

Cromer Shoal Chalk Beds Marine Conservation Zone Education Pack

When the Marine Conservation Society's Agents of Change project consulted local people about the Cromer Shoal Chalk Beds Marine Conservation Zone (MCZ), it found that raising awareness of the MCZ and educating local people about it was considered very important. These resources have been produced to aid primary school teachers to do just that!

Why use these resources?

The MCZ provides a real-life context to teach a range of subjects across the curriculum. There is a fascinating world hidden below the surface of this popular seaside area: an amazing rare chalk reef, wonderful wildlife and Cromer crabs. This pack contains teaching ideas and resources for learning about them, the local landscape and the people that interact with it. If you can visit the coast here, it will really bring their learning to life!

How do I use them?

The pack contains a mixture of lesson ideas and resources under different themes. The MCZ provides a great focus for a topic in its own right, or you can dip into the resources for use in specific subjects. The overview shows you the National Curriculum objectives that can be covered under each theme so is a good starting point.



Cromer Shoal Chalk Beds Marine Conservation Zone National Curriculum links

Ages 4-7

Local Geography

Geography

Name, locate and identify characteristics of the four countries and capital cities of the United Kingdom and its surrounding seas

Use basic geographical vocabulary to refer to:

- key physical features, including: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather

- key human features, including: city, town, village, factory, farm, house, office, port, harbour and shop

Use world maps, atlases and globes to identify the United Kingdom and its countries, as well as the countries, continents and oceans studied at this key stage

Use simple compass directions (North, South, East and West) and locational and directional language [for example, near and far; left and right], to describe the location of features and routes on a map

Use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a key

Local viewpoints and values

Citizenship

To recognise what they like and dislike, what is fair and unfair, and what is right and wrong

To share their opinions on things that matter to them and explain their views

What improves and harms their local, natural and built environments and about some of the ways people look after them

To realise that money comes from different sources and can be used for different purposes

To identify and respect the differences and similarities between people

Health Education

That mental wellbeing is a normal part of daily life, in the same way as physical health

How to recognise and talk about their emotions, including having a varied vocabulary of words to use when talking about their own and others' feelings

The benefits of physical exercise, time outdoors, community participation, voluntary and service-based activity on mental wellbeing and happiness

Wildlife (Science)

Science

Year 1 Animals, including humans

Identify and name a variety of common animals that are carnivores, herbivores and omnivores

Year 2 Living things and their habitats

Explore and compare the differences between things that are living, dead, and things that have never been alive

Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other

Identify and name a variety of plants and animals in their habitats, including micro-habitats

Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.

Year 2 Animals including humans

Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)

Cromer Shoal Chalk Beds Marine Conservation Zone National Curriculum links

Ages 4-7

Plastics

Citizenship

To take part in discussions with one other person and the whole class

To realise that people and other living things have needs, and that they have responsibilities to meet them

What improves and harms their local, natural and built environments and about some of the ways people look after them

Science

Year 1 Everyday materials

Distinguish between an object and the material from which it is made

Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock

Describe the simple physical properties of a variety of everyday materials

Compare and group together a variety of everyday materials on the basis of their simple physical properties

Year 2 Uses of everyday materials

Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses

Art

To use drawing, painting and sculpture to develop and share their ideas, experiences and imagination

English

Persuasive writing, narrative writing

Beach Safety

Citizenship

To agree and follow rules for their group and classroom, and understand how rules help them

Rules for, and ways of, keeping safe, including basic road safety, and about people who can help them to stay safe

Health education

About safe and unsafe exposure to the sun, and how to reduce the risk of sun damage, including skin cancer

How to make a clear and efficient call to emergency services if necessary

English:

Explanation writing

Fishing in the MCZ (crab and lobster)

Design and Technology

Use the basic principles of a healthy and varied diet to prepare dishes

Understand where food comes from.

