Green City English Medium School

CAREER LANDING : TECHNOLOGY, ECONOMICS & MANAGEMENT

BY

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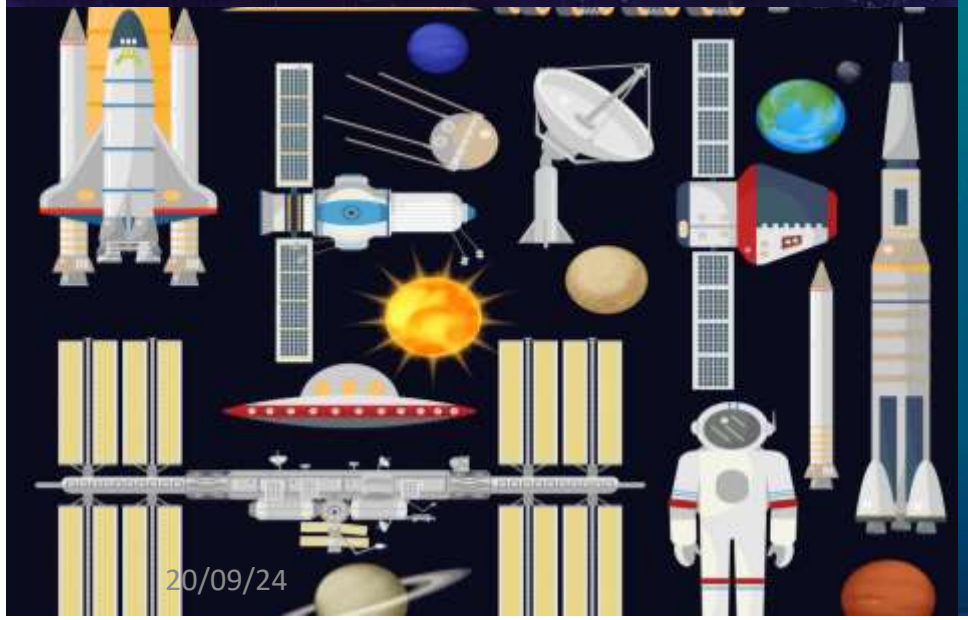
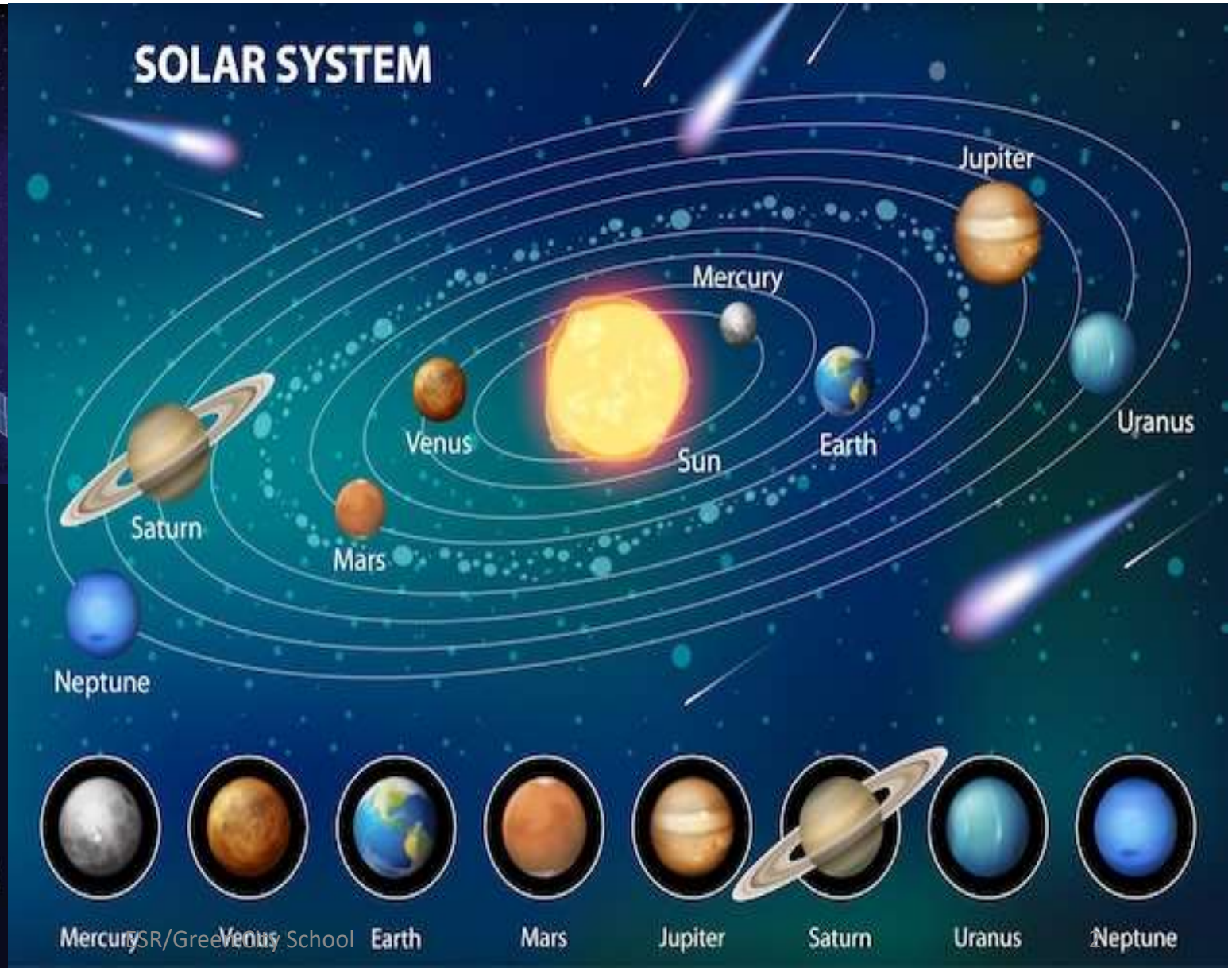
TECHNOLOGY & SCIENCE





