

Name:

Year:



YOU'RE THE **CATALYST!**

YOUR pathways
to a career using
Chemistry.

National Careers Week

NCW



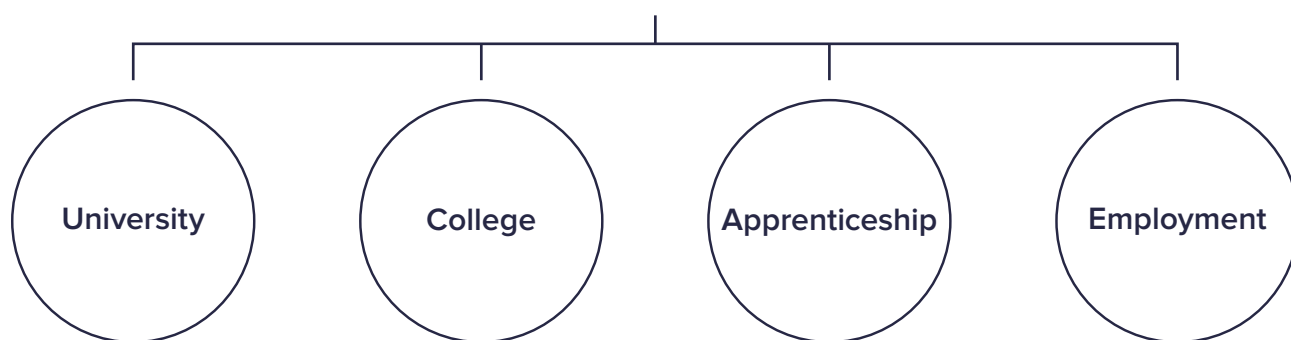
ROYAL SOCIETY
OF CHEMISTRY



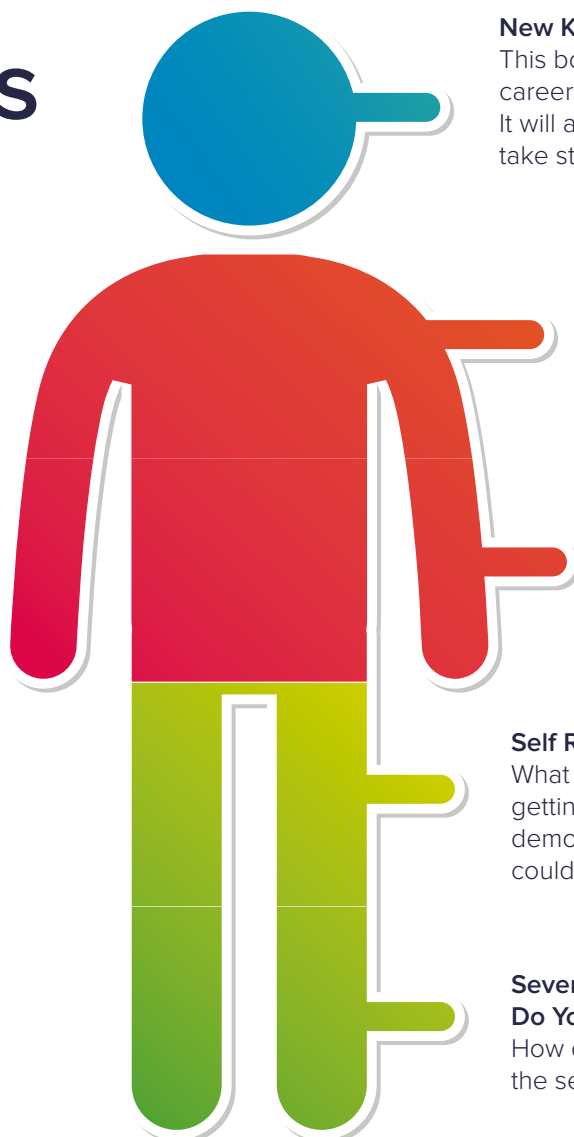
NatWest
Group

     National Careers Week

Helping to achieve the best for your future, wherever it may take you.



How this student booklet can benefit you...



New Knowledge

This booklet will help you to see what a career in chemistry has to offer you. It will also allow you to find out how to take steps towards it.

CV Builder

The information recorded in this booklet will prove useful when putting together CV's or higher education applications.

Information Gathering

This booklet will help you to gather information about University, careers and how to take steps towards your future.

Self Reflection

What are you good at? Where are your getting your skills from? How can you demonstrate YOUR expertise? Where could you excel in the future?

Seven Skills For the Future: How Do You Measure Up?

