

PLASTIC PIRATES - RESEARCHING AS A TEAM

How bad is plastic waste pollution in flowing waterways? And what impact does this have on our seas and oceans? Visit Germany for a citizen science project and work with your partner school to find the answers.

From 16 September to 18 November 2016, school classes will become research teams in order to study the presence and spread of plastic waste in and around German rivers and coastal areas.

UK schools are invited to travel to Germany during this period to be a part of this exciting and informative experience. In a joint project week, British and German Plastic Pirates can join forces to tackle key environmental questions and strengthen their partnerships. The German Federal Ministry of Education and Research has agreed to bear the travel and accommodation costs incurred by British partner schools who take part in the project.

The United Kingdom and Germany have long had close ties in the field of marine research. The UK is now the partner country for Science Year 2016*17. The two countries are working together to research, use and protect the world's seas and oceans.



FIND OUT MORE AND GET INVOLVED

Would you and your pupils like to become Plastic Pirates? If so, get in touch with your German partner school if they are also taking part in the programme. They should then let us know. We will then help you organise your research trip to Germany.

Here's how to contact us:

Editorial Office Science Year 2016*17 – Seas and Oceans

Gustav-Meyer-Allee 25, 13355 Berlin, Germany

Tel. +49 30 818 777 166

Fax +49 30 818 777 125

Email: plasticpirates@scienceyear.de

Berlin office hours: 9 a.m. to 1 p.m. and 2 p.m. to 6 p.m.,

Monday - Friday

For more information on the project and to sign up, please visit

www.plasticpirates.scienceyear.de

Imprint

Federal Ministry of Education and Research

Project Group „Science Year 2016*17 – Seas and Oceans“

53175 Bonn, Germany

www.bmbf.de/en

The Science Years are an initiative of the German Federal Ministry of Education and Research (BMBF) and Wissenschaft im Dialog (WiD). As the central instrument for scientific communication, they make research available to the public and support the dialogue between the research community and society at large. The Science Year 2016*17 is supported by the German Marine Research Consortium (KDM) as a specialist partner.

AN INITIATIVE OF THE



Federal Ministry
of Education
and Research



kieler
forschungs:werkstatt



**VISIT YOUR GERMAN
PARTNER SCHOOL AND
RESEARCH AS A TEAM!**

An Initiative of the Federal Ministry
of Education and Research

Science Year 2016*17

**SEAS
AND OCEANS**

ALL WATERWAYS LEAD TO THE SEA - WITH PLASTIC WASTE ALONG FOR THE RIDE

There is a lot of plastic waste in our seas and oceans. For a start there is macroplastic such as plastic bags, yogurt pots and synthetic rope, but also tiny particles that are hardly visible – known as 'microplastic'. The majority of this has travelled along rivers to the sea, where it now threatens wildlife, enters the marine food chain and, eventually, ends up on our plates.

Progress is being made in terms of researching the pollution of the world's seas with plastic waste. Relatively little research, however, has been carried out into its presence and spread in and around flowing waterways. This needs to change in the next few years, as items that are now floating along the Rhine, Elbe, Thames and Severn will eventually enter the North Sea and Atlantic Ocean.

Our 'Plastic Pirates' project is a citizen science programme that promotes research into the spread of both macroplastic and microplastic in and around German rivers and coastal areas. Citizen science projects give people interested in science an opportunity to play a hands-on role in the research process, with scientists and researchers working hand in hand with citizens.



Calling all 10- to 16-year-olds

BECOME PLASTIC PIRATES!

The 2016*17 Science Year – Seas and Oceans lets you go on a scientific expedition. Just like real researchers, you will study microplastic, document rubbish patches on riverbanks, measure flow speeds and work out GPS data.

How does the project work?

You and your class will travel to Germany between 16 September and 18 November 2016. Here, you will work with your partner school to take samples from rivers and the surrounding areas. How much plastic waste can be found, and what kind? Where does the waste build up? Using scientific methods, you will dig, filter, weigh and count – and your results will be documented on a digital online map of Germany.

What will the data be used for?

You might be wondering what German rivers have got to do with you. It's quite simple: our two countries are connected by the sea. Plastic waste that enters the sea via German rivers may be eaten by fish that land in the nets of British fishermen. And vice versa! Marine protection affects us all. And you can help – as the data you gather will be scientifically evaluated so that it can be used to develop protective measures.



For teachers

FREE EDUCATIONAL MATERIALS

You can download the free project booklet, as well as teaching materials and worksheets, from our website. The materials were commissioned by the German Federal Ministry of Education and Research and designed by experienced scientists and teachers. They are suitable for supporting lessons at all kinds of schools.

Use the project as a starting point for practical lessons in biology, geography, chemistry and social studies, as well as during the joint project week with your partner school in Germany.

The materials

The teaching materials and worksheets focus on key topics related to our seas and oceans. The material can also be used outside the project period. The project booklet helps youngsters find their feet during the excursion and serves as a scientific guide to data collection.

For more information and downloads, please visit:

www.plasticpirates.scienceyear.de