Technology And Science

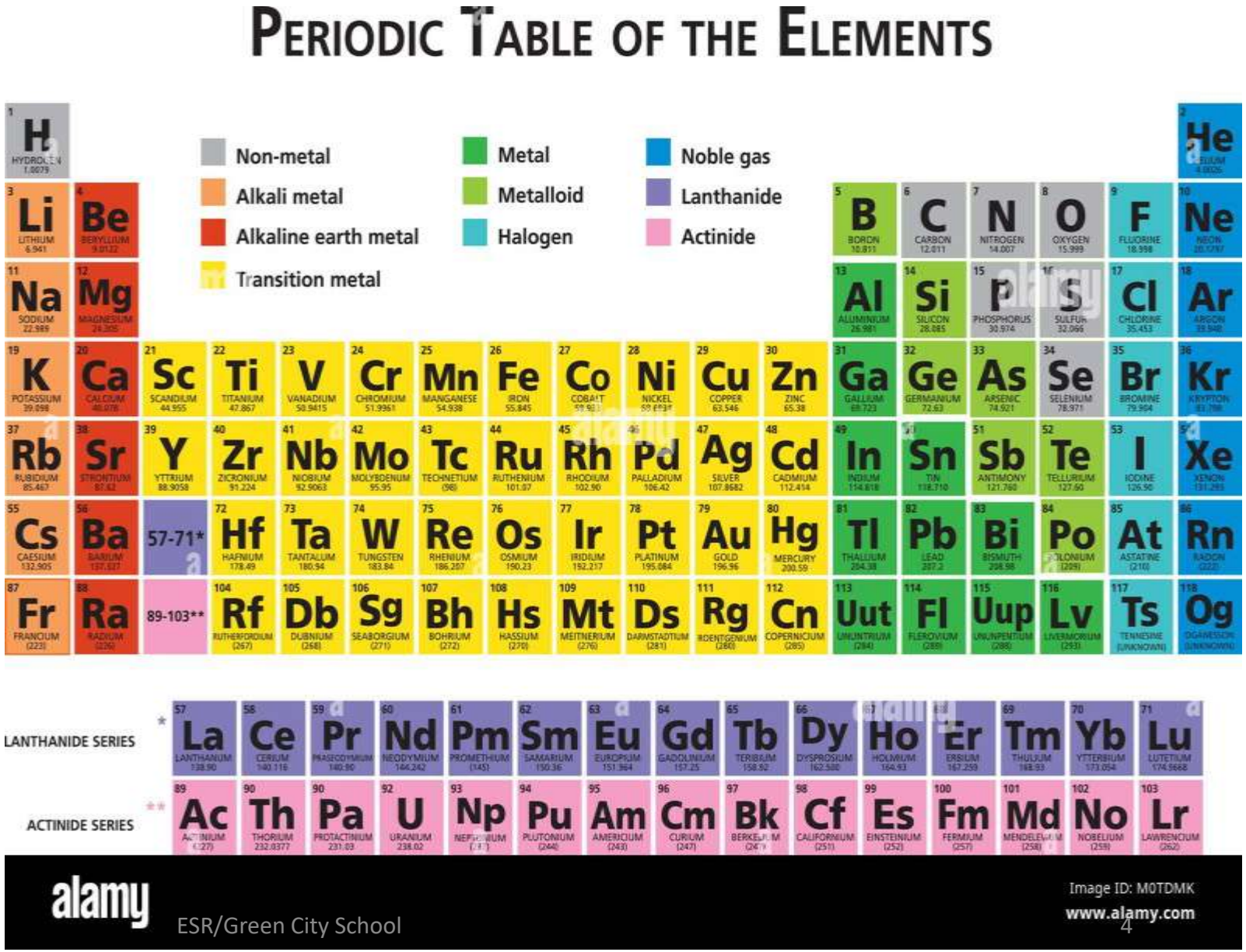
- Welcome to our presentation on the fascinating world of Space Technology and Science

- How various Components play a crucial role in Rockets and Satellite manufacturing and exploring the Space & Planets

- **Materials**
- **Chemicals**
- **Electronics**
- **Solar &Electricity**
- **Telecommunications**
- **Software & AI**
- **Fuels**
- **Astronomy**
- **Project Management**
- **Economics**
- **Conclusion**

Materials in Technology

- Overview: Space-grade materials are essential for withstanding extreme conditions.
- Examples: Aluminium alloys, titanium, carbon fiber composites, and heat-resistant ceramics.
- Importance: Lightweight, durable, and capable of withstanding high temperatures and pressures.



