

## Career resources Science

## Activity collection – years 7–8

### Introduction

These resources are suitable for students in years 7–8.

They are aligned to the Australian Curriculum and relate to the Australian Curriculum learning area of Science

This selection will provide you, as an Australian educator, with tools to help build your own and your students' career development awareness.

If you are an Australian teacher or preservice teacher you can access these resources via Scootle, the national digital learning resources portal that contains more than 20,000 digital teaching and learning resources.

#### Log in to Scootle

Using your school or teacher training institution email account, log in to Scootle.

#### Not registered? Accessing resources on Scootle

These resources can only be accessed by teachers working in Australian schools (using their school email accounts), and by preservice teachers in Australian education institutions (using their institution email accounts). <u>Register now</u>.

Not sure if you are eligible? View Frequently asked questions.



# Careers with STEM: Science and health teacher notes

Resource ID	M021754						
Link to resource	http://resolver.thelearningfederation.edu.au/?rft_id=10257/5870667						
Resource description	The Careers with STEM Teacher Notes are for teachers, careers counsellors, parents, STEM-based institutions, or mentors that could use the guides to expose and inspire students towards STEM careers. These notes focus on careers with science or careers with health.						
Relevance of resource to careers education	The Careers with STEM series includes four quarterly magazines, along with website articles, teacher resources and videos across four STEM areas: science, technology, engineering and maths. The focus is on independent inquiry and constructivist learning through the application of a range of general capabilities that can 'bridge the academic and vocational divide, providing young people with the resources to navigate the future.'* Each magazine issue provides inspiring stories, career role models, job statistics and first step action points towards the careers of the future, and is based on the premise of discovering new areas of innovation through <i>STEM</i> + <i>X</i> – where X is another field of study, a personal passion, or a world-changing goal.						
Australian Curriculum	Career development and management	$\checkmark$	Entrepreneurial behaviours		Gaining and keeping work		
Work Studies category/ies	Learning to learn	V	The nature of work		Work skills		

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### Bringing engineering to life: STEM careers

Resource ID	M019742							
Link to resource	http://resolver.thelearningfederation.edu.au/?rft_id=10257/5871187							
Resource description	This is a unit of work on engineering, the range of possible occupations in engineering and the future and ethics of engineering. The resource includes: An introduction with teacher notes, student tasks, embedded videos and links to additional resources. The resource aims that students learn broadly about engineering and that there are many types; and that students consider and appreciate the important role of engineering today, throughout history and into the future. Topics covered include defining engineering; meeting engineers; engineering wonders and who made them; and ethics in engineering. The resource is a career resource written for both classroom teachers and career counsellors.							
Relevance of resource to careers education	This is a highly useful resource for the year 7, 8 and 9 Science curriculum. It is particularly useful for the content descriptions referring to the way people use understanding and skills from across the disciplines of science in their occupations (year 7 and 8) and how advances in science and technology affect people's lives creating new career opportunities (year 9). Task 2: Getting to know some engineers is particularly relevant here as it includes three videos of interviews with engineers discussing their work, with associated student tasks. Task 6: If I were an engineer is also relevant, which asks students to reflect on their own career aspirations on completion of the unit.							
Australian Curriculum Work Studies category/ies	Career development and management Learning to learn	N	Entrepreneurial behaviours The nature of work		Gaining and keeping work Work skills			

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## Unconscious bias: You can be a scientist: STEM careers

Resource ID	M019899						
Link to resource	http://resolver.thelearningfederation.edu.au/?rft_id=10257/5871192						
Resource description	This is a unit of work particularly what con regarding who can of introduction with te to additional resource scientists at work; an resource is a career counsellors.	mmon s or shoul acher n ces. Spe nd parti	stereotypes, prejuc d become scientist otes, student tasks ecific topics explore icipation of girls an	lices an s. The r s, embe ed inclue d wome	d perceptions exis esource includes: dded videos and I de stereotypes; en in STEM. The	an inks	
Relevance of resource to careers education	This is a highly useful resource for the year 7 and 8 Science curriculum. It is particularly useful for the content descriptions referring to the way people use understanding and skills from across the disciplines of science in their occupations. Task 1 is particularly relevant to this as it includes four videos of interviews with scientists discussing their work, and includes associated student tasks.						
Australian Curriculum Work Studies	Career development and management	$\checkmark$	Entrepreneurial behaviours		Gaining and keeping work		
category/ies	Learning to learn	$\mathbf{N}$	The nature of work	$\mathbf{N}$	Work skills	$\mathbf{\nabla}$	



### Meet a scientist

Resource ID	R10706						
Link to resource	http://resolver.thelearningfederation.edu.au/?rft_id=10257/5830011						
Resource description	This collection of 20 digital curriculum resources investigates the life and work of scientists from a range of scientific endeavours. It is organised into five categories - environmental scientists, life scientists, physical scientists, earth scientists and the qualities of a research scientist. Interactive learning objects can be used to explore and collect biographical data from which scientific profiles can be developed. Several audio and video resources discuss the nature of the work of particular scientists.						
Relevance of resource to careers education	<ul> <li>This resource:</li> <li>explores the nature of work within science</li> <li>illustrates how scientists live and work</li> <li>provides biographical information about scientists at work, their professional activities and personal interests</li> <li>demonstrates real-world applications of science.</li> </ul>						
Australian Curriculum Work Studies category/ies	Career development and management	$\mathbf{A}$	Entrepreneurial behaviours		Gaining and keeping work		
	Learning to learn		The nature of work	$\mathbf{\Lambda}$	Work skills		



### A career as a geologist

Resource ID	M015756							
Link to resource	http://resolver.thelearningfederation.edu.au/?rft_id=10257/5858221							
Resource description	Do all scientists wear white lab coats and work with chemicals? Watch this clip and discover how a career in science can take you soaring to dizzying heights. Find out what an exploration geologist does and why helicopters are used in the job. This clip will inspire you to consider a career in one of the many varied fields of science, including geology.							
Relevance of resource to careers	Teachers can use this video to ask students a set of questions related to opportunity awareness.							
education	<ul> <li>opportunity awareness.</li> <li>Questions to ask before viewing: There are many different jobs in science. How many science jobs or types of scientists can you think of? Can you name some less well-known science jobs and describe what work is involved? Do you know a scientist? What does he or she do? Questions to ask while viewing: Why did the South Australian government set up the website <i>There's more to it than you think</i>? Listen as Emma explains why she took part in the program. What does Greg say geology is the study of? Why do geologists take to the skies? What are they looking for and what clues help them find these? Find out more about geology and related earth science careers at the Earth</li></ul>							
Australian Curriculum Work Studies	Career development and management	$\checkmark$	Entrepreneurial behaviours		Gaining and keeping work			
category/ies	Learning to learn	$\checkmark$	The nature of work	$\checkmark$	Work skills	$\checkmark$		