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# Which way to the beach?

Heading to the beach with your class, family or youth group? This pack has everything you need for your own Ocean School. From taking in the sights and sounds, to collecting and analysing ocean pollution, to turning everything you've learnt into big, brave ocean protection actions.

# THE ACTIVITIES

There are three types of activity in this pack. Connect exercises to help you feel closer to the ocean, Explore tasks for roaming the beach and discovering new things, and a Protect activity to turn what you've learned into environmental action. Ocean School is a journey through these three experiences. So if you only have time for a few activities, try to do one of each.



# Connect

- Sunrise session
- Mindfulness moment
- Mark the tide

# **Explore**

- Beach clean
- Beach sort
- Habitat chat
- Rockpool ramble
- Food chain challenge

# Protect

- Voice of the ocean
- Pupil protest
- Ocean activist graduation
- Sunset session

# HOW TO PUT ON AN OCEAN SCHOOL

- **1.** Have a read of this programme.
- 2. Prepare any equipment you'll need.
- Take your group of activists to the beach. Any beach will do, they all tend to need some TLC.
- Follow the activity instructions to put on your own Ocean School. And look out for the activities labelled 'Little activists' for younger children.
- Share your pictures and findings far and wide using the social info below.

@SurfersAgainstSewage

- @SurfersAgainstSewage
   @SeeGemmetrics
- 💟 @SasCampaigns

#OCEANSCHOOL #OCEANACTIVISTS

# How to fight the polluters without getting bruised.

We're here to investigate ocean pollution and learn how to care for our coast. Not twist our ankles and step in dog poop. So let's get to grips with these simple safety tips to make sure we get the most from our beach trip.

# Wildlife Look but don't touch.

# Emergency

If anything goes wrong, tell a grown up.

# Tide

It moves fast. Keep an eye on it.

# **Common sense**

If something looks dangerous, dodgy or just plain gross, leave it alone.

# Rocks

Some are slippy, some are sharp, and some are hidden underwater. So watch out.

# **Ankles and knees**

Don't go in water deeper than your ankles. Don't climb rocks higher than your knees.

# Base

Remember where your base is (mark it with a big stick or something) and gather there after each activity.



# Get beach-brain ready.

We want to learn as much as possible. So let's find out how much we know about the ocean before we begin. This activity can be done in the days leading up to Ocean School, or first thing in the morning.

# Do

**SUNRISE** 

SESSION

- Watch the film 'The Creature'
- **Briefly introduce Surfers Against** Sewage and our mission - create Ocean Activists everywhere.
- Talk about how you're all going to become ocean activists, and what this means - cleaning up the coast, encouraging polluters to do better, sharing the facts and inspiring people to take action for the ocean.
- Think about ocean conservation by asking the simple question, 'If the ocean could speak, what would it say?'

# Discuss

- What would you all like to learn at **Ocean School?**
- What do you know about ocean conservation? (for a hint, look down.)
- Why is it important to learn about the environment?

# Know it all

Find out more about Surfers Against Sewage here

# Prepare

means protecting and caring for the ocean and OGEAN GONSERVATION

everything living in it. And when we take care of the ocean, we take care of the whole planet.

The film 'The Creature'

Check out the glossary for more definitions

407 someone who takes action to make real change happen.



# Breathe in. Breathe out.

# Let's get Ocean School off to a chilled start by taking a moment to relax and reconnect. Eyes shut. Minds open.

#### Do

- Whip off your socks and shoes.
- Get comfortable sitting or lying down, digging your fingers and toes into the sand.
- Close your eyes and take some long, deep breaths. Focus on your senses, one by one.
- Read out these facts and start thinking about the ocean:

Up to two thirds of a shark's

brain is dedicated to smell.

What can you smell? prompt: seaweed, salty air, Some whales can hear other whales calling from over 300 miles away. What can you hear? Prompt: waves crashing, wind blowing, seagulls.

> Catfish have soft skin, no scales and a very Carnsn nave sont skin, no scales and a very Descard wat sond wat can you feel?

Prompt: dry sand, wet sand, pebbles,

Learn

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- Interesting facts about the ocean and marine life.
- How to relate to the environment.
- How to slow down and practise
  - simple meditation.