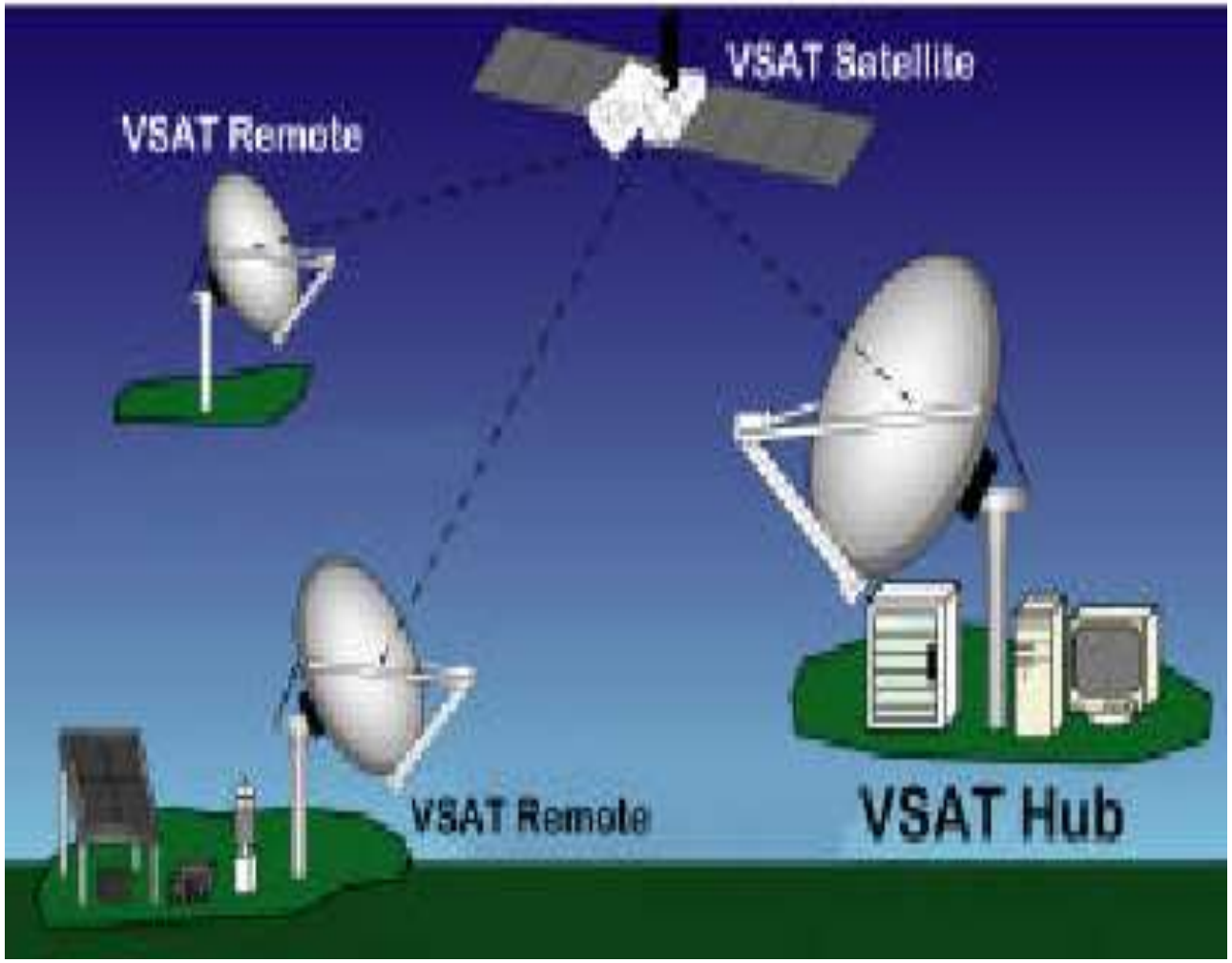
Chemicals in Technology

- Overview : Chemicals Are used in rocket propellants, coolants, and various manufacturing processes.
- Examples: Liquid oxygen, liquid hydrogen, hydrazine, and nitrogen tetroxide.
- Importance: Efficiently generate thrust, control rocket maneuvers, and provide cooling.

Electronics in Technology

- Overview: Advanced electronics enable communication, navigation, and control systems.
- Examples: Microprocessors, sensors, and integrated circuits.
- Importance: Ensure precise control, data acquisition, and reliable operation in extreme conditions.

Telecommunications in Technology



- Overview: Communication systems are crucial for relaying data to and from satellites.
- Examples: Antennas, transmitters, receivers, and satellites.
- Importance: Enable long-distance communication, data transmission, and remote sensing.