Local History

History

Significant historical events, people and places in their own locality

Other Maths & English ideas

Maths

Data collection and handling

English

Descriptive writing, recount, acrostic poems, speech punctuation

Beach visit support

A visit to the coast near the Marine Conservation Zone will bring the learning to life. For students, standing on the beach looking at the sea and thinking about the wildlife they've learned about beneath the waves is awe inspiring! There are ideas for beach activities throughout the resources to support a self-led visit or you can gain support for a visit from the following:

Norfolk Wildlife Trust

Rockpool and fossil sessions at West Runton:
<https://www.norfolkwildlifetrust.org.uk/discover-and-learn/teachers/sessions/primary-sessions>

Sheringham Learning, National Trust

Beach sessions including rockpooling and push netting. For more information contact:
sheringhamlearning@nationaltrust.org.uk



Field trip ideas

Scavenger hunt

A great way to explore the beach is to get the children to complete a scavenger hunt. They could work in pairs or small groups to collect a variety of things. These might include something:

- Smooth
- Rough
- Hard
- Soft
- Shiny
- Dull
- Colourful
- Twisted
- Jagged
- With a hole in
- Man-made
- Dead
- Natural but never alive
- An interesting stone
- A shell/three different types of shell
- Seaweed/three different types of seaweed

Land art or sand sculptures

Everyone loves building a sandcastle at the beach! Broaden it out into a sand sculpture, perhaps focusing on something you're learning, or create artworks using found materials.

Andy Goldsworthy can provide inspiration; he has made lots of artwork on the beach using pebbles. Check online to see his work.



Plastics

Teaching resources

Marine Conservation Society:

mcsuk.org/what-you-can-do/fun-learning/primary-learning/teaching-resources/lower-primary/marine-litter/

Kids Against Plastic:

kidsagainstplastic.co.uk/learn/

Final Straw Foundation:

finalstrawfoundation.org/get-involved/schools-and-resources/resources-for-schools-and-home-learning/

Applying the learning

Design posters about littering or another aspect of the plastic problem.

Write persuasive letters to national or local businesses or family members persuading them to ditch single use plastic. Or create persuasive leaflets.

Read *The Journey* by Neil Griffiths and Scott Mann. Rewrite the story to be about a plastic bottle dropped in a city and ending up in a river. Describe the journey to the sea. What does it pass? What creatures does it see? Who picks it up?

Organise a litter pick or beach clean

Organise a litter pick of your school grounds, local environment or beach. If you head to the beach, remember to check tide times. Useful information on organising a Beach Clean is available here:

<https://www.mcsuk.org/what-you-can-do/join-a-beach-clean/useful-guides-and-resources/guides-and-resources/>

Details of local volunteers that may be able to help with equipment or leading your beach clean can be found here:

<http://www.norfolkcoastalb.org.uk/partnership/beach-clean-events/691>

Surfers Against Sewage: Plastic Free Schools

Sign up your school to get support for auditing single use plastic in school, ditching it and challenging government and industry. Includes sacks and gloves for a litter pick. Work towards Plastic Free School Status.

plasticfreeschools.org.uk/

Local History

Museums

The area provides an opportunity for a local history study to find out about local seafaring history and culture.

The following museums in Cromer and Sheringham provide information, school visits and resources:

Henry Blogg Museum

rnli.org/find-my-nearest/museums/henry-blogg-museum

Cromer Museum

museums.norfolk.gov.uk/cromer-museum/learning

Sheringham Museum

sheringhammuseum.co.uk/index.php

Tourism

Visit Cromer Museum for their Seaside Special workshop to find out about Victorian holidaymakers in Cromer. Sheringham Museum has a similar workshop available about Sheringham.

Fishermen, lifeboatmen and shipwrecks

Visit the RNLI Henry Blogg museum to find out about the RNLI's most decorated lifeboat volunteer – Henry Blogg. Groups can join storytelling, immersive drama or science workshops to explore Cromer's incredible history of saving lives at sea.

Visit Sheringham Museum to see 5 lifeboats dating from 1867 and find out more about life in Sheringham in the past.

Fossils

The North Norfolk Deep History Coast is well known for its fossils, particularly the West Runton Mammoth. Visit Cromer Museum for their Deep History Coast session which includes a fossil hunt at the beach. Schools can also borrow their Deep History Coast Loan Handling Box.

Include a fossil hunt when you visit the beach. Belemnites are commonly found along the coast, particularly at East and West Runton. Information about where and how to fossil hunt is available here:

visitnorthnorfolk.com/Deep-History-Coast/deep_history_coast_fossils.aspx

English ideas

Speech punctuation

Pupils can apply what they have learned in English lessons about punctuating speech.

Pupils could select two pictures of creatures from the wildlife resources and imagine what the creatures might say to each other. This could be carried out in pairs with each child being one of the creatures. You might want to focus the conversation to be about fishing, plastic pollution or life in a rockpool.