How do your skills measure up to the seven skills the world needs?



YOU'RE THE **CATALYST!**

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Hello.

How are you?

You're lucky! This booklet has been put together by us at National Careers Week and the Royal Society of Chemistry because we want YOU to be able to see what amazing things Chemistry does for us and how you could get involved in work and careers that use Chemistry.

OK, you may be thinking that wearing a white coat and using a test tube all day isn't something for you...well, we wanted to change those stereotypes and help you to see some of the incredible roles and jobs which use Chemistry in the course of the working day.

We are also delighted to be able to help you explore how those organisations improve peoples' lives and change the world for the better.

In this booklet there are a number of self-assessment exercises, some video linked tasks and some signposts which will help you to see that whatever your careers interests may be - in a career using Chemistry or not - there is likely to be a pathway towards a job for you. This booklet will help you consider your skills and abilities for your future.

Ready?

Where is Chemistry used?



Think about jobs and industries that use chemistry on a daily basis.



Video Resource – what jobs are available using Chemistry?

<https://edu.rsc.org/future-in-chemistry/career-options/what-jobs-can-i-do>

Where is Chemistry used? Everywhere!



OK, there are loads of areas of work and life which use chemistry as a major part of the role or industry – follow the links below to see where Chemistry is Making The Difference in these amazing short films and links to some roles in each area:



Changing lives:

From drug discovery and testing, through Olympic-level sports science and helping us stay safe from toxic substances through to catching dangerous criminals, chemistry is important!

 <https://edu.rsc.org/future-in-chemistry/making-the-difference/changing-lives>



Fixing the future:

An essential part of our world is energy and waste management. Chemistry helps us to consider environmental technologies like solar and wind power, the reduction of plastics and the development of alternative fuel technologies as well as the most crucial element for survival – water.

 <https://edu.rsc.org/future-in-chemistry/making-the-difference/fixing-the-future>



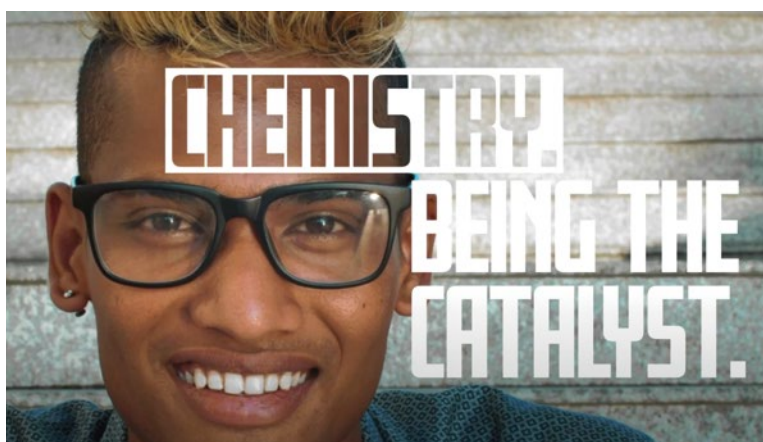
Where is Chemistry used? Everywhere!



Challenging opinions:

Chemistry can be used to change opinions and shape the world using research and analysis to prove points or create policy in Government, world environmental protection, drug development and testing as well as health and wellbeing technologies.

 <https://edu.rsc.org/future-in-chemistry/making-the-difference/challenging-opinions>



Being the catalyst:

How can one person change the world for others? Teaching, developing flavours and fragrances, researching cures for illnesses and cancer, forensic scientists help to catch and punish criminals and scientists can help stop the spread of diseases and viruses.

 <https://edu.rsc.org/future-in-chemistry/making-the-difference/being-the-catalyst>



Innovating industry:

Everything we buy needs to be produced or grown and chemistry plays a role in it: food science, biodegradable packaging, make-up, sports science, printing and manufacturing ALL involve chemistry.

 <https://edu.rsc.org/future-in-chemistry/making-the-difference/innovating-industry>

Thinking about you!



Why are YOU at school?

What are your ambitions?

If you could do anything in the world, what would it be?

What are your strengths?

How do you learn best? Practical, video, classroom, experimentation?



Attitude



If you were being described by someone what would they say about your attitude? (Choose – parent, teacher, friend, employer)



How does this help you?

Do you ever consider your attitude and what it does for you?

When has your attitude helped / hindered you?

How could being more positive help you in the future?



What are you like?



21st Century* KEY Employability Skills.

*Dr Tony Wagner Research for Learning Policy Institute 2015

Understanding Yourself

Your Skills: How do you measure up and where could you improve your skills for the future?



