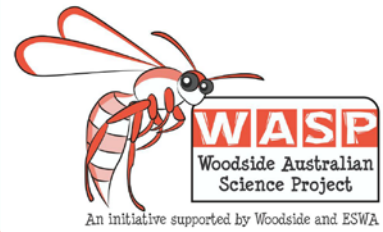


At Home Learning – Year 7



In support of students and their Earth and Space Science learning, the following is a sequence of tasks and activities that could be carried out at home.

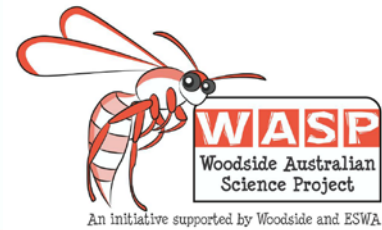
Objectives:

At the completion of this unit of work students will:

- Be able to define what an Earth resource is
- Understand that some resources are renewable and others are non-renewable
- Be able to explain a number of ways water behaves and how it cycles through the environment
- Understand some different perspectives on water transport and use
- Be able to outline how non-renewable resources, oil and gas, form and are extracted

Focus	Activity/ies	WASP Support Resources
Resources	<ul style="list-style-type: none"> • Research what a resource is • Create a mind map, table, video (or other) to outline some of Earth's major resources 	
Renewable V non-renewable	<ul style="list-style-type: none"> • Research what it means for a resource to be renewable. What about non-renewable? • Research how long it takes for the given list of resources to renew. Which would be renewable? Non-renewable? 	Timescale for renewal – https://www.wasp.edu.au/mod/resource/view.php?id=8
What makes water a renewable resource?	<ul style="list-style-type: none"> • Research how water might be considered a renewable resource (is there any debate about this?) • View the WASP water cycle animation and answer the questions provided 	Water cycle animation – https://www.wasp.edu.au/mod/resource/view.php?id=549
Rain	<ul style="list-style-type: none"> • Investigate how rain forms with a simple experiment 	Rain – https://www.wasp.edu.au/mod/resource/view.php?id=42 (use a clear glass instead of a beaker and be VERY careful with the hot water)

At Home Learning – Year 7



Focus	Activity/ies	WASP Support Resources
Water use history	<ul style="list-style-type: none"> Research the history of water use in your area 	For students in WA (the Perth to Kalgoorlie pipeline) - https://www.wasp.edu.au/mod/resource/view.php?id=557
Perspectives on water use	<ul style="list-style-type: none"> Consider an Aboriginal perspective on water Learn more about an Indian perspective on water 	An Aboriginal Perspective - https://www.wasp.edu.au/mod/resource/view.php?id=54 An Indian Perspective - https://www.wasp.edu.au/mod/resource/view.php?id=56
The formation of oil and gas	<ul style="list-style-type: none"> Find out more about the formation of oil and gas by watching our animation Explore this process further with our iPad app Investigate how sedimentary rocks form (vital to the formation of oil and gas) with a simple experiment Investigate how oil, gas and water move through some rocks (and not others) Then investigate how fast they move through the reservoir (store) Find out how pressure changes the deeper sediments are buried Explore how we can increase the amount of oil extracted from a reservoir Create a presentation that outlines the formation, extraction and use of oil and gas 	Oil and gas animation - https://www.youtube.com/watch?v=8YHsxXEVb1M iPad app – https://www.wasp.edu.au/mod/page/view.php?id=85 Dewatering of sediments - https://www.wasp.edu.au/mod/resource/view.php?id=60 Porosity and permeability - https://www.wasp.edu.au/mod/resource/view.php?id=67 (use clear glasses instead of beakers and the top third of cool drink bottles instead of filter funnels) Migration rate - https://www.wasp.edu.au/mod/resource/view.php?id=69 (use measuring cups instead of a cylinder and a clear glass instead of a beaker) Pressure and depth of burial - https://www.wasp.edu.au/mod/resource/view.php?id=66 (be careful when poking holes in the bottle!) Viscosity and raising raisins - https://www.wasp.edu.au/mod/resource/view.php?id=74 (use straws instead of transfer pipettes)
Quizzes	<ul style="list-style-type: none"> Test how much you have learnt in this unit by taking our online quizzes 	Quizzes - https://www.wasp.edu.au/mod/page/view.php?id=108