STEM quiz answers

- 1. What does STEM stand for? Science, Technology, Engineering and Maths.
- 2. True or False: This is a real STEM job:

Legoland Designer Sports statistician Spotify engineer Professional hacker All true

- 3. How many people work in STEM in the UK? 5.8 million people, 20% of the workforce. 72% of UK businesses rely on people with STEM skills.
- 4. Where is Europe's research centre for nuclear fusion?

Switzerland
France
Germany
UK (Oxfordshire) Culham Centre for Fusion Energy

- 5. If I do a science degree or A levels, do I have to be a scientist? No lots of industries want STEM graduates and you can convert your degree to go into Law for example or technical sales.
- 6. Do I need a university degree to work in STEM? No you can go through an apprenticeship scheme.
- 7. How much more do STEM graduates earn in their lifetime in comparison to non-graduates?

£50,000 £100,000 150,000 £250,000

Graduates tend to earn £160,000 more than non-graduates; whereas STEM graduates earn a whopping £250,000 more in their lifetime. Chemistry and Physics graduates will earn on average over 30% more during their working lifetimes than other A level holders.

New study: http://www.telegraph.co.uk/finance/jobs/11008228/The-value-of-a-degree-500000-over-your-career.html

8. True or False: STEM careers aren't for creative people

False! Examples:

<u>http://www.rainbowwinters.com/home2.html</u> - they have developed clothing that reacts to different stimuli such as water or light.

Using electronics in textiles, previously worn by Katy Perry. http://cutecircuit.com/

Research and development at Cadbury's to make a new chocolate!

Designing an interesting building/stadium/etc (engineering) – one example is the London Olympics stadium which made use of wasteland

Developing a brand new type of camera for surgery, based on a snake http://www.theguardian.com/science/2007/dec/29/medicalresearch

Making energy from waste

Special effects for films

The Angel of the North

Figuring out how old a painting is with chemistry

A robot bear that cares for the elderly http://news.bbc.co.uk/1/hi/sci/tech/1829021.stm

9. How many types of STEM professionals are involved in making sure your water is clean? Nine

From Future Morph website:

- A <u>water treatment worker</u> adds chemicals and microbes to water and monitors it to make sure it's safe for people to drink
- A <u>civil engineer/water engineer</u> managing water supply and drainage networks and installing flood barriers
- A <u>geoscientist</u> –searching for new water supplies and assessing safety and impact of work done by Civil Engineers
- A <u>geotechnician</u> obtaining and analyzing samples and interpreting data to support the work of geoscientists
- A chemist developing ways to keep water supplies clean
- A <u>meteorologist</u> measuring and predicting the weather so people are prepared for floods or droughts
- A <u>water quality scientist</u> maintaining the quality of water by testing and comparing samples
- An <u>environmental consultant</u> identifying any sources of contamination which affect water supplies
- A waste management officer managing waste so that it does not contaminate water supplies