





# Design your own Weddell Sea equipment to search below or above the ice

Activity for KS2 and KS3:

Ask children to decide what they would like to discover more about in the Weddell Sea. Using the key features below, ask them to design a piece of equipment that will enable them to carry out the task e.g. ROV's take images of the deep sea

Area of study	Equipment	Key functions	Video clip for inspiration	Images for inspiration	Further information
Deep sea creatures	Remotely Operated Vehicle (ROV)	<ul style="list-style-type: none"> <li>Take photographs</li> <li>Track locations</li> <li>Collect samples of animals (different types/sizes etc)</li> </ul>	<a href="https://youtu.be/WZsGx-7-huM">https://youtu.be/WZsGx-7-huM</a>		<a href="http://www.eclipse.us.com/specifications.html">http://www.eclipse.us.com/specifications.html</a>
Deep sea creatures Shipwrecks	Autonomous Underwater Vehicle (ROV)	<ul style="list-style-type: none"> <li>Move easily</li> <li>Transmit data</li> <li>Observe marine life</li> <li>Study sea floor</li> <li>Search for shipwrecks</li> </ul>	<a href="https://youtu.be/5F-w34oqqCY">https://youtu.be/5F-w34oqqCY</a>		<a href="https://oceaninfinity.com/wp-content/uploads/AUV_Factsheet.pdf">https://oceaninfinity.com/wp-content/uploads/AUV_Factsheet.pdf</a>
Sea ice	Aerial Drones	<ul style="list-style-type: none"> <li>Camera</li> <li>GPS</li> <li>Laser</li> </ul>	<a href="https://youtu.be/SxSLg9kYyOc">https://youtu.be/SxSLg9kYyOc</a>		<a href="https://www.canterbury.ac.nz/science/science-news/2018/uc-duo-prepare-to-join-search-for-shackletons-lost-ship.html">https://www.canterbury.ac.nz/science/science-news/2018/uc-duo-prepare-to-join-search-for-shackletons-lost-ship.html</a>
Geology of the sea bed	Sediment corer	<ul style="list-style-type: none"> <li>Drill down into the sea floor and collect sediment samples</li> </ul>	N/A		<a href="http://seatechnology.co.za/">http://seatechnology.co.za/</a>

<https://weddellseaexpedition.org/>

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