

SELAQUI INTERNATIONAL SCHOOL
HOLIDAY HOMEWORK
SUMMER VACATION 2018-19
(CLASS VIII A&B)

INTEGRATED PROJECT

In accordance with the guidelines of CBSE, we are incorporating integrated project-based learning wherein students will prepare projects for all the subjects based on a common theme. This endeavour has been taken up with the objective of inculcating the approach of integrating diverse subjects or fields and the spirit of collaborative learning.

THEME – GO WITH NATURE

General Instructions:

1. Integrated project of all subjects to be done in Scrap Book (only).
2. The areas to be covered are suggested below. You can of course use your creativity and innovation for new ideas too!
3. Credit will be awarded to original drawings, illustrations and creative use of materials.
4. The project needs to be developed and presented in this order:
 - Cover page showing project title, student information, school and Academic year.
 - List of contents with page numbers.
 - Acknowledgements (acknowledging the institution, offices and libraries visited and persons who have helped).
 - The works to be done in this sequence only-
 - English,
 - Hindi,
 - Mathematics
 - Science,
 - Social Science
 - Computer
 - Third Language
 - The last page should have Bibliography/ Sources of information from where you have collected your information.
5. The project to be submitted tentatively on July 9, 2018 failing to which the submissions will not be entertain

ENGLISH

Vacations are about making up on the lost sleep, hogging on food, spending time with your loved ones and travelling. Take this opportunity to click photos of natural beauty around you and give them catchy captions. Print the best 5, paste them in the scrapbook, give each photo a caption and on the facing page write something about the photo and even tell us why you like it.

Romantic age of literature was an age when all the major writers turned to nature for inspiration. Some of the prominent writers of this age were Wordsworth, Coleridge, Byron and Shelly. Research and write a meaningful essay on the romantic age, why and how nature can be a source of inspiration. Also, find a poem that talk about nature. You will recite this poem for the class upon returning.

Happy holidays!

HINDI/ FRENCH

१ प्रकृति से सम्बन्धित कोई भी एक कविता लिखें ।

२ प्रकृति से सम्बन्धित अनुच्छेद लिखें ।

3. प्रकृति से सम्बन्धित दो मित्रों में संवाद लिखिए ।

OR

Quels sont les saisons de l'année ? (Name the 4 seasons in French)

In a scrap book draw or paste a picture each of the four seasons of the year with its name and at least **five representative characteristics** of the season in French.

Par exemple:

Saison : L'été



i) Il fait chaud en été.

ii) On transpire trop! (We sweat a lot)

MATHS

(Any queries to be addressed to: sahil.bhardwaj@selaqui.org)

1. Make an interesting report on any one of the following:

- Mother Nature is a Math Geek
- Everything in the Universe is made of math – including you
- Mathematics in nature or Mathematics in the Natural World

Use of original photographs/ drawings, illustrations and creative use of materials is highly advised.

2. Worksheet questions on **Rational numbers and linear equations in one variable** to be completed in the worksheet itself as these multiple choice questions.

SCIENCE

(Any queries can be addressed to sahil.bhardwaj@selaqui.org)

Research project on biomimicry or biomimetics (Innovations inspired by nature)

Biomimicry, as defined by Janine Benyus, is "a new science that studies nature's models and then imitates or takes inspiration from these designs and processes to solve human problems".

- **Your holiday assignment is to think of an example where biomimicry or biomimetics can be used and present it in the form of a report.**
- **Please follow the steps given below:**

Step 1– Students are advised to visit the links given and read the articles and watch the videos available at those links.

Step 2 – Think of an example where biomimicry can be used and present it in the form

of a report. (Please do not plagiarize the content matter – Plagiarizing is copying information from the internet sources directly).

