

Dr Helen Mason Solar scientist



Hi there! I am Dr Helen Mason – A solar scientist



Where do I work?

I work at the University of Cambridge. I study the Sun using observations from solar satellites. I love everything to do with astronomy, but especially the Sun, our star.

What did I like doing when I was at school?

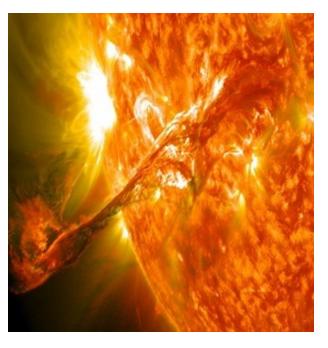
I have always loved science and maths at school, especially finding out about the world around us. The stars fascinated me.

What do I like doing in my spare time?

I love to travel both here in the UK and overseas, taking photos of people and places. I visit my friends in India every year. I love sunshine.

What do I do as a solar scientist?

I study the Sun and its interaction with the Earth. I do this using observations from solar satellites, working with colleagues at NASA (USA), ESA (European Space Agency) and in Japan. The Sun is fascinating. It is our nearest star, and we study it in a lot of detail.



How does what I do make the world a better place?

My job is to learn more about the Sun. If we could find better ways to capture the Sun's energy (solar energy), we could slow down global warming. It is important to understand our Sun better and its impact on the Earth, and how it affects the technology we now depend on so much.

What I like about my job

I love my job because I love finding out about the Sun, discovering new things. I enjoy working with teams of people on solar projects, young and old, from lots of different countries.

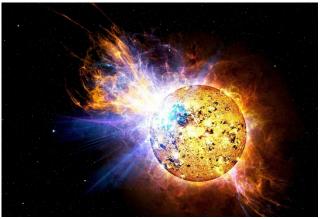


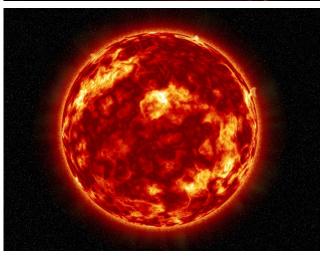
Challenges I have faced

All jobs are challenging in different ways. I've had to work very hard. Sometimes things didn't quite work out the way I wanted them to, but I just had to accept this and move on. Sometimes we learn a lot from what seem to be mistakes or failures, but overcoming these setbacks teaches us to be stronger and more determined.

If you want to be a solar scientist, you need:

- * to set yourself some achievable goals and work hard
- * to want to **ask questions** and try to find the answers
- * to observe things very carefully, and to record (write down or draw) what you see
- * to be determined and persistent, keep chipping away at the question or problem you are working away at
- * to be brave and not be afraid of getting something 'wrong' or 'failing'





Discussion time

* Would you like to be a solar scientist like Dr Helen Mason?

Why? Why not?



- * What skills and interests do you already have that would help you become a solar scientist?
- * What new skills and knowledge would you need to develop?

Free supporting resources for solar science

<u>Science Fun at Home</u> — see 'World Space Week' and 'Rocket Science'

<u>Science at Work</u> — see 'Gene Cernan' and 'Meet two space scientists'

<u>City Science Stars</u> — practical science activities (for ages 9—11), using links to football, other sports and space

<u>I bet you didn't know...</u> articles use cutting-edge science research as a context for learning. Teacher Guides describe investigations linked to the research:

- How to play planetary hide and seek
- One of Saturn's moons could be a home for extra-terrestrial life
- InSight into Mars
- Ice giants at the end of the Solar System
- There is a storm coming and it is not going away
- There is lightning at the edge of the Solar System



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