

Project Samples for Bhawishya

1. Solar Cooker

SDGs: No poverty, Zero hunger, Affordable and Clean Energy

STEAM solution: This project aims to make cooking available inexpensively. Families can save the cost of fuel for buying more food.

2. Wind Turbines

SDGs: Sustainable cities and communities

STEAM solution: The aim of this project is to generate renewable energy at home independently using the power of wind.

3. Soil Quality Test Kit

SDGs: Zero hunger

STEAM solution: This system checks the quality of the soil so that we can produce more food in places with good fertility.

4. Prosthetics with LEGO

SDGs: Good Health and Well Being for people

STEAM solution: This project aims to make prosthetic development accessible for everyone.

5. Electric Car

SDGs: Affordable and Clean Energy, Climate Change

STEAM solution: This model of car aims to make transportation eco-friendly.

6. Arduino for Agriculture

SDGs: Zero hunger

STEAM solution: This solution is useful to monitor temperature and humidity in farming.

7. Latrine Design

SDGs: Clean Water and Sanitation

STEAM solution: This project aims to demonstrate a model of latrine that is easily affordable in rural places.

8. Mini Hydropower model

SDGs: Affordable and Clean Energy

STEAM solution: This is a small scale model of hydropower that aims to make electricity generation easier in remote areas.

9. Eco-friendly factory model

SDGs: Industry, Innovation and Infrastructure

STEAM solution: This is a model of a factory that is eco-friendly.

10. Algae Fuel

SDGs: Zero Hunger , Good Health and Well Being for people

STEAM solution: This project aims to demonstrate how algae-fuel can be used as bio-fuel, biomass and pollution control.

11. Dust Suction Machine

SDGs: Good Health and Well Being for people

STEAM solution: This project is a vacuum cleaner for roads to make roads dust-free.

12. Household farming

SDGs: No poverty, Zero poverty, Responsible consumption and production

STEAM solution: This project demonstrates an easily affordable model for household farming.

13. Earthquake Alarm with arduino

SDGs: Sustainable Cities and Communities

STEAM solution: This is a model of an earthquake detection system. It detects basic shaking on a surface.

14. Apps for Awareness [with platform for kids like AppyPie,Tynker,...]

SDGs: Gender equality

STEAM solution: This is a prototype of an app that aims to address complaints against gender violence.

15. Short animation films [Scratch]

SDGs: Gender equality, Peace Justice and Strong Institutions

STEAM solution: This animation reflects a social message towards an ideal society.

16. Game with Purpose [Scratch]

SDGs: Quality education

STEAM solution: This is an instructional physics game. It is focused on gamification of learning.

17. Hazard Robot [arduino sensors]

SDGs: Industry,Innovation and Infrastructure, Good Health and well being for everyone

STEAM solution: This robot detects hazardous gases that are harmful for humans in hazardous environments.

18. Portal Website [Wix, Squarespace, Wordpress]

SDGs: Decent work and Economic Growth, Partnerships for Goals

STEAM solution: This is a portal site that shows the news regarding national economy and int'l collaborations.

19. TV Suggesting Solution

SDGs: Quality Education

STEAM solution: This is a mathematical solution for finding the size of TV using Pythagorean theorem.

20. Natural Gas

SDGs: Affordable and Clean Energy,Climate Change

STEAM solution:This project aims to make fossil fuel accessible for heating,cooking and electricity generation.

21. Ocean Layers

SDGs: Life under water

STEAM solution: This is a Jar Model of ocean layers that demonstrates the life under water.

22. SpaceCraft Designs

SDGs: Industry,Innovation and Infrastructure

STEAM solution: This project demonstrates a model of an spacecraft for space exploration.

23. Toys with Trash

SDGs: Responsible Consumption and Production

STEAM solution: This project demonstrates how toys can be made with reusable things that are easily available at home.

References:

Youtube Channels:

Instructables

-<https://www.youtube.com/user/InstructablesTV>

Make

- <https://www.youtube.com/user/makemagazine/featured>

Kids Make

- <https://www.youtube.com/channel/UCDdMryhO2umklbFW8GZA3-w>

The Q

- <https://www.youtube.com/channel/UCZdGJgHbmQqCvZaJCkqDRwg>

DrScrew

- <https://www.youtube.com/channel/UCFCIfxMvBA4h6MQ7v1b3VMQ>

Creative Channel

- <https://www.youtube.com/channel/UCFwdmgEXDNIEX8AzDYWXQEg>

Websites:

-<https://www.wikihow.com>

- <https://www.sciencebuddies.org/>

- <http://www.dangerouslymad.com/>

- <https://cms.math.ca/Education/mpsf/>

Digital Platforms:

- <https://scratch.mit.edu/>

- <https://www.appypie.com/>

- <https://www.squarespace.com/>

Books:

- STEAM Kids: 50+ Science / Technology / Engineering / Art / Math Hands-On Projects for Kids

- DIY Project Based Learning for Math and Science (Eye on Education)

- Maker Lab: 28 Super Cool Projects: Build * Invent * Create * Discover

- Make: Rockets: Down-to-Earth Rocket Science