	Score yourself 1-10	Where do I use this?	How could I improve it?	Helpful in learning?	Helpful in work?	How I'll improve my skill here.
Critical Thinking & Problem Solving						
Collaboration & Leading by Influence						
Agility and Adaptability						
Initiative and Entrepreneurship						
Good Oral & Written Communication						
Accessing & Analysing Information						
Curiosity and Imagination						



Great – so now you know a bit more about yourself and your skills, which areas of Chemistry could be for you?



Have a look at the Royal Society of Chemistry website for job roles:

<https://edu.rsc.org/future-in-chemistry/career-options/job-profiles>



Or take a look around the BBC Bitesize Careers site:

<https://www.bbc.co.uk/bitesize/tags/zktg382/jobs-that-use-chemistry/1>

You're here to get some inspiration and information about what you **COULD** do in the future.

Don't be put off by what your friends or parents say – if there's something you really want to find out about, **NOW** is your chance!

Job or career title:

Qualifications required:

Where can I study?

What qualifications will I need?

What skills do I need?

Job or career title:

Qualifications required:

Where can I study?

What qualifications will I need?

What skills do I need?

Job or career title:

Qualifications required:

Where can I study?

What qualifications will I need?

What skills do I need?

Job or career title:

Qualifications required:

Where can I study?

What qualifications will I need?

What skills do I need?

The future



Where else can you get some great information and inspiration about your future?



National Careers Week TV has loads of videos and links for you here
www.ncwtv.co.uk



Or you could have a good look around the National Careers Service website for more information on any career or pathway:
<https://nationalcareers.service.gov.uk/>

You're here to get some inspiration and information about what you **COULD** do in the future.

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What qualifications will I need?

What skills do I need?

Job or career title:

Qualifications required:

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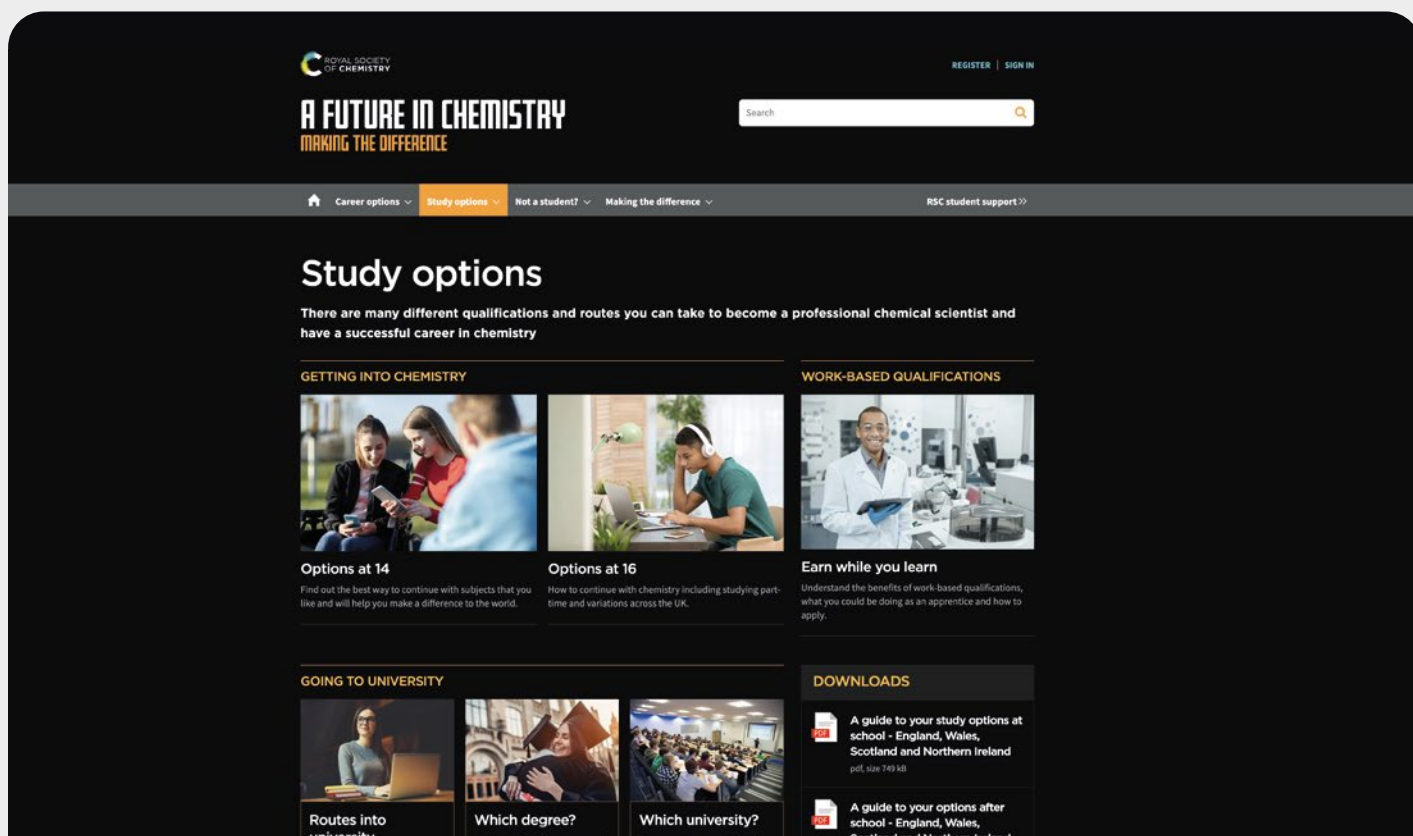
You're the catalyst!



