

Recommended style of activity	
Public engagement: Family drop-in activity	Schools: Class activity
Suggested age range: 6-15 years	
Approximate time : 10-20 minutes	

Background Science

The oceans cover around 70% of the Earth’s surface, but they are largely unexplored! This is partly due to them being relatively inaccessible and inhospitable for humans. Scientists have come up with amazing ways to overcome this problem using specialised marine exploration technology!

While submarines and submersibles are a great way for humans to dive down to the depths to explore, they are incredible expensive and sometimes dangerous for the people inside. Recently scientists have begun using Remotely Operated Vehicles (ROVs) which are controlled by pilots at the surface and are equipped with a camera and machinery that allows the robot to record the biodiversity of the area as well as sample the abiotic factors such as salinity, temperature and depth.

The other option is to lower a piece of recording equipment down to the sea bed and collect it at a later date and analyse the data it has collected. Gliders can be pre-programmed to ‘fly’ around and scan the ocean, taking readings of important



Advances in marine technology means that it is easier for humans to discover what goes on beneath the surface and better understand how the oceans may be affected by changing conditions such as ocean warming and acidification.

Design Time:

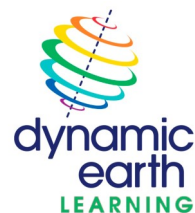
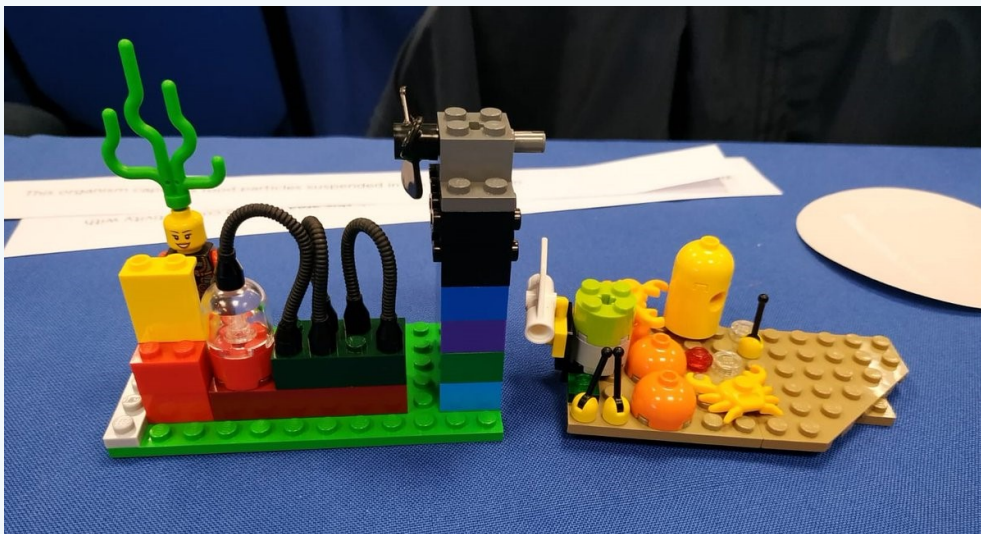
- Use the Lego to design and make your own vehicle that will help scientists to explore and investigate the deep oceans.
- Fill in a design card outlining what your vehicle does
- Draw a diagram showing its special features

How deep will it go?

What is it looking for?

How will it record data for scientists to use?

**For more oceans-themed activities and experiments, please visit
www.eu-atlas.org/outreachportfolio**



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