21 SERIOUSLY COOL CAREERS
THAT NEED MATHS
21 SERIOUSLY COOL CAREERS

1. ANIMATOR
2. SPECIAL EFFECTS DIRECTOR
3. COMPUTER SCIENTIST
4. COMPUTER GAMES DESIGNER
5. FORENSIC SCIENTIST
6. ASTRONAUT
7. CRYPTANALYST
8. STATISTICIAN
9. ARCHITECT
10. DOCTOR
11. FASHION DESIGNER
12. ASTRONOMER
13. SCIENCE JOURNALIST
14. METEOROLOGIST
15. ENVIRONMENTAL CONSULTANT
16. STOCKBROKER
17. INTERIOR DESIGNER
18. CAR DESIGNER
19. POLITICAL SCIENTIST
20. PETROLEUM ENGINEER
21. AERONAUTICAL ENGINEER

THAT NEED MATHS
As well as cool jobs at Disney and Pixar, animators can work in computer and console game development, television programming, broadband internet animation, broadcast and web advertising, education, research, and military and corporate training.

An Animator uses linear algebra to show the way that an object is rotated and shifted and made larger and smaller.
Whether it’s Inception or Sesame Street, special effects are used to give that WOW factor to a lot of what you watch on TV and at the cinema.

Mathematics provides the language for expressing physical phenomena and their interactions. Powerful computing equipment, numerical methods and algorithms are used to make most of the spectacular feats in the visual effects industry.
Whether it’s the millionaire behind Facebook, the secretive geniuses behind Google or the cool creative types at Apple, maths will be needed by those wanting to be part of creating the next generation of gadgets and apps.

Computer scientists use mathematics as they span a range of topics from theoretical studies of algorithms, and the computation of implementing computing systems in hardware and software.
Whether it’s Little Big Planet, Mario, or virtual sports, kids and grown-ups love playing computer games. To build that one game, with all it’s user generated levels, requires some serious maths skills.

Every game designer needs to have a good grasp of game theory – a branch of applied mathematics. Aspiring video game programmers should also study trigonometry, physics, and calculus.
CSI has made cutting up dead bodies a cool career choice! So why do Forensic Scientists need maths?

Forensic scientists use maths principles to figure out the location of the victim when the blood was shed and even the type of weapon or impact that caused the victim’s injury.
Even those who have no desire to travel into space will agree that being an astronaut is still a cool job.

Astronauts use maths in order to make precise mathematical calculations, from how the spacecraft leaves Earth’s atmosphere to how the astronauts pilot the craft.
You may have read a story or two about code breaking or even enjoy making up codes yourself.

Cryptanalysts use maths to among other things; follow mathematical theorems and formulas, encode and encrypt systems and databases and devise systems for companies to help keep hackers out and to protect the company and consumer.
From the daily news headlines to fact filled books like the Guinness Book of World Records, statistics rule the world!

Statisticians apply their mathematical and statistical knowledge to the design of surveys and experiments; the collection, processing, and analysis of data; and the interpretation of the experiment and survey results.
Architects are trained in the planning, design and oversight of the construction of buildings. With buildings getting taller and taller, as well as the challenges of housing the world’s growing population, being an architect is certainly a cool and important career choice.

Mathematics is needed to analyse and calculate structural problems in order to engineer a solution that will assure that a structure will remain standing and stable.
There’s more to medicine than just knowing the parts of the body.

Physicians use statistics and probability to interpret tests results. When a patient is treated for an illness, the probability is used to determine which type of treatment to use, if any.
Fashion design is often seen as a glamorous career but it’s also a practical career which uses plenty of maths.

Fashion designers use area, perimeter and diameter as well as mathematical algorithms to help create designs as well as to calculate the amount and cost of fabric required.
If there is life on other planets, it’s likely that astronomers will be the people to find it first.

Astronomers use maths to calculate the paths of stars, planets and other objects in space as well as to filter sound waves from outer space as they listen out for signals from other life forms!
Science journalists translate complex ideas and discoveries that involve science into news articles that non-scientists can understand.