#### Act

Keep what you've learned in mind. By remembering all the ways we're connected to the ocean, we can feel closer to it wherever we are.

Surfers Against Sewage Ocean School



#OceanSchool #OceanActivists

**Know it all** Find out more about how we're all connected to the ocean.

The ocean is a source for food for people all around the world.



OXYGEN Without ocean life, we wouldn't be able to breathe. More than half the oxygen in the atmosphere is created in the ocean, by things like marshes and underwater kelp forests.

WEATHER The ocean is the earth's regulator of climate and weather patterns.

80% of global TRAVEL al trade is transported by sea.

ACTIVITIES The ocean provides us with an abundance of different sporting and leisure activities to enjoy.

# It won't stick around

Is the tide coming in or going out? It can be hard to know when you first arrive, so this activity is a good way to find out.

#### Do

- Grab a stick from the beach.
- Stick it in the ground where the water comes to.
- At the end of Ocean School, check to see if your stick is further from the sea, or if it's been washed away. This will tell you how much the tide has moved, and whether it's gone in or out.

#### Discuss

- How far has the tide moved?
- Did anyone notice the tide moving?
- How can we be careful around the sea to make sure we don't get caught by the tide?

# Prepare

- Å stick.
- A backup stick, in case the first one gets accidentally beach-cleaned.

#### Learn

- Tide times and levels.
- Basic beach safety.

of the world's surface is covered by ocean.

# Pick up some rubbish knowledge

Let's get some hands-on experience with ocean pollution. With a good pair of gloves and a keen pair of eyes, we can literally gather data from around the world right on the beach. And by data, we mean of course plastic bottles, fishing nets and chocolate wrappers from the 1980s.

# Do

- Put on gloves and grab some bags or buckets to put the rubbish in.
- Go off and explore the beach, collecting rubbish where you find it.
- Set a time limit, then come back together and put your rubbish in your base.

#### **Discuss**

- How much rubbish did you find?
- What was the biggest thing you found?
- Was there more rubbish than you expected?
- What was the most common item you found?
- What was the most common material you found?
- What's the weirdest thing you found?

# **Prepare**

- Gloves.
- Bags or buckets.
- Hand sanitiser.

Make your beach clean one in a million. Get all the gear you need and sign up to our Million Mile Clean at <u>beachcleans.org.uk</u>

#### Learn

- Which man-made objects end up in the ocean.
- Where they can be found.
- The rough level of pollution on a particular beach.

# Act

Take lots of pictures as you're cleaning the beach. Get shots of the biggest and weirdest things you find, and share them far and wide using these social hashtags:



# 5000

pieces of plastic pollution are estimated to be found on every mile of UK beach.

Marine Conservation Society 2016

# These polluters need a good sorting out

It's time to put ocean pollution in its place. These activities are all about organising our rubbish to give us a better look at the things polluting our beaches. But there's no need to do every one of the activities, just the ones that seem most manageable and useful. Remember, we can use everything we learn to teach the polluters a lesson. So make sure someone's ready to record the results and discussions

# **PIE CHART**

# Do

- Separate your rubbish by what it's made from (plastic, metal, etc).
- Draw a circle in the sand big enough to fit it all in.
- Arrange the materials into a pie chart in the circle.

# BAR GRAPH

# Do

- Arrange the objects into groups, like bottles, plastic bags and fishing gear.
- Turn the groups into a bar chart, showing how much of each group was on the beach.

# **VENN DIAGRAM**

# Do

- Draw a big venn diagram with two or more circles in the sand.
- Give each circle a label, like 'Plastic', 'Branded' and 'Reusable'.
- Put the items in the right areas.

#### **Discuss**

- Why do you think there's so much of the biggest group of materials?
- How could they harm fish and marine animals?

# Discuss

- Why is there so much of the biggest group?
- What can we do to make sure less of it ends up in the ocean?

# **Discuss**

• How do the objects in different areas affect the ocean and marine life in different ways?

# **Little Activists**

**BEACH SORT** 



# WHAT'S IT MADE OF?

#### Do

- Draw some big shapes in the sand
- Sort the rubbish by material, putting the plastic in one shape, the glass in another, and so on.

# Discuss

- How many materials are there?
- How do you know what each object is made from?
- Which shape has the most rubbish?