Step 3 – The report submitted must be in the following order:

- **Page 1** –
 - a. Title
 - b. Your full name
 - c. Submitted to Mr Sahil Bhardwaj
 - d. Department of Science
 - e. SelaQui International School
- **Page 2** – Abstract (*An **abstract** is a brief summary of a research article or any in-depth analysis of a particular subject and is often used to help the reader quickly ascertain the purpose of the research*) – in 5 to 10 lines).
- **Page 3** – Contents/Index
- **Page 4** – Acknowledgement (where one expresses his/her thanks to anyone who has helped the researcher in conducting his/her research in a successful way.
- **Page 5** – A quotation which might be relevant or irrelevant to the topic, the idea is that you write a quote which appeals to you the most.
- **Page 6** – Introduction
- **Page 7** – The rest of the research (do use pictures, diagrams, etcetera, to convey your idea well)

Useful Links:

1. Definition

<https://dictionary.cambridge.org/dictionary/english/biomimicry>

2. Video reference

https://www.ted.com/talks/janine_benyus_biomimicry_in_action/up-next

3. Wikipedia reference -

<https://en.wikipedia.org/wiki/Biomimetics>

4. <https://biomimicry.org/what-is-biomimicry/>

5. <http://www.gdrc.org/uem/anthill.html>

6. Further video references for the inquisitive ones.

<https://www.ted.com/topics/biomimicry>

Biomimicry example -

- <http://earthsky.org/earth/sunni-robertson-on-how-a-kingfisher-inspired-a-bullet-train>
- <https://asknature.org/idea/shinkansen-train/#.WwAPy9Iwi1s>

NOTE- Paste the report in the scrapbook.

The format of the report:

**Kingfisher inspired
bullet train**

A Report on Biomimicry
by
Your name comes here
ABC House
ADM NO.

**Submitted to
Mr Sahil Bhardwaj
Department of Science
SelaQui International School
Selaqui, Dehradun, India**

Abstract

The fastest train in the world at speeds of up to 200 miles per hour, Japan’s Shinkansen Bullet Train was a marvel of modern technology. But there was one major problem after its initial debut: noise. Each time the train emerged from the tunnel, it caused a change in air pressure that caused thunder-like sounds that were a nuisance from a quarter of a mile away. The train’s chief engineer, a bird-watcher, had an idea: taking inspiration from the shape of a bird’s beak to make it more aerodynamic. The resulting design was based on the narrow profile of a kingfisher’s beak, resulting in a quieter train that also consumes 15% less electricity and goes 10% faster than before.

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Acknowledgement

I thank my teacher, Mr ABC, for his boundless insights, and endless patience. I thank my friends, for bringing so much joy to my life. I thank my family, for all their love, support, and encouragement throughout my research.

“Do not go gentle into that good night,
Old age should burn and rave at close of day;
Rage, rage against the dying of the light”

**Chapter 1
Introduction**

Imagine whisking through towns at speeds over 100 miles an hour, walking only a few steps to public transportation, and ending up just blocks from your destination
Japan opened the world’s first high-speed rail line, between Tokyo and Osaka, in time for the 1964 Olympics. Shinkansen, or bullet trains, now travel at speeds up to 185 miles per hour over some 1,500 miles of rail lines across the country. Italy is credited with Europe’s first high-speed line, opening between Rome and Florence in 1978; today trains also race through Spain, Germany, Belgium, Britain and France at speeds up to 150 miles per hour or more — making most Amtrak lines resemble a Disneyland monorail in comparison. Taiwan has also climbed on board, and fast-growing China has plunged into high-speed rail in a big way. Trains hit 217 miles per hour along a new, 75-mile route between Beijing and Tianjin built for the 2008 Olympics, and maglev (magnetic levitation) trains blast by at 268 between Shanghai and its airport.

SST

(Any queries to be addressed to: sahil.kumar@selaqui.org)
(kanvi.nagpal@selaqui.org)

- ✓ Make a Collage on -"**Natural Resources**", collecting pictures, photographs and cuttings from magazines and newspapers to show how some of our natural resources have been damaged due to industrialization, increasing population, illegal trade etc.
- ✓ Write a short note below each picture describing how the resources have been damaged.
- ✓ Does India face real water scarcity? Justify by analysing the amount of availability of water, its uses in different areas of activity and its use leading to depletion and scarcity.



COMPUTER

Search on Internet, book and magazines about Energy Conservation. Make a presentation in Sway or MS PowerPoint on topic – **Go with Nature**. Apply formatting effects to make it attractive. Mail the MS PowerPoint Presentation to sandeep.pandey@selaqui.org and put a copy in a CD. Paste the CD in the scrapbook.

PHYSICAL EDUCATION

1. Choose any Two Adventure Sports of your choice.
2. Write Introduction of the Adventure Sport.
3. Advantages & Disadvantages of Adventure Sports (Five each)
4. Equipment required for Adventure sport.
5. Destinations of the adventure sports.