

BIRLA SHISHU VIHAR, PILANI
SESSION (2018-19)
HOLIDAY HOMEWORK
CLASS XI-SCIENCE

PHYSICS

1. Solve the work sheet attached.
2. Solve NCERT book exercises (especially examples) chapter 1.
3. **Activity** – Prepare clinometers and using that find the approximate distance of moon from the earth. Using this distance find approximate diameter of the moon. Compare your results with actual values. List the possible errors that can arise and how they can be minimized. Find the percentage error in your observation. Prepare a report file.
Note – Best suited time for observations will be a full moon night.
4. Prepare theoretical topics of chapters 1 with special focus on application based questions.
5. Make a formula note book and write formulae of chapter 1.

BIOLOGY

1. Prepare a collage of organism belonging to following kingdom. Also write five major characteristic of the same.
 1. Kingdom – Animalia
 2. Kingdom – Plantae
 3. Kingdom – Fungi
 4. Kingdom – Monera
 5. Kingdom - ProtistaCollect the different samples of flowers from your surrounding and paste it in the scrap book. Also provide the following information's.
 1. Name of flowers.
 2. Symmetry
 3. Position of flower parts.
 4. Aestivation
 5. Sexuality

2. Do the given assignment in your note book.

CHEMISTRY

➤ Multimedia Project on Organic Chemistry

You are required to make a Multimedia presentation on a topic related to your chemistry course that links Chemistry with Technology, Society or the Environment. This will be done in groups of 2 or 3 students.

Listed below are some topics one of which you may choose for your presentation. You may also choose a topic of your own that is not in the following table, provided that it can be linked to one of the chemistry course units.

Topic:

1. Air Conditioning coolants and the environment
2. History of TNT and its chemistry
3. Toxicity of Organic Halides
4. Mustard Gas, then and now
5. Methanol as a fuel
6. Non-systematic names of common organics
7. Diabetes and Ketosis and Acidosis
8. Animal Skin Tanning and tannic acid
9. Optical Isomers especially in medicine (example: Thalidamide)
10. Propane refrigeration
11. Aniline Dyes, chemistry and uses
12. Lactic acid buildup in athletes and its chemistry
13. Aspirin and the Stomach Wall chemistry

Your presentation must conform to the following guidelines:

1. The presentations should be made using Microsoft PowerPoint
2. It should comprise of text, graphics, animation and sound
3. A voiceover can be incorporated in the presentation.

4. The presentations must run on their own. Team members will not be allowed to manually play the presentation. You would need to time the slides for this. The maximum time limit of the presentation will be 3 mins.
5. You should include a title page, with your topic title and the names of all group members
6. There should be one slide that contains a short one paragraph description of your topic (this is often called an abstract).
7. The presentation should have a minimum of 10 slides that contain the information for your topic. Use the slides to organize your information into sections.
8. A final slide that acts as a reference section/ bibliography that lists all of the sources of information you used.

Your presentation will be assessed on the basis of the following parameters:

1. Content and factual knowledge of the topic
 2. Use of software features and the effective use of Multimedia features
 3. Aesthetics of the presentation
 4. Communication skills
- **Green Chemistry** encourages the design of products and processes that minimize the use and generation of hazardous substances. Think of ways to introduce Green Chemistry in the practical's that are performed in chemistry lab. Submit your suggestions and the best ones may be introduced in the next academic year.
- **Disinfectants** are substances which are applied on inanimate objects to kill microbes (like floor cleaners). You can easily prepare a disinfectant on your own.

Take a litre plastic bottle. To it add 3tbsp borax powder and then add 700ml warm water and shake it well. Then add 4 tbsp of white vinegar and shake to combine. You can add some more things to make it more effective like neem oil, 1 tbsp of liquid dish washer or tea tree oil.

You can search for other methods but do not use any chemical which may be corrosive. Choose a small corner of your house where you can apply it and observe its effectiveness. Compare it with the disinfectant you normally use like domex and lizol. Is it more effective?

Justify your answer with arguments.

MATHEMATICS

1. Solve the given assignment in a separate note book.

2. Prepare a notebook of all the concepts of set theory.
3. List the applications of set theory in other branches of mathematics

ENGLISH

1. Read the full text of Oscar Wilde's *The Canterville Ghost* write character sketches of all major and minor characters that appear in the book and narrate the major episodes of the text in your own words.
2. Watch cinematic adaptation of the text *The Canterville Ghost* available on You tube (link: ***The Canterville Ghost*** <https://youtu.be/BXCh3r-pPAM>), compare the film with the text and write your findings in the form of an article in 300 words.
3. Write a speech (150-200 words) on the theme of 'The Canterville Ghost.' Love is indeed stronger than life or death
4. Write any five conversations between you and any two members of your family separately. Please follow the below mentioned instructions:
 - You can choose any general topics for conversation
 - The conversation should be in dialogue form
 - Act as an interviewer and draft the conversation
 - Write the conversation neatly.

Note :- All work should be done in the homework register.

COMPUTER SCIENCE

Do the given assignment provided to you in the separate notebook.

PHYSICAL EDUCATION

Prepare a project file, which includes:-

- a) Labelled diagram of 400mt track & Field with computations.
- b) Prepare a BMI chart of 10 family members & neighborhood, with graphical representation.
- c) Explanation & list of current national Awardees (Dronacharya Award, Arjun Award, & Rajiv gandhi Khel Ratan Award).
- d) Pictorial presentation of any five asanas for improving concentration.

DRAWING

Make one composition of your own choice in mix media technique. Use A3 size sheet of thick white chart/ canvass (12"x12") and give a small write up (one para) about your work.

MUSIC

1. Learn to play any musical instrument to develop basic knowledge in Summer Break.
2. Collect information about any two musicians and write a brief note on their life and contribution in the field of music.
 - Pt. KRISHNA RAO SHANKER PANDIT
 - Ustad FAIYAZ KHAN
 - Ustad BADE GULAM ALI KHAN

Note:- 1. The assignment would be provided to you by your respective subject teachers

2. The soft copy of the holiday homework and subject-wise assignments may also be downloaded from the school website under the tab holiday homework on homepage.