Surfers Against Sewage Ocean School



# Know it all

There are loads of interesting (and worrying) facts about ocean rubbish <u>here.</u>

#### Prepare

- Gloves.
- Hand sanitiser.

#### Learn

- Observing, measuring, classifying, and hypothesising skills.
- How to record environmental damage and understand and evidence the problem.
- How to be a critical consumer.

# **BONUS ACTIVITIES**

# **Linear Economy**

#### Do

- Choose an object that's hard to recycle, like a carrier bag.
- Stand together in a line.
- Pass the object down the line and talk about its life (for example, from a factory, to a shop, to a home.)

# **Circular Economy**

# Do

- Choose a reusable object, like a glass bottle.
- Stand together in a circle
- Pass the object around the circle and talk about its life (for example, from a factory, to a shop, to a home, to finally being cleaned and reused.)

# Act

- You've organised your rubbish, now make it count.
- Share your findings on your socials, and remember to tag us.
- Do more beach, park, street and river cleans. And make them go further by joining our <u>Million Mile Clean.</u>
- Talk to your family and friends about how we can stop these things getting to the ocean.
- Tell the polluters to sort themselves out by submitting your rubbish to our <u>Brand Audit</u>. Or take it one step further and contact them directly.

# Discuss

- What happens when it gets to the end of the line?
- How did it end up on the beach?

# **Discuss**

• How can reusing and recycling things make them last longer and keep them out of the ocean?

A plastic bottle can stay in the ocean for 450 years, slowly breaking down into smaller and smaller pieces but never actually going away.

# Life's a beach

# Ever lifted up a stone and seen a tiny crab scurry away? Or dug a hole in the sand and had a sand hopper spring into your lap? All sorts of <u>creatures</u> and <u>critters</u> live in habitats on the beach. And the more we know about them, the more we can do to keep them safe.

# Do

- Take a walk around the beach together.
- Look at the sand, rocks, rockpools and tideline.

# Discuss

- What is a habitat? (A place where plants and animals live. Like fields, forests, deserts, and the ocean.)
- What's a micro-habitat? (A smaller, specific place where plants, animals and insects live. Like a tree, a cave or a rock pool.)
- What's an ecosystem? (A community of animals, plants, creepy crawlies and their various habitats.)
- How do people change coastal ecosystems?
   (By polluting them, by building on them, by creating too much waste, etc.)
- What happens when one part of an ecosystem changes?
  (For example, when pollution means some creatures can't live there anymore, it makes it harder for the other creatures to live there.)

# Know it all

Find a bunch more habitat facts here.

# Prepare

Curiosity and imagination.

# Learn

- The types of habitats and ecosystems.
- Where to find them on the coast.
- How people affect them.
- How people can protect them.

# Act

 Now you know all about habitats and ecosystems, you can help protect them. Tell your friends and family what you've learned and what we need to do to stop them getting disturbed or polluted.

Every 30 seconds a marine animal dies because of plastic pollution. That's over 100,000 marine mammals and turtles and 1 million seabirds every year. UK Government, 2018

#### 20 mins Suggested time

# It's a little blue zoo

Rockpools are home to thousands of organisms and ocean critters. And they all depend on the tide flowing in and out every day, bringing fresh food and new companions. In our rockpool ramble, we're going to explore the rockpools on the beach, see who lives there, and figure out how their homes might be affected by rubbish and pollution. But let's keep our distance. We can look, gaze, peek and stare, but let's not touch, poke, yank or twiddle.

# Do

- If there's a lot of you, get into teams of two.
- Grab a pen and paper.
- Investigate a rockpool each.
- How many colours are there?
- What plants and animals can you see?
- Why would the animals choose to live there?
- Can you see what's under the rocks and seaweed without touching them?
- What might change as the tide comes in?
- What might change as the sun comes and goes?
- How might plastic and pollution affect the rockpool's plants and animals?
- Set a time limit, then come back together.

#### Discuss

The questions above, now you've researched the rockpools yourselves.

# Prepare

- Magnifying glasses.
- Spot the species guide on the next page.

# Learn

- How organisms live in the habitats they're suited to.
- How different habitats give their creatures what they need.
- The names of marine plants and animals.

# Act

- Talk to your friends and family about the threats to rockpools, like climate change, acidification and pollution. And how we