

# How can I borrow NERC's Operation Earth kit?



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## What is Operation Earth?

Operation Earth is a two-year-long national programme that will engage, inspire and involve school-age children and their families with NERC's world-leading environmental science research. The programme will highlight the relevance of contemporary environmental science issues to everyone's daily lives and to society's future. NERC commissioned the Association for Science and Discovery Centres (ASDC) ([www.sciencecentres.org.uk/projects/operation-earth](http://www.sciencecentres.org.uk/projects/operation-earth)) to run the project, along with three development partners - Dynamic Earth, the Eden Project and the Natural History Museum – with scientific expertise from our researchers.

Activities will be delivered by the successful infrastructure of eleven of the UK's science and discovery centres and museums, engaging over 100,000 children and adults throughout 2018. The activities aim to give young people and their families the confidence, curiosity, and interest to continue to explore and ask questions long after they leave the science and discovery centres. Operation Earth builds on the successes of STFC's Explore Your Universe (now in Phase 3) and UK Space Agency's Destination Space.

Each of the 11 science centres will have:

- A set of hands-on kit, including a planet Earth costume with its very own ice cap, a real-life experiment to demonstrate ocean acidification, sensors to measure air quality, and microscopes to explore living things.
- Script, guidance and kit to deliver a public show
- Meet-the-expert sessions

NERC research centres and NERC researchers can borrow NERC's two sets of kit. The full Operation Earth Handbook can be viewed via [www.operationearth.co.uk/resources/handbook](http://www.operationearth.co.uk/resources/handbook).

## Science and Discovery Centres:

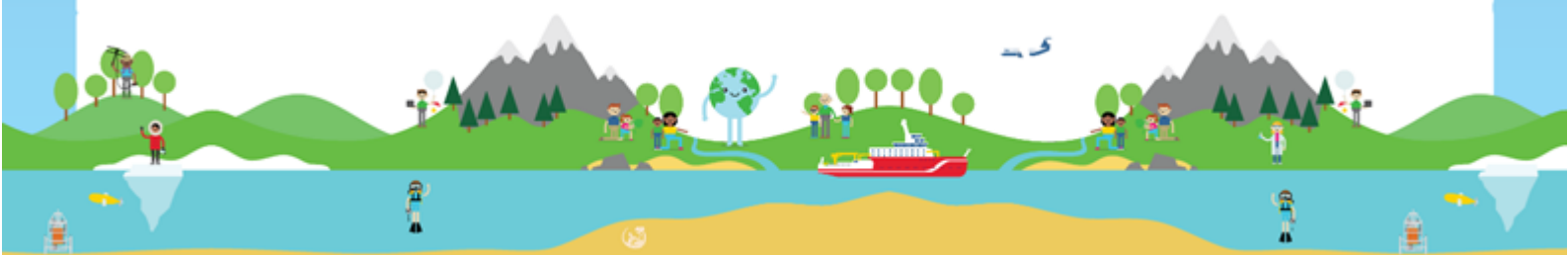
You can visit your local science centre and see Operation Earth in action at:

1. Catalyst, Cheshire
2. Techniquest Glyndŵr, Wrexham
3. Dynamic Earth, Edinburgh
4. Eden Project, Cornwall
5. Jodrell Bank Discovery Centre, Manchester
6. Natural History Museum, London
7. National Space Centre, Leicester
8. Oxford University Museum of Natural History
9. The Observatory Science Centre, Sussex
10. Thinktank, Birmingham
11. W5, Belfast

## Further information

[www.operationearth.co.uk](http://www.operationearth.co.uk)

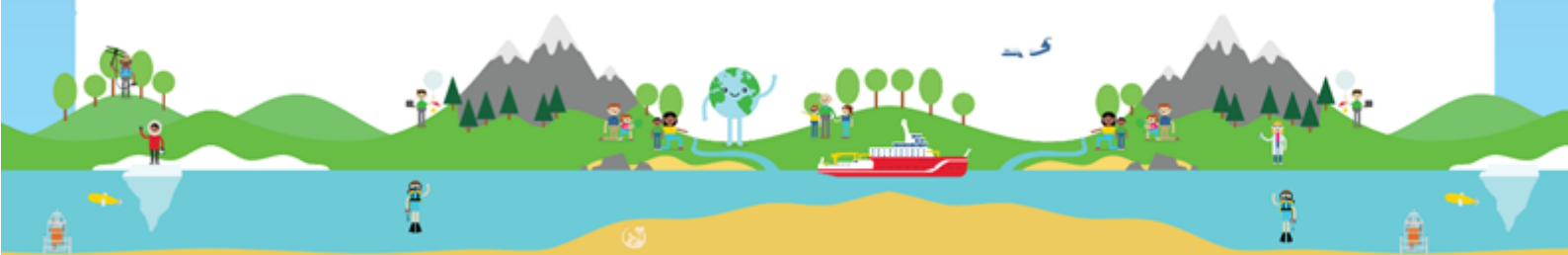
#operationearth



## What is in the kit?

You can borrow the full kit or elements of it. If there is anything broken or missing, [please get in touch](#).