OK, you've thought about your future and possible job roles you could do...what's next?

As with any journey, there are a number of pathways you could take to get to the final destination...have a look around the Royal Society of Chemistry's Study Options page to find the right pathway for you:

 <https://edu.rsc.org/future-in-chemistry/study-options>



The screenshot shows the 'A FUTURE IN CHEMISTRY' website. The header includes the RSC logo, navigation links (REGISTER, SIGN IN), a search bar, and a menu with 'Career options', 'Study options' (highlighted), 'Not a student?', and 'Making the difference'. The main heading is 'Study options' with the subtext 'There are many different qualifications and routes you can take to become a professional chemical scientist and have a successful career in chemistry'. The page is divided into three main sections: 'GETTING INTO CHEMISTRY', 'WORK-BASED QUALIFICATIONS', and 'GOING TO UNIVERSITY'. 'GETTING INTO CHEMISTRY' includes 'Options at 14' and 'Options at 16'. 'WORK-BASED QUALIFICATIONS' includes 'Earn while you learn'. 'GOING TO UNIVERSITY' includes 'Routes into university', 'Which degree?', and 'Which university?'. A 'DOWNLOADS' section on the right offers two PDF guides for school and post-school options in England, Wales, Scotland, and Northern Ireland.

You're the catalyst!

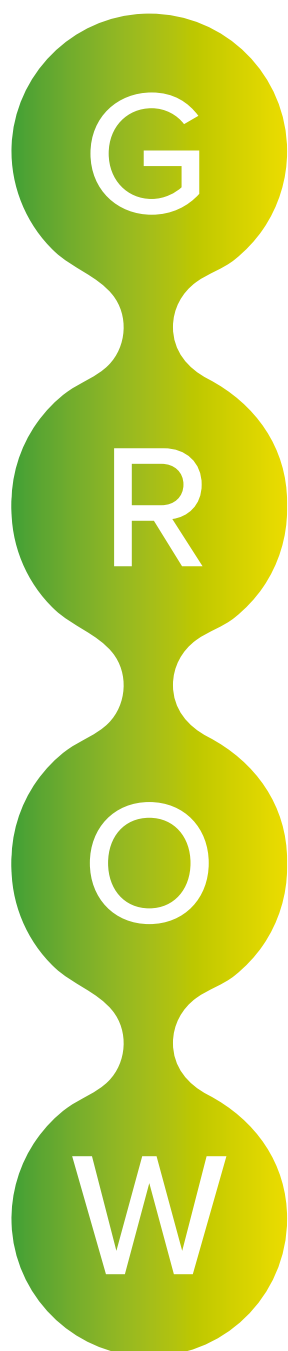


Nearly there!

If you've narrowed your thoughts and options down to a couple of job roles and / or industries, how do you proceed?

You need to start planning out who can help you. (that's the next page) but before you do that, let's look at the stages you'll need to take.

We're going to use the **GROW model** for this:



GOAL:

Your goal is either the specific job role or course you've decided to study. Make it specific – maybe you want to study an apprenticeship to learn about environmental science or a Degree in Chemistry with Drug Discovery with an Industry Year.

REALITY:

How realistic is this? Could you improve your Chemistry grades? Have you studied the usual options? What needs to be done to improve your realistic chances of fulfilling your goal? Who could help you?

OPTIONS:

What options do YOU have? Extra study? Change to different options? Re-take exams? Get additional tutoring? Try and secure relevant work experience?

