

TAKE THE ENGINEERING CHALLENGE!



Engineers take ideas and turn them into reality, using science, maths and imagination. Engineers use their problem-solving skills to improve the world around us. There are many different types, or disciplines, of engineering.

Take the Engineering Challenge and match the engineering types described below with the images in the picture above!

Write the corresponding number or numbers in the circles on the picture. (Some of the images are examples of more than one type of engineering.) The first one is done for you.

- 1 Aeronautical** engineers design and build flying machines like airplanes, rockets, space ships and satellites.
- 2 Mechanical** engineers invent and design all kinds of machines, such as robots, engines, vehicles, and rollercoasters.
- 3 Civil & Structural** engineers design the structures people live and work in - like houses, factories and office blocks - and build the structures we use for travel - roads, railways, bridges and canals.
- 4 Biomedical** develop technologies and equipment to help save people's lives and improve their health, such as artificial limbs, contact lenses, and lasers for eye surgery.
- 5 Chemical** engineers develop processes that are used to make everyday products like food, drink, cosmetics, drugs, and plastics.
- 6 Electronic** engineers design the electrical and electronic equipment we use every day, from mobile phones to microwaves. They also develop cutting-edge gadgets such as virtual reality headsets.
- 7 Electrical** engineers develop all kinds of systems and products that collect, distribute and use electricity, from power plants to building wiring to household appliances. They also develop renewable energy technologies like wind turbines and solar cells.
- 8 Biosystems & Agricultural** engineers develop new ways to grow and deliver high-quality, safe food to consumers.
- 9 Computer & Software** engineers design hardware and software for computers and mobile devices, such as MP3 players, games consoles, and microchips. They also develop smartphone apps, security software, and operating systems.

For more information about engineering, visit www.steps.ie or www.engineersweek.ie