

# Innovations for Home



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Home is a place where the family spends good amount of time in a day. Innovations for Home, in the name itself, refers to the modernization of products, ideas, or technologies that are useful for a home enhancing everyday life. Home innovations improve lives in terms of safety, efficiency, productivity, convenience, cost-effectiveness, waste reduction, reusability, and whatnot.

For the sake of convenience, let us look at these home innovations in four categories, viz., (1) smart home devices, technologies, and automation, (2) energy-efficient appliances, (3) space-saving furniture as well as creative interior design solutions, and (4) health and wellness innovations.

## 1. Smart Homes

- **Smart Assistants & Automation:** You can convert your homes into voice-controlled, intelligent, and self-operating spaces. The Smart Home Automation Devices include Smart Hubs, Smart Thermostats, Smart Lights, Smart Plugs. These are commonly combined with Security Appliances. Typically, you instruct Smart Assistants using voice commands and mobile apps. Examples of Smart Assistants for Home Automation are Amazon Alexa, Google Assistant, Apple HomeKit & Siri, and Samsung SmartThings.
- **Smart Surveillance Cameras:** Provide 24/7 live streaming including cloud storage. They come with amazing features of AI-powered motion detection and facial recognition. Examples are Arlo Ultra, Google Nest Cam, and Ring Stick Up Cam.

- **Video Doorbells:** These come with two-way audio device specially designed for remote communication and offer advanced features like Motion-activated alerts and night vision. Examples are Ring Video Doorbell, Google Nest Doorbell, and Eufy Security Doorbell.
- **Smart Door Locks:** These are used to improve home security via Keyless entry through fingerprint, PIN, or smartphone app with remote access to lock/unlock doors. Examples are August Smart Lock, Yale Assure Lock, and Schlage Encode.
- **Smart Alarm Systems:** These come with real-time security, instant alerts, and automation. Integrated with cameras, motion sensors, and smart assistants. Types of Smart Sensors are Motion sensors, Door & Window Sensors, Glass Break Sensors, Smoke & Carbon Monoxide (CO) Detectors, Water Leak & Flood Sensors, Temperature & Humidity Sensors, and Air Quality Monitors. Examples are SimpliSafe, ADT Smart Home, and Abode Security.
- **AI-Powered Threat Detection:** This technology will improve home safety and security simply by calculating real-time data from cameras, sensors and also detect potential threats with the help of alarms. These are completely AI-driven systems, monitor unusual activity, and perfectly distinguish the identity of objects, people, and animals. Examples are Deep Sentinel, Wyze Cam AI Detection.

At times, you also integrate these systems as an Integrated Security Hub.



## 2. Energy-efficient appliances

Using smartphone apps, you can monitor and control appliances remotely, lower power consumption, reduce costs. You can set schedules or voice commands. Besides appliances, you can also manage AI assistants. Such apps send notifications related to filter changes, power usage, or malfunctions so you can prevent hazards. Commonly connected Appliances for home are...

- Smart Refrigerators (Samsung Family Hub) with touchscreens and food tracking.
- Smart Ovens, Microwaves & Air Fryers (June Oven, Tovala) with recipe automation.
- Water-Saving Dishwashers, Smart Washing Machines with AI load detection.
- Touchless Faucets with motion sensors.
- Smart Coffee makers, Smart Air Conditioners & Heaters, and Smart Vacuum Cleaners & Mops.
- Robot Vacuums & Mops (Roomba, Roborock, Narwal).
- Self-Cleaning Toilets with built-in bidets.
- Air Purifiers with Smart Sensors for Indoor Air Quality Control.
- Smart Lawn Mowers (Husqvarna Automower) for automated yard care.



There are Eco-Friendly Innovations for home that will decrease energy consumption, reduce environmental impact, and lower utility bills. Water usage monitoring and leak prevention helps conserve water.

Typical sustainable and eco-friendly Smart Home Innovations are Smart Thermostats, Smart Lighting, Solar Energy & Battery Storage, Smart Water Conservation, Smart Power Strips & Plugs and Smart Waste & Composting.

- **Solar Energy Integration:** Decreases electricity bills, carbon footprint and optimises the consumption of energy storage and efficiency. These include High-Efficiency Solar Panels, Smart Solar Inverters, Smart Solar Batteries, Smart Energy Monitors, and Smart Home & Solar Integration.
- **Water Conservation Technologies:** These technologies are used to lower the water waste, reduce utility bills and improve the lifestyle. Smart leak detectors are used to prevent water damage or detect leakage. Smart irrigation systems are used to decrease the outdoor water usage with watering schedules depending upon the weather conditions. Greywater recycling systems are used to reuse the water.
- **Green Building Materials:** Manufactured from recycled, renewable, or low-impact resources. They are low-cost and provide insulation. Eco-friendly Bamboo Flooring is an alternative to hardwood. Cork Flooring, VOC Paints and Recycled Materials using Wood, Bricks, and steel come under this category.

### 3. Space-saving furniture and creative interior design

Sky is the limit to this category of innovations. With urbanization, space became pretty expensive. So, creative interior designers keep innovating on smaller sized furniture, multi-functional units, space-saving ideas transforming furniture into different things for different occasions. General categories are...

- Foldable Furniture (Murphy beds, expandable tables).
- Convertible Workspaces (desks that transform into shelves).
- Hidden Storage Solutions (under-floor storage, wall beds).

In conclusion, Home Innovations improve our quality of life, save money, and protect the environment. Home automation technologies improve the smartness in the livelihood of our homes.

### 4. Health and wellness innovations

Smart Air Purifiers, Smart beds, and Home fitness tech are some home innovations that support health and wellness. Smart Air Purifiers remove toxins, pollutants, bad bacteria, allergens, and dust particles from the water.

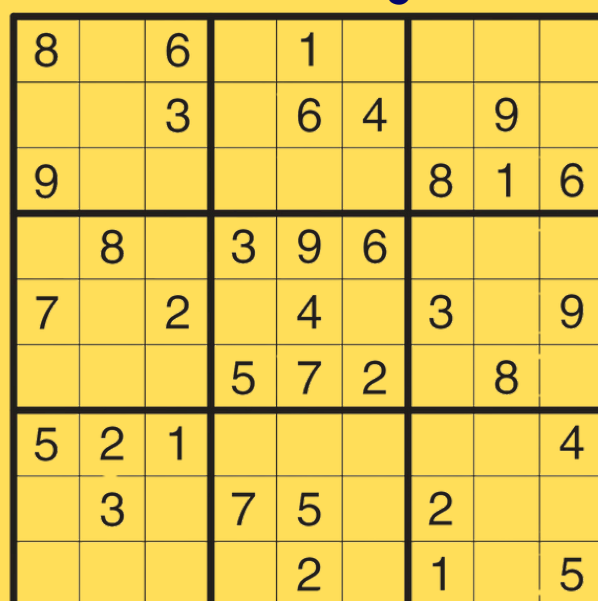
- Smart Beds (Sleep Number, Eight Sleep) that adjust firmness and temperature are used for improving the quality of sleep. Circadian Rhythm Lighting also improve sleep and well-being.
- Fitness plays an important role in this. Home fitness tech like Peloton, Mirror are devices that give support to exercise routines.
- Air Quality Monitors to detect pollutants and allergens.

### Word Search 2503 - Planets



SOLAR SYSTEM, STARS, PLUTO, VENUS, NEPTUNE, URANUS, MARS, MOON, MERCURY, SUN, JUPITER, SATURN, EARTH

### Sudoku Challenge 2503



Solutions are on Inside Back Cover.