Software in Technology

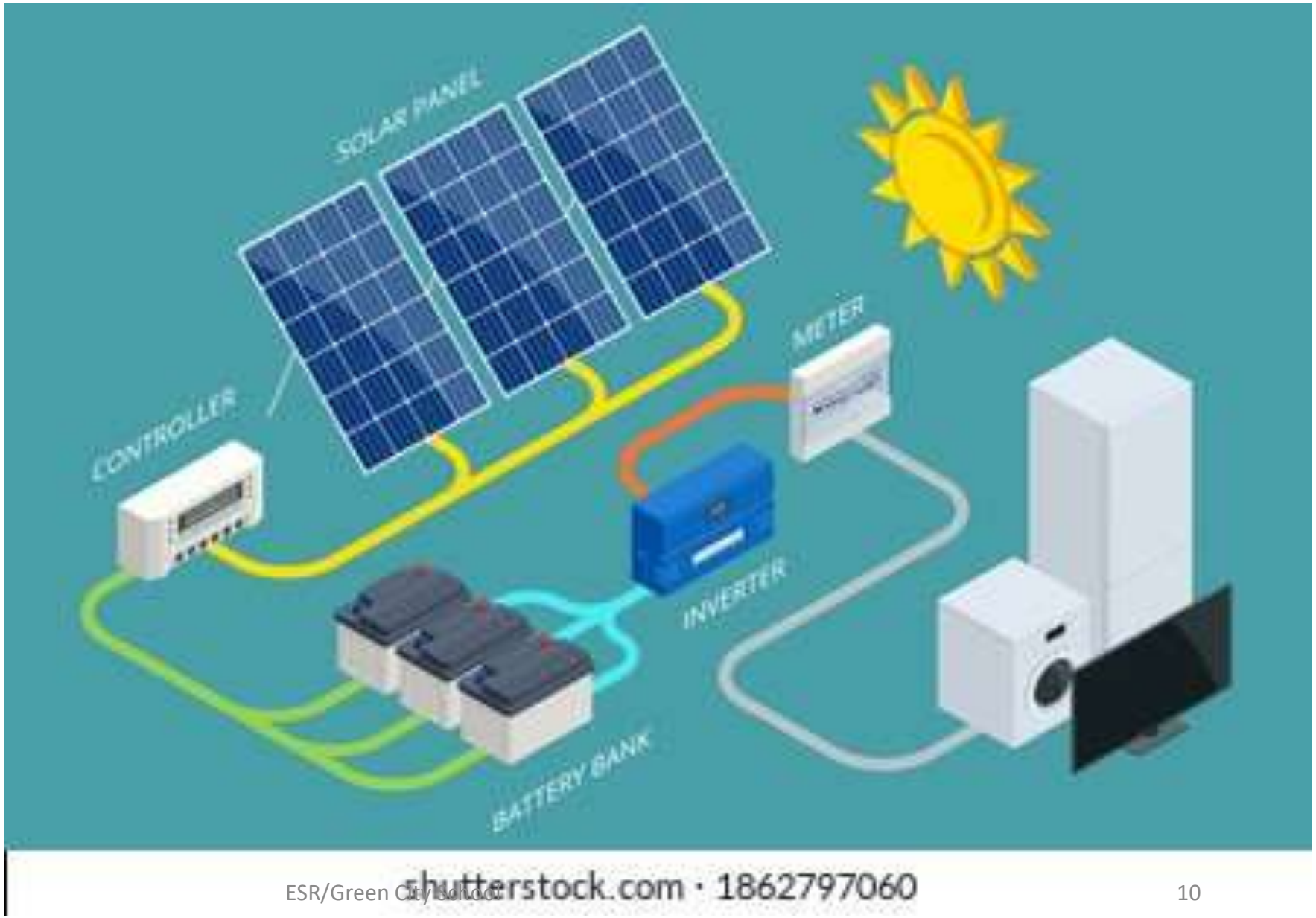
- Overview: Software plays a vital role in controlling and operating space systems.
- Examples: Flight control software, navigation algorithms, data analysis and AI/ML tools.
- Importance: Enables precise trajectory calculations, system monitoring, and data processing.

Fuels in Technology

- Overview: Rocket fuels provide the necessary energy for space missions.
- Examples: Liquid and solid propellants, including kerosene, liquid oxygen, and ammonium perchlorate.
- Importance: Efficiently generate thrust to overcome Earth's gravity and propel spacecraft.

