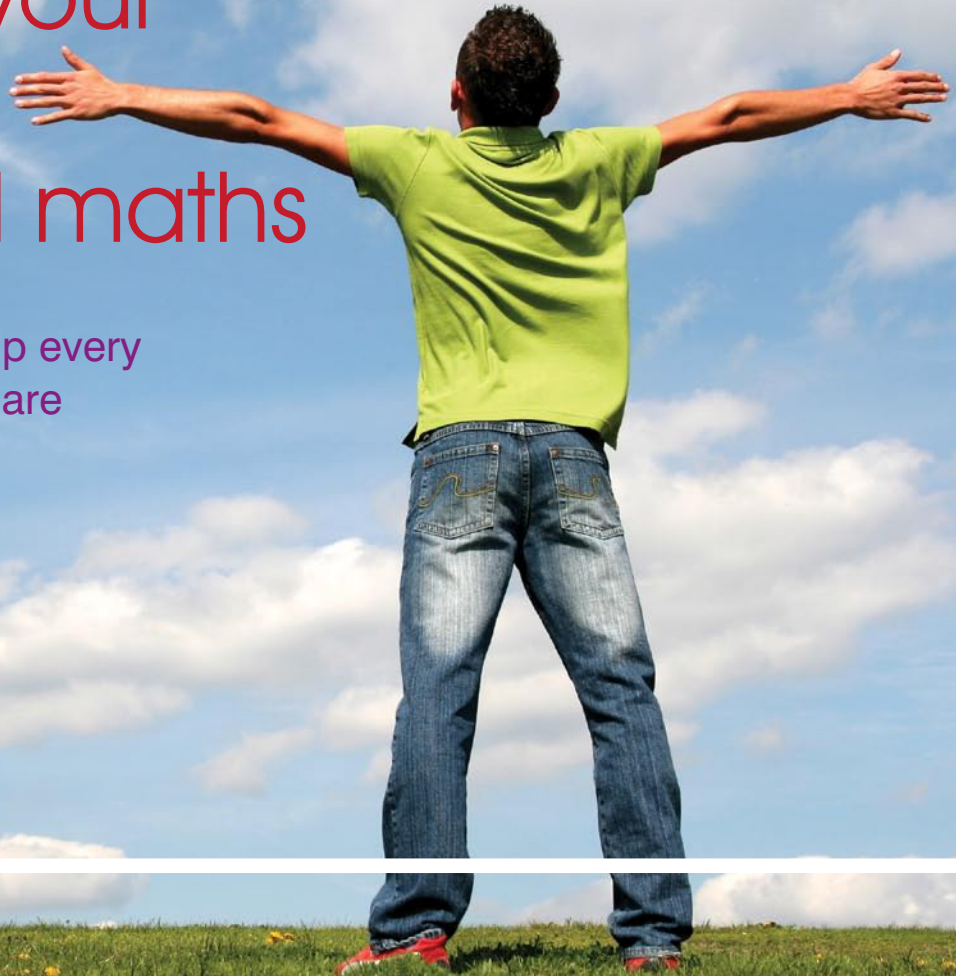


# Wake up to your future with science and maths

From the second you wake up every  
morning, science and maths are  
everywhere around you.  
Take a look...

future  
morph™  
become someone



# How do science and maths contribute to our world?

07:00

7:00  
Who wakes  
you up?

Electronic engineers,  
Sound engineers,  
Recording  
technologists



7:15  
Who provides  
your toiletries?

Cosmetic scientists,  
Industrial scientists,  
Chemists,  
Microbiologists,  
Perfumers



7:30  
Who makes  
your clothes?

Textile designers,  
Fashion & footwear  
designers, Fashion  
technologists,  
Textile dyers



8:00

Who produces your breakfast?

Farmers,  
Food scientists  
and technologists,  
Nutritionists



8:30

Who takes you to school?



Design & development engineers,  
Petrochemical engineers, Automotive electricians,  
Environmental scientists, Mechanics,  
Materials scientists

9:00

Who built your school?

Architects,  
Surveyors,  
Structural engineers,  
Electricians,  
Plumbers,  
Carpenters



10:00

Who assists your learning?



Teachers, Journalists,  
Film producers,  
Software designers,  
Publishers, Writers



12:00  
Who helps you  
exercise?

