

Landers and Moorings

What are they?	Equipment which can be left on the sea-floor or anchored to it for months to years.
What can they do?	<p>Have sensors for measuring lots of different things like underwater currents, temperature, saltness, the amount of food in the water.</p> <p>Can have 'hydrophones' to record underwater sound, which can help scientists find marine creatures.</p> <p>Have special floats so that they can be collected and the information they have gathered can be looked at.</p>
Not so good...	<p>Have to be lowered from a ship—can't get into the water on their own.</p> <p>You can't tell if it has worked until you pick it up again!</p>



Deep-sea mining vehicle

What are they?	Future technology! Underwater vehicles that people can control and use to mine the deep sea.
What can they do?	<p>Dig up metals and useful materials from hydrothermal vents, deep sea-floors and mid-ocean ridges. These can help us make mobiles and develop new technologies.</p> <p>Get materials which we can't get on land.</p> <p>Get materials which have run out on land.</p>
Not so good...	<p>Could destroy lots of amazing and unique underwater places, leaving many creatures without a home.</p> <p>They could make the water really dirty over a large area.</p>



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CTD

What are they?	CTD = conductivity, temperature and depth. Measuring equipment which can be lowered into the sea.
What can they do?	Collect water at different depths with specially designed bottles that open automatically at different depths. Conductivity can be used to work out the saltiness of the water. Measure the water temperature. The water samples can be taken back to find out what is in them scientists might be looking for bacteria, tiny animals or marine snow!
Not so good...	Has to be lowered from a ship—can't get into the water on it's own. Has to be cleaned each time it's used to make sure nothing gets mixed up.



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Submarine/Submersible

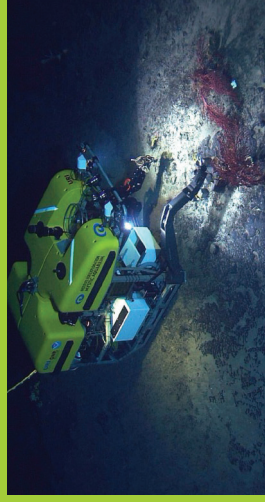
What are they?	Underwater vehicles that people can sit in and dive to the deep!
What can they do?	Give scientists a great view of the deep sea. Take some really amazing pictures and videos. Help with exploration and let scientists watch creatures in the sea.
Not so good...	They are expensive to use. Could be scary for people who don't like small spaces or going deep underwater. There aren't very many of them!



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ROVs

What are they?	A 'Remotely Operated Vehicle' - underwater robots controlled from a ship by a pilot.
What can they do?	Use lights and cameras to take videos and pictures underwater. Pick up rocks or creatures using robot arms or 'suction guns' and put them in special boxes to be brought back up. Collect water or sea-bed samples.
Not so good...	They are attached by a cable so can't go too far from the pilot. Can't be used in very strong currents, especially the smaller ones.



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Gliders

What are they?	Small robots that 'fly' underwater using their wings.
What can they do?	They can be controlled via a satellite link from anywhere in the world—people don't have to be at sea to use them. Collect information such as water temperatures and saltness. Be at sea for up to seven months at a time!
Not so good...	They are small compared to the ocean so can be hard to find if they stop working or get lost.



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