Solar Power in Technology

- Overview : Solar power provides electricity to the space craft
- Examples: Solar Cells and panels
- Importance: Electricity is important for the life of the space craft



Project Management

Project Management is the Process of :

1. Supervising the work of a team
2. To achieve all project goals
3. Within the given constraints

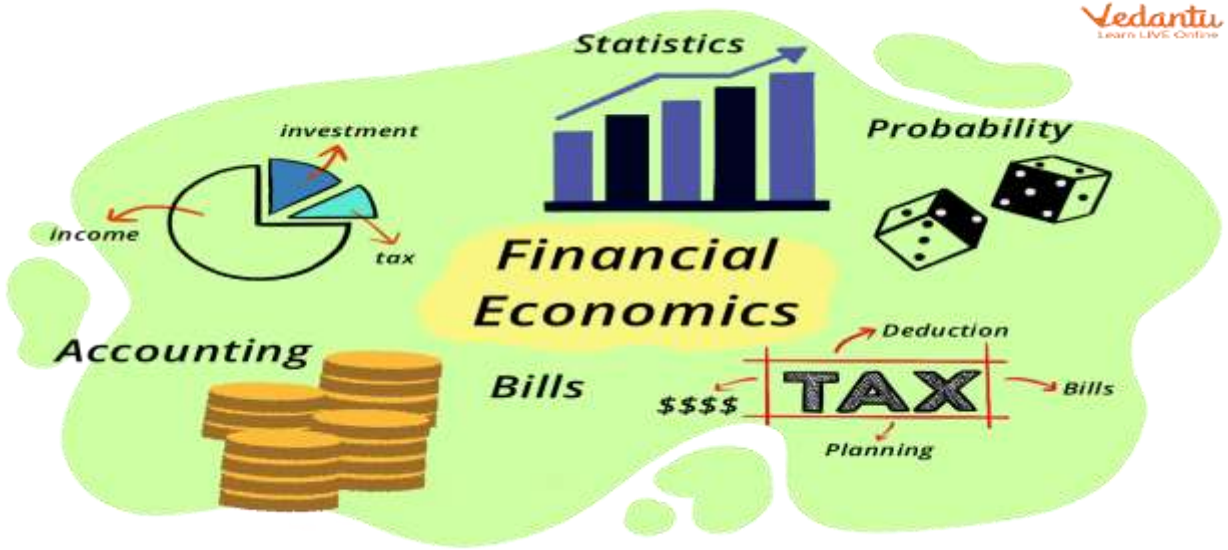
Constraints are :

1. Scope
2. Time
3. Budget.

Economics & Finance

Economics :

- Studies the production of Agri, Manufacturing and Services
- Scarcity of wealth and resources, including the government's approach to money and spending.



Finance Management:

- Focuses on the management of money, including how individuals and companies manage their money
- Finance includes areas such as personal finance, corporate finance, public finance, Project finance, Financial systems and global finance

Astronomy and Space Exploration

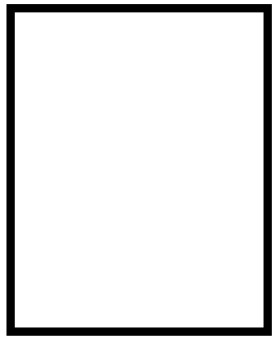
- Astronomy is the science for exploring the planets and space
- Space Technology helps to explore the other planets and galaxy
- Rockets, Satellites and Telescopes helps to explore the Space
- Mathematics, Science and Engineering

Conclusion

- **Recap:** We explored the role of materials, chemicals, electronics, telecommunications, software, and fuels in technology.
- **Importance:** Each component contributes to the success of manufacturing and services for Economic Growth.
- **Inspire:** Encourage students and teachers to explore careers and research opportunities in technology & economics

Q&A

I Encourage the Students and Teachers to ask questions and engage in a discussion.



THANK YOU FOR YOUR

LISTENING & LEARNING

Dr. ESR

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