Personal trainers,  
Physiotherapists,  
Sports psychologists



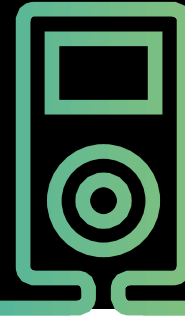
4:00  
Who keeps you  
healthy?

Doctors, Nurses,  
Dentists,  
Pharmacists,  
Biomedical  
scientists



6:00  
Who contributes  
to your spare  
time?

Computer game  
developers, Music  
technologists,  
Product designers,  
Sound & lighting  
technicians



**Science and maths  
are everywhere in  
our world.**

## YOUR future world is in YOUR hands

Our world is constantly changing and evolving. There has been a revolution in the way information is stored and accessed, via the web. Due to the demands we make on the planet's resources and the environment, we need to develop new or alternative solutions for nearly everything we do from fuel production to waste disposal. By studying science and maths you could have a fascinating and crucial role to play by:



- Designing realistic alternative energy sources
- Developing new modes of communication
- Helping people to live more sustainably
- Producing safe, environmentally friendly and healthy products, from aeroplanes to chocolate bars
- Working with farmers to improve crop production
- Protecting the environment and combating the effects of climate change by reducing carbon dioxide emissions and limiting global warming
- Finding alternative methods for supplying clean water
- Discovering new medicines and vaccines for treating killer diseases, techniques for surgery or gene therapy
- And... there is still space to explore!

**Will the next scientific breakthrough be your idea?**

## Science and maths are YOUR keys to the future

Whichever career path you decide is best for you, you will keep your options open by studying science and maths. These subjects will give you an excellent foundation and enable you to go on to study them or other subjects further, including engineering, electronics and environmental science. Also, they provide you with the skills needed for all sorts of careers such as law, accountancy or business.



**Grow your future: Biology** is the science that deals with the life processes and habits of all living things, from tiny single cells to whole organisms and how they interact with each other and with their environment. It includes the study of plants (botany), humans (physiology and anatomy) and animals (zoology), genetics and microbiology.



**Expand your horizons: Chemistry** examines materials in terms of their structure, their physical and chemical properties, how they interact and what role they play in the living world.



**Launch your life: Physics** is the science of matter and its motion, as well as space and time – it deals with concepts such as force, energy, mass, and charge, and helps us understand how the world around us behaves.



**Shape your prospects: Maths** is part of just about everything; from calculation, measurement and the study of shapes and motion of objects to the science of patterns for example in numbers, space or computers. Maths is used in most fields including science, medicine, business and the social sciences.

## What will YOU do?

From studying science and maths students can progress to well paid and respected jobs in various professions, such as:



- Clinical psychology
- Sports science
- Engineering
- Medicine
- Dentistry
- Music technology
- Animal health

The skills you gain from studying science and maths open up more opportunities than you may have realised in other areas too.

For example:



- Finance
- Teaching
- Marketing
- Patent law
- Photography
- Art restoration
- Media and film production
- Food technology



...all use or build on the skills gained from studying science and maths to some extent.

## Back to YOUR future: GCSEs

GCSEs enable you to progress either directly to employment or to further education. Your opportunities for further study will depend on how well you do at GCSE.

Your teachers will be able to inform you of what options are available and will help you decide what is best for you. However, you must take either:

### 1. Core Science GCSE

In addition to **Core Science** you should also take:

- **Additional General Science GCSE** or
- **Additional Applied Science GCSE**

Or:

### 2. **Biology, Chemistry and Physics GCSEs** (as three separate GCSEs)

Or:

### 3. **Applied Science Double Award** (worth two GCSEs)

- If you think you may want to study one or more sciences after your GCSEs, or to pursue a career that is in any way

science related, it is advisable not to take *only* **Core Science** as this could limit your options.

- A good grade in **Maths GCSE** is also important if you want to study any of the sciences at a higher level.

There are many routes available to you after you have finished your GCSEs, whether you decide to continue in education or begin working. But remember: **taking science and maths will open up a variety of career options for your future providing you with skills that will make you very employable.**

**For more information about careers using science and maths go to:**

[www.futuremorph.org](http://www.futuremorph.org)

FutureMorph links directly to useful websites of relevant organisations who may be able to answer individual queries. Don't forget to talk to your teachers and careers advisors too, or try your public library.