Equipment	How many per kit?	Equipment	How many per kit?
<b>Show props</b>		<b>Table top demos</b>	
Stethoscope	1	<b>Ocean Acidification</b>	
Clipboard	1	Bromothymol blue 500ml	<i>Consumable: not provided</i>
Lab coat	2	Shells (dog whelk or cockle)	<i>Consumable: not provided</i>
IR thermometer	1	1 litre plastic beakers	1
Earth suit	1	50ml plastic beakers	1
		Light box	1
<b>Biodiversity demo</b>		Stop clock	1
Giant rose (white)	1	Vinegar	<i>Consumable: not provided</i>
Giant daisy	1	Baking soda	<i>Consumable: not provided</i>
Giant rose (Red)	1		
Giant sunflower	1	<b>Ecology/biodiversity</b>	
Flower stand	4	Soil	<i>Consumable: not provided</i>
Insect costumes - 2 x bee, 1 x fly, 1 x butterfly	1	Wildflower seeds	<i>Consumable: not provided</i>
Pollen ping pong balls	1	Paper bags	<i>Consumable: not provided</i>
Buckets	8	Jumbo magnifiers	3
Gloves	4	Green duct tape	<i>Consumable: not provided</i>
Bubble lamp	1	Trays	1
Velcro dots	<i>Consumable: not provided</i>		
		<b>Microscopy</b>	
<b>Air quality demo</b>		Phone macro lens	2
Pop up greenhouse	1	HDMI microscope	2
Leaf blower + spare battery	1	21 inch HDMI screen	2
Tissue paper cutter	1	Slides	1
Tissue paper air particles	<i>Consumable: not provided</i>		
Face mask	1	<b>Air Quality</b>	
Goggles	2	Atmospheric Sensor	1
Collecting net	1		
		<b>Printing /graphics</b>	
<b>Ocean pollution</b>		Graphics for air demo	1
Trolley with brake	0	Biodiversity mat	2
Medical screen on wheels	0	Table cloth	1
Microfibres on slide	1	Earth observation images (laminated)	1
White plastic tray	1	Banner	1
Bag of nurdles	1		
Plastic bag	<i>Consumable: not provided</i>		
Fish tank	1		
Small net	1		



## Guidelines for booking the kit

- The Operation Earth kits are the property of the Natural Environment Research Council (NERC). Each set of kit is worth around £3,500. There is no charge for borrowing the kits.
- NERC has a limited budget to cover some costs of courioring the kit. We ask that borrowers either cover the cost of the courioring, or provide a statement as to why this public funding is needed.
- The security of all the kit, in transit and during the period of the loan, must follow the requirements laid down by NERC and will need to be agreed when applying for the kit.
- Each organisation must nominate one person to take responsibility for the loan, with a second person to act in the case of an emergency. This includes responsibility for the receipt, use (including security during use), accountability, and return of the samples at the end of the designated time.
- This person must check the inventory to ensure all contents are received, and must report any discrepancies immediately to NERC by emailing [publicengagement@nerc.ac.uk](mailto:publicengagement@nerc.ac.uk).
- The kit should be attended and handled with care at all times. Every effort should be made to prevent the kit from being damaged.
- When not in use, the kit must be locked in a safe and secure place.
- No admission charge may be made to view the kit. If the organisation has an established general admission charge, no additional charge may be made to view the kit.
- Kit will be allocated on a first come first served basis, however, where there are competing demands for kit, NERC will decide based on a diversity of borrowers and institutions and may ask organisations to compromise on other borrowing times to ensure fair use across different users.

## How do I book the kit?

1. Complete the [online application form](#).
2. After discussion and agreement, NERC will send a **confirmation email** with details of the booking and a full electronic [training handbook](#) of the Operation Earth programme.
3. Delivery and collection of the samples is by **courier** and plans must be arranged by NERC.
4. Following the event, the person borrowing the kit is responsible for ensuring that the samples are **correctly packed and clearly labelled** for return either to NERC or to the next borrower and must be ready for collection by 9.00am on the agreed date.
5. The person borrowing the kit must email NERC ([publicengagement@nerc.ac.uk](mailto:publicengagement@nerc.ac.uk)) to confirm that the **package has been despatched**.
6. The borrower should then complete the [online feedback form](#).

## Health and Safety

Please read health and safety information on page 122 of the [handbook](#), and complete a risk assessment before carrying out any of the Operation Earth activities.

## NERC Contacts

For further information, please contact the Communications and Engagement team:

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