/Graffiti/collage/any 2d art form on the following points on separate A4 Sheets.**

**i) Air**

**ii) Importance of Air**

**iii) Air as a Habitat**

**iv) Air pollution.**

**v) Impact of Air Pollution on biotic & abiotic factors.**

**vi) Prevention of Air pollution.**

**vii) Relation with ozone hole**

**viii) Nitrogen cycle.**

**ix) Oxygen cycle.**

1. **Project 3 Soil (For Roll No. 21 to 30)**

**Write 5 points and make drawings/Sketches/Paintings/Graffiti/collage/any 2d art form on the following points on separate A4 Sheets.**

**i) Soil**

**ii) Importance of Soil**

**iii) Soil as a Habitat**

**iv) Soil pollution.**

**v) Impact of Soil Pollution on biotic & abiotic factors.**

**vi) Prevention of Soil pollution.**

**vii) Relation with Agriculture.**

1. **Project 4 Natural Resources (For Roll No. 31 & above)**

**Write 5 points and make drawings/Sketches/Paintings/Graffiti/collage/any 2d art form on the following points on separate A4 Sheets.**

**i) Natural Resources (in context to chapter 14)**

**ii) Importance of air, water & Soil.**

**iii) Inter dependence of air, water & soil.**

**iv) Pollution & its Types.**

**v) Impact Pollution on biotic & abiotic factors.**

**vi) Prevention of pollution.**

**vii) Relation with ozone hole.**

**viii) Biogeochemical Cycles.**

**Activity-2:-**

**Write the following practicals in your practical record.**

1. **Preparations of:**

**(a)a true solution of common salt, sugar and alum.**

**(b)a suspension of soil, chalk powder and fine sand in water.**

**(c)a colloidal solution of starch in water and egg albumin/milk in water and distinguish between these on the basis of**

 **transparency**

 **filtration criterion**

**Activity-3:-**

Scientific Competitions

Choose any topic from the given themes

Topics/Themes:

1.Advancement in information and communication technology

2.Eco-friendly materials

3.Health and cleanliness

4.Transport and innovation

5.Environmental concerns

6.Historical development with current innovation

7.Mathematics for use.

**In a separate sheet, give a brief write-up of your idea and its uses. Submit it along with your holiday homework. Your ideas will be selected for Regional level or for National Level Scientific Competitions.**

**KENDRIYA VIDYALAYA NO.2, AFS, KALAIKUNDA**

**HOLIDAY HOMEWORK FOR SUMMER BREAK 2023-24**

**SUBJECT: SCIENCE**

**CLASS:X**

**INSTRUCTION:**

**Activity 1:-**

1. **Do your Project work separate A4 size paper and maintain it in proper file.**
2. **On 1st page there should be the name of your school, your name, project name and various other details.**
3. **On 2nd page there should be the certificate stating that the project is your original work and you have not copied it from anywhere else having designated place at the bottom left and right of the page for the signature of subject teacher and Respected Principal sir.**
4. **Index on page 3. Start your project from 4th page. At the end there should be references.**
5. **Project 1 Ecosystem (For Roll No. 1 to 10)**

**Write 5 points and make drawings/Sketches/Paintings/Graffiti/collage/any 2d art form on the following points on separate A4 Sheets. Some Focus Points may be as under.**

**i) Introduction.**

**ii) Importance.**

**iii) Problems.**

**iv) Impact.**

**v) Ways of reducing problems.**

**vi) Solution.**

**vii) Conclusion (Critical Analysis)**

1. **Project 2 Ozone (For Roll No. 11 to 20)**

**Write 5 points and make drawings/Sketches/Paintings/Graffiti/collage/any 2d art form on the following points on separate A4 Sheets. Some Focus Points may be as under.**

**i) Introduction.**

**ii) Importance.**

**iii) Problems.**

**iv) Impact.**

**v) Ways of reducing problems.**

**vi) Solution.**

**vii) Conclusion (Critical Analysis)**

1. **Project 3 Waste Production & Management (For Roll No. 21 to 30)**

**Write 5 points and make drawings/Sketches/Paintings/Graffiti/collage/any 2d art form on the following points on separate A4 Sheets. Some Focus Points may be as under.**

**i) Introduction.**

**ii) Importance.**

**iii) Problems.**

**iv) Impact.**

**v) Ways of reducing problems.**

**vi) Solution.**

**vii) Conclusion (Critical Analysis)**

1. **Project 4 Biodegradable & Non-Biodegradable substances (For Roll No. 31 & above)**

