

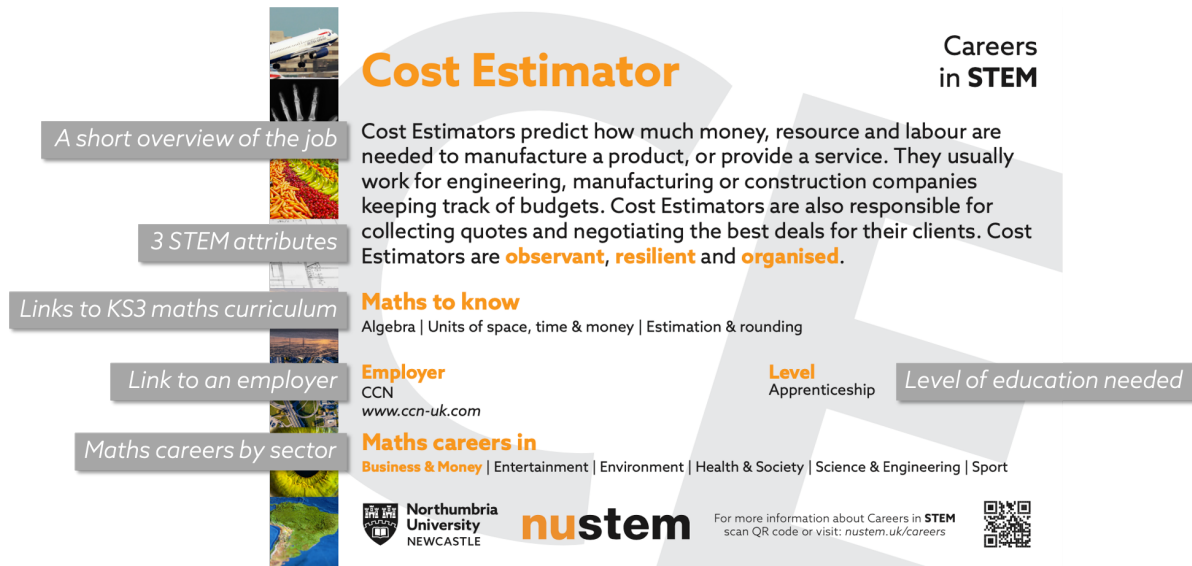
KS3 Careers in STEM Postcards: Careers in Maths

Supporting information for teachers & educators

With the implementation of the new Gatsby careers benchmarks¹, teachers are expected to embed careers information in the classroom (Benchmark 4). Our KS3 careers in STEM postcards are an easy gateway to introduce your students to careers and local employers. The cards are available in both physical and digital formats making them easy to incorporate your own lessons, display in the classroom or give out to students.

Anatomy of the postcard

Each postcard contains:



Why maths?

Mathematics has played a fundamental role in human evolution and the development of society as we know it. Yet, the usefulness of mathematical skills in a wide variety of careers is still poorly understood by students. These postcards will enable teachers to showcase the importance of maths during their lessons and engage in earlier conversations with students about their future subject options in school.

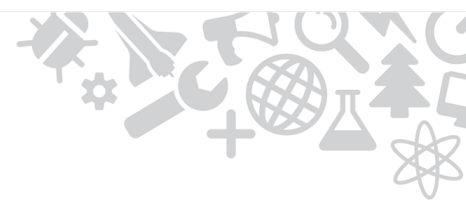
Why STEM attributes?

Students typically have limited knowledge of careers in STEM, and may find it difficult to picture themselves doing STEM jobs. Showcasing attributes helps a wide range of students identify with a job and the characteristics needed for it. Often the students will already possess these attributes and characteristics. Our STEM attributes article² will provide you with more information on this topic.

¹ <https://www.gatsby.org.uk/education/focus-areas/good-career-guidance>

² <https://nustem.uk/resource/stem-attributes/>





The 15 STEM attributes

We selected these based on earlier work by the WISE Campaign and the Royal Academy of Engineering:

Observant

I quickly spot fine details and I am good at paying attention.

Open minded

I listen to new ideas and respect other people's views and opinions.

Logical

I solve problems in a sensible order. I know how one action leads to another.

Creative

I make new things and have original ideas.

Imaginative

I can think of new and interesting ideas.

Organised

I am good at planning to make sure tasks are finished.

Patient

I am able to stay calm when faced with problems.

Resilient

I can quickly recover from difficult and challenging situations.

Communicator

I am good at sharing information and ideas with others.

Passionate

I have strong feelings about things I am interested in.

Curious

I enjoy learning new things.

Self-motivated

I like to do things by myself without being told how to do them.

Hard-working

I put effort into finishing things.

Tenacious

I am able to stick with something difficult until it finishes.

Collaborative

I work well with others to do things.

Curriculum-mapped careers

We've mapped how the Careers in STEM postcards relate to the KS3 curriculum:

Numbers & Algebra	<i>Units of space, time & money</i>	Air Traffic Controller Cost Estimator Nurse Pharmacist
	<i>Rounding & estimation</i>	Acoustics Engineer Actuary Agronomist Air Traffic Controller Cost Estimator Firefighter Chef
	<i>Algebra</i>	Marine Engineer Cost Estimator
	<i>Patterns & sequences</i>	Epidemiologist Cyber Security Analyst
	<i>Graphs & Handling data</i>	Acoustics Engineer Actuary Visual Effects Artist Sports Scientist Epidemiologist Ecologist Cyber Security Analyst
Ratio, proportion and rates of change	<i>Ratios & proportions</i>	Nurse Chef Pharmacist

Geometry and measures	<i>Geometry (properties of shapes)</i>	Agronomist Visual Effects Artist Prosthetists
	<i>Geometry (position and direction)</i>	Marine Engineer Air Traffic Controller Visual Effects Artist Sports Scientist Firefighter Prosthetists
	<i>Measurement</i>	Marine Engineer Acoustics Engineer Agronomist Sports Scientist Nurse Firefighter Chef Pharmacist Prosthetists Ecologist
Probability & Statistics	<i>Probability</i>	Actuary Epidemiologist Ecologist
	<i>Statistics</i>	Cyber Security Analyst

We'd love to hear about how you're using the postcards, your suggestions for improvements, or if you have any questions. Get in touch : antonio.portas@northumbria.ac.uk

