



MODY SCHOOL, LAKSHMANGARH
SUMMER HOLIDAY HOMEWORK
CLASS XI SCIENCE

"Empowering Wellness, Embracing Health: Fusing Art and Health Tech for Holistic Well-Being"

Health and wellness technologies have revolutionized the way individuals monitor and manage their physical and mental well-being. In today's fast-paced world, where maintaining a healthy lifestyle is paramount, these innovations play a crucial role in empowering individuals to take control of their health. Wearable devices, such as fitness trackers and smart watches, offer real-time insights into various health metrics, including heart rate, activity levels, and sleep patterns. These devices not only track physical activity but also provide personalized feedback and motivation to help users stay active and achieve their fitness goals.

Telemedicine platforms have also emerged as a valuable tool in promoting health and wellness, especially in remote or underserved areas. These platforms enable individuals to access healthcare services remotely, connecting them with healthcare professionals via video consultations, phone calls, or secure messaging.

Overall, health and wellness technologies continue to evolve and expand, offering innovative solutions to promote physical and mental well-being. By showcasing these devices and apps, we can inspire individuals to embrace technology as a tool for improving their health and living their best lives.

To address the issue, various tasks have been created to deal with it.

For these, Form group of 5 students (team members from your class of your choice). Each group has to present their project comprising all the 5 tasks mentioned below. Communicate with each other using any communicating media like Email, WhatsApp, Google Meet etc.

Following are the subject wise tasks for the student:

ENGLISH CORE

" Art therapy combined with modern health technologies enhance mental health treatment" Write an article in 150-200 words highlighting how can schools incorporate art and health technology to support students' overall well-being?

HINDI

परिवार में बुजुर्गों का होना मानसिक स्वास्थ्य को ठीक रखता है ,_विषय पर अपने साथियों से चर्चा करते हुए सबके विचारों को संकलित करके लिखिए।

PHYSICS

On the basis of the given survey make a project report how different types of health devices are useful to track physical activities. Write the name of each device and explain their functions with a suitable diagram.

CHEMISTRY

Identify the most efficient drug used for the five most common diseases based on this survey. Additionally, illustrate the chemical structure of the primary component of each (5 minimum) specific drug on a chart paper.

BIOLOGY

- * Enlist the organism that cause these health issues from kingdom Monera. Classify them in group which they belong like eubacteria, mycoplasma.
- * Collect the pictures from reliable resource.
- * Economic importance of Kingdom Monera.

MATHEMATICS

Data Collection and Analysis:

1. Use a fitness tracker or smart watch to collect data on your daily steps, heart rate, and sleep duration for one week.
Represent this data using bar graphs, line graphs, and pie charts.
Calculate the mean, median, and mode of each dataset.
2. Statistics and Probability:
Determine the probability of reaching a daily step goal (e.g., 10,000 steps) based on your one-week data.
Compare this probability with that of another student or an average person.
3. Linear Equations:
Create linear equations to model the relationship between hours of sleep and daily activity levels.
Interpret the slope and y-intercept in the context of health and wellness.
4. Trigonometry:
Analyze the angle of elevation or depression during outdoor runs or walks using trigonometric functions.
Calculate distances using trigonometric ratios based on GPS data from a fitness tracker.
5. Mathematical Modeling:
Develop a mathematical model to predict future activity levels based on past data.
Use this model to set realistic fitness goals.

INSTRUMENTAL TABLA

Classify the various indian musical instrumental and also brief your favorite musical instrument with pictures.

COMPUTER SCIENCE & INFORMATICS PRACTICES

Task 1: Prepare a questionnaire using 'Google Form' to conduct a survey around your neighborhood to identify a health related problem (for example – Mental Health in the Digital Age). Share this survey with each other using Google Docs. Form at least 10 questions in your questionnaire.

Task 2: Collect data from the survey and list down the main points. Learn more about the problems

you have identified using sources like the internet or newspapers etc. Discuss with your team members the problems as well as solutions and present it on a shared Google doc.

SUBJECT- DANCE (KATHAK)

Prepare your own choreography on either any one vandana or any semi classical dance form of India.