**Write 5 points and make drawings/Sketches/Paintings/Graffiti/collage/any 2d art form on the following points on separate A4 Sheets. Some Focus Points may be as under.**

**i) Introduction.**

**ii) Importance.**

**iii) Problems.**

**iv) Impact.**

**v) Ways of reducing problems.**

**vi) Solution.**

**vii) Conclusion (Critical Analysis)**

**Activity-2:-**

**Write the following practicals in your practical record.**

1. **Performing and observing the following reactions and classifying them into:**

**A.Combination reaction**

**B.Decomposition reaction**

**C.Displacement reaction**

**D.Double displacement reaction**

**(i)action of water on quick lime**

**(ii)action of heat on ferrous sulphate crystals**

**(iii)irons nails kept in copper sulphate solution**

**(iv)reaction between sodium sulphate and barium chloride solutions.**

**Activity-3:-**

Scientific Competitions

Choose any topic from the given themes

Topics/Themes:

1.Advancement in information and communication technology

2.Eco-friendly materials

3.Health and cleanliness

4.Transport and innovation

5.Environmental concerns

6.Historical development with current innovation

7.Mathematics for use.

**In a separate sheet, give a brief write-up of your idea and its uses. Submit it along with your holiday homework. Your ideas will be selected for Regional level or for National Level Scientific Competitions.**

**KENDRIYA VIDYALAYA NO.2, AFS, KALAIKUNDA**

**HOLIDAY HOMEWORK FOR SUMMER BREAK 2023-24**

**SUBJECT: CHEMISTRY**

**CLASS: XII**

 **Q1) Solve previous year question paper.**

Q2). Scientific Competitions

Choose any topic from the given themes

Topics/Themes:

1.Advancement in information and communication technology

2.Eco-friendly materials

3.Health and cleanliness

4.Transport and innovation

5.Environmental concerns

6.Historical development with current innovation

7.Mathematics for use.

**In a separate sheet, give a brief write-up of your idea and its uses. Submit it along with your holiday homework. Your ideas will be selected for Regional level or for National Level Scientific Competitions.**

**KENDRIYA VIDYALAYA NO.2, AFS, KALAIKUNDA**

**HOLIDAY HOMEWORK FOR SUMMER BREAK 2023-24**

**SUBJECT: PHYSICS**

**CLASS: XII**

**KENDRIYA VIDYALAYA NO.2, AFS, KALAIKUNDA**

**HOLIDAY HOMEWORK FOR SUMMER BREAK 2023-24**

**SUBJECT: BIOLOGY**

**CLASS: XII**

1. **WRITE ALL THE FOLLOWING QUESTIONS IN YOUR NOTEBOOK:**
2. Draw the following diagram with proper labelling
3. Section of Ovary
4. Ovum surrounded by sperms
5. Fertilization and implantation
6. Describe the changes during menstrual cycle with a chart indicating various events.
7. What is LH surge?
8. What is Corpus luteum? Write down its function
9. What ensures entry of only one sperm during fertilization?
10. How is the sex of a child determined?
11. When does the second meiosis take place in oogenesis?
12. Why is the meiotic division in oogenesis uneven?
13. Describe the changes that a zygote undergoes till implantation in human embryogenesis.
14. What is placenta? State its functions and name the hormones it secretes.
15. Write a note on
16. Stem cells
17. Trophoblast
18. Parturition
19. Foetal ejection reflex.
20. Colostrum
21. What is amniocentesis? Why is it banned in India?
22. What are the steps undertaken by the government to control population explosion in India?
23. Classify the following as barriers, pills or IUDs, vaults, LNG-20, cervical cap and

Condoms, Cu-T, Saheli, Leppes loop,

1. Explain the surgical methods of birth control.
2. How does Cu ions in Cu-T prevent pregnancy?
3. Explain MTP. When is it performed?
4. a) What are STDs? Name 5 examples.

b) What is HIV-AIDS? How can it be prevented?

1. Explain in 3 ways by which a childless couple can be assisted by ART.
2. Expand and explain IVF, ZIFT, GIFT, ICSI, IUI and AI in reproductive biology.
3. **Investigatory Project**

Write the investigatory project in A4 paper as per your Objectives, process of experiment/research, observation, inference, calculation/result, conclusion, acknowledgement and bibliograpghy.

Write only your name, class and session.