Science journalists need a strong foundation in maths in order to fully understand the science they are reporting on so they can explain it in a simple way to their audience.

13. SCIENCE JOURNALIST
Everybody loves to talk about the weather. The science of weather forecasting uses plenty of maths.

Maths is a central part of understanding the physics of the atmosphere. Meteorologists use mathematical variables and calculus to predict how different weather elements will interact with each other, and what weather will result.
Environmental consultants study the sources and consequences of pollution and develop solutions to minimise pollution.

Environmental consultants use mathematical models to calculate the impact of pollution and construction projects on the environment. They help to design energy efficient machines.
Stockbrokers invest in the stock market for individuals or corporations. They gather information from clients about their needs and financial ability, and then determine the best investments for them.

A stockbroker uses maths to work out whether particular stocks and mutual funds are a good investment and advanced calculations when helping a client plan for retirement, factoring in current assets, expected returns, inflation, taxes, and living expenses.
Interior designers design our living and working spaces by taking into account the needs and resources of the clients.

Interior designers use area and volume calculations to lay out fixtures and fittings. They also use mathematical calculations to make sure their designs comply with building regulations.
Car designers use design principles to create practical and innovative new designs for everything from the family car, through to cool racing cars and cars of the future.

Car designers use geometry to design cars that both look good and perform well. They work with engineers using calculus to design ever more powerful and economical engines.
Political scientists study the structure of government and seek solutions to issues such as welfare, immigration and foreign policy.

Political scientists use math and statistics to predict the probability of political events occurring. They also use regression analysis and other mathematical formulae to work out how to allocate resources to best benefit all parties.
Petroleum engineers search the world for reservoirs containing oil or natural gas, then work with geologists and other specialists to work out how to extract this dwindling resource.

Petroleum engineers use mathematical computer modeling, statistics and probability analysis, to enhance oil recovery.
Aeronautical engineers design and build air and space craft. These are the real “rocket scientists!”

Aeronautical engineers use mathematical equations to work out how air moves over the parts of the craft and to calculate how the craft and its components move and accelerate.
SERIOUSLY COOL SOURCES

http://www.wikipedia.com
http://www.answers.com
http://weusemath.org/
http://www.dreambox.com/blog/7-dream-jobs-that-require-math
http://www.mathscareers.org.uk
http://plus.maths.org/content/Career
SERIOUSLY COOL PHOTOS

Cover Photo & Animator http://www.flickr.com/photos/87919923@N00/2322720389/
Special Effects Director http://www.flickr.com/photos/8087836@N05/1312189857/
Computer Scientist http://www.flickr.com/photos/25064547@N06/2568436053/
Computer Games Designer http://www.flickr.com/photos/21671782@N03/4520938592/
Forensic Scientist http://www.flickr.com/photos/22715327@N06/2972228779/
Astronaut http://www.flickr.com/photos/48152057@N00/3813345704/
Cryptanalyst http://www.flickr.com/photos/lwr/839316075/
Statistician http://www.flickr.com/photos/22177648@N06/2136954043/
Architect http://www.flickr.com/photos/14838182@N00/4594489291/
Doctor http://www.flickr.com/photos/mallix/3611512334/
Fashion Designer http://www.flickr.com/photos/dos-chin/474076652/
Astronomer http://www.flickr.com/photos/28634332@N05/3765799902/in/set-72157606205297786/
Science Journalist http://www.flickr.com/photos/28634332@N05/3765799902/sizes/o/
Meteorologist http://www.flickr.com/photos/taminator/353301838/sizes/o/
Environmental Consultant http://www.flickr.com/photos/shutterhack/2773618786/sizes/z/
Stockbroker http://www.flickr.com/photos/russloar/2484507721/
Interior Designer http://www.flickr.com/photos/jinkazamah/2607335084/sizes/z/
Car Designer http://www.leedownham.com
Political Scientist http://www.flickr.com/photos/jmtimages/2287332094/
Petroleum Engineer http://www.flickr.com/photos/bpamerica/4691529582/
Aeronautical Engineer http://www.flickr.com/photos/amylloyd/4811244553/sizes/l/

www.mathsinsider.com