Children could then write some dialogue using speech bubbles or the punctuation they have been learning.

Acrostic poem

Children could write an acrostic poem on a theme of your choice. It could be about a sea creature, plastics, crab pots or chalk...

Descriptive recount

Write a description of diving under the sea to see the Cromer shoal chalk beds.

Discuss description, noun phrases and using the senses. Children to collect notes on a planning sheet as they watch one of the videos. Pause from time to time to discuss adjectives/ names for things/adverbial phrases/ emotions.

Snorkel – Sheringham:
[youtube.com/watch?v=YKv5IyHqCBs](https://www.youtube.com/watch?v=YKv5IyHqCBs)

Scuba dive – West Runton:
[youtube.com/watch?v=WEgLWlsvhDk](https://www.youtube.com/watch?v=WEgLWlsvhDk)

The children could find a partner and tell them about the amazing snorkel/ dive they went on. What did you see? Hear? Feel?

As a class, write the opening paragraph together and then the children should write their recount.

5-10 minutes before the end, encourage them to end their description and sum up how they feel about their experience.

Reading and narrative writing

The Secret of Black Rock by Joe Todd-Stanton tells the story of a mysterious and misunderstood black rock.

Explore the story and how the feelings of the characters about the black rock change.

The children could rewrite the story to be 'The Secret of White Rock' giving it a local twist using the chalk and creatures that live in the MCZ and crab and lobster fishing.

Maths – Data handling

Collect data

Help get families talking about the Marine Conservation Zone at the start of the topic by creating a questionnaire sheet with the questions you would like the children to ask. Children could take a couple of sheets home and use them to survey family members or neighbours.

Data analysis

Pool the data from whole class - it may be easiest to do this without the children.

What does our data show? Explain that we can make these numbers easier to see by using a bar chart or pictogram.

Model drawing a bar chart or pictogram for one of the questions. Go over numbering and labelling axes, gaps between bars, title etc.

Give the children a set of data to enter onto a blank bar chart and ask them to write a sentence to explain what it shows.

Example questions:

Have you heard of the Cromer Shoal Chalk Beds Marine Conservation Zone?

Yes/no

Do you know when it was created?

a) 1953 b) 1986 c) 2005 d) 2016

Do you know about the purple sponge in the sea here?

Yes/no

Do you know much about the creatures in the sea here?

A lot/a bit/nothing

What do you most like doing in the sea?

Surfing/swimming/snorkelling/paddle boarding/none of these

On a scale of 1 to 5 how much do you love the sea?

(1 – not at all to 5 – loads!)

Ages 4-7 – Beach safety

Beach safety

RNLI Beach Safety teaching resources for lower primary:
[rnli.org/youth-education/education-resources/lower-primary](https://www.rnli.org/youth-education/education-resources/lower-primary)

General beach safety information here:
[rnli.org/safety/beach-safety](https://www.rnli.org/safety/beach-safety)

Arrange a visit from RNLI to your school:
[rnli.org/youth-education/educational-visits](https://www.rnli.org/youth-education/educational-visits)

Sun safety

BBC: [bbc.co.uk/cbeebies/watch/sun-safety-for-kids](https://www.bbc.co.uk/cbeebies/watch/sun-safety-for-kids)

Lesson plans and resource from Care In the Sun (note Northern Irish resource with different key stages):
[careinthesun.org/sun-protection/school-activities/](https://www.careinthesun.org/sun-protection/school-activities/)

Register for free to access resources:
[soltansunready.com/for-schools](https://www.soltansunready.com/for-schools)

SKCIN is a national skin cancer and melanoma UK charity that has free resources available to schools that register and work towards gaining Sun Safe School Accreditation:
[sunsafeschools.co.uk/](https://www.sunsafeschools.co.uk/)

Tides

Introduce the tides and the effect of the moon on tides.

BBC: [bbc.co.uk/teach/class-clips-video/little-stargazing-the-moon-and-the-sea/zb7tf4j](https://www.bbc.co.uk/teach/class-clips-video/little-stargazing-the-moon-and-the-sea/zb7tf4j)

Always check tide times before visiting the beach:

- Buy a Norfolk tide table to plan ahead.
- Free predictions for up to 4 months ahead are available here: [tides4fishing.com/uk/england](https://www.tides4fishing.com/uk/england)

Applying the learning

Design beach safety posters.

Involve the children in conducting a risk assessment at the start of a beach visit.