**INDIAN SCHOOL AL WADI AL KABIR**
**DEPARTMENT OF SCIENCE 2016-17**
**HOLIDAY ASSIGNMENT – SUMMER VACATION**
**CLASS 10**

1. Journal completion for Physics / Chemistry / Biology
   ( As instructed by the respective Science Teachers in the class.)
2. Completion of worksheet : Revision worksheet
   ( file format)

- **DATE OF SUBMISSION :Reopening Day**

INDIAN SCHOOL AL WADI AL KABIR

REVISION QUESTIONS FOR PRE-MID TERM

CLASS X- SCIENCE

## PHYSICS

1. Define the terms
   Pole b) Centre of curvature c) Principal axis d) Focal length of a spherical mirror.
2. Using a diagram show that angle of incidence is equal to angle of reflection.
3. State and draw the rules for drawing the ray diagrams for the image formation by spherical mirrors.
4. Differentiate between principal focus of a concave mirror and convex mirror.
5. Draw the ray diagram for the image formation by a concave mirror to get an erect image.
6. Why Convex mirrors are used as rear view mirror? Draw the ray diagram for its image formation.
7. What are the uses of concave mirrors? Explain any two with the help of ray diagrams.
8. Why is a concave mirror said to have a real focus?
9. State the laws of reflection of light.
10. The distance between the image and the object formed by a plane mirror is 48cm. What is the object distance?

## CHEMISTRY

1. Identify the type of reaction and define it.
   $CaO + H_2O \rightarrow Ca(OH)_2$
2. A student takes 2g of Ferrous sulphate crystal in a dry test tube and heats the test tube. Answer the following questions on the basis of the observations made by the student.
3. Write an observation about colour of residue or smell of gas involved.
4. Name the type of chemical reaction.
5. Write balanced chemical equation for the reaction involved.
6. Differentiate between a combination reaction and a decomposition reaction. Write one chemical equation each for these reactions.
7. List two observations which you record while burning magnesium in air.

8. Balance the following chemical equations.
   $MnO_2$+ HCl → $MnCl_2$ + $H_2O$ + $Cl_2$
   $CH_4+O_2 \rightarrow CO_2+H_2O$
9. What do you understand by exothermic and endothermic reactions?
10. Give one example each of a chemical reaction characterised by :
    a. Change in colour
    b. Change in temperature.

11. Give one example of a decomposition reaction which is carried out :
    a. with electricity
    b. by applying heat.
12. When hydrogen burns in oxygen, water is formed and when water is electrolysed, then hydrogen and oxygen are produced. What type of reaction takes place:
    i. In the first case.
    ii. In the second case.
13. Giving examples, state the difference between balanced and unbalanced chemical equations.

**BIOLOGY**

14. What is Photosynthesis?
15. Write an equation of this process.
16. Why is transpiration and Photosynthesis considered a compromise in plants?
17. How do dessert plants show this compromise?
18. Explain the following terms-
    a. Nutrition
    b. Holozoic Nutrition
19. Differentiate between the following.
    a. Autotrophic and Heterotrophic nutrition.
    b. Saprophytes and Parasites.
20. With the help of diagrams illustrate the nutrition in amoeba.
21. Explain the steps of Photosynthesis.
22. Draw neat and labeled diagrams of the following-
    a. Cross section of a leaf.
    b. Open and close stomata.