WILL:

What will YOU do now to turn your plan into action and success?

You're the catalyst!



	Option 1	Option 2
Goal		
Reality		
Options		
Will		



Who will help you fulfil your GROW plans?



OK, let's hope you've got a clearer idea of where you want to get to in the future...you don't need to do everything on your own – who could help you?
This is your network – who do you know, how do you know them, how could they help?

References, connections, recommendations, mentoring – support comes in lots of ways.

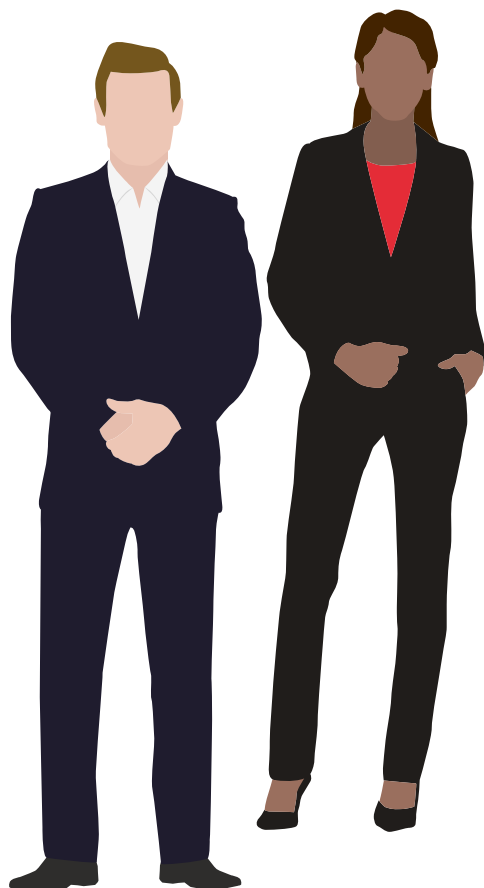
Family – who is in your family and could they help you? Don't forget uncles, grandparents and more distant relations.

Friends – who do you know and could they / their parents or relations help you?

Employers – do you have a part-time employer who would be willing to help you?

Teachers – which teachers would be willing and able to help you?

Others – Sports Coaches, Volunteering staff, DofE, Scout Leaders etc who could help you?



You're the catalyst!



As you know, different study options carry different costs and challenges. Many people may be put off studying at University because of the cost of studying in England, Wales and Northern Ireland. (If you live and want to study in Scotland there are no fees to pay but living / maintenance costs are still required).

Studying at university massively increases your earning potential and student loans are designed to be low interest and easy to pay off over time.

There is information on the Royal Society of Chemistry about funding here:



<https://edu.rsc.org/future-in-chemistry/study-options/going-to-university/student-finance>

A FUTURE IN CHEMISTRY
MAKING THE DIFFERENCE

Search

Home Career options Study options Not a student? Making the difference RSC student support >>

Student finance

How will I pay for university?

The costs depend on where you live and study. The main expenses are:

- tuition fees
- accommodation costs
- living expenses

Tuition fees

Tuition fees are what you pay to the university for your studies. They cover teaching (lectures, seminars, tutorials, exams, graduation, etc) as well as the use of university facilities and services such as labs, libraries, a Students' Union and welfare.

For 2020 studies, UK universities and colleges can charge home and EU students:

- new full time students up to £9,250 a year
- new part time students up to £5,935 a year

There are no restrictions on the amount private colleges or universities can charge. EU students starting their studies in 2020 will still be charged the same rate but we advise checking with your university before starting your course as this may change.

GOING TO UNIVERSITY

- Routes into university
- Which degree?
- Which university?
- Gap year

MSE Martin Lewis: Student Loans D...

MARTIN LEWIS:
Student Loans Decoded

MoneySavingExpert.com

Jump to key parts of the video...

- [The cost of university](#)
- [The hidden parental contribution](#)
- [How student loans are paid back](#)
- [Student loan interest isn't what you think](#)
- [Students' Q&A](#)

What is Student Loans Decoded? ✓

Resources for teachers

If you work with young people, you may find Student Loans Decoded a useful tool to simplify the facts around student finance for both potential students and their parents. So, together with financial education charity [Young Money](#), we have created a teacher guide for Student Loans Decoded.

Useful Links:



<https://www.rsc.org/>



National Careers Week



<https://nationalcareersweek.com/>



<https://ncwtv.co.uk/>



<https://www.bbc.co.uk/bitesize>



<https://nationalcareers.service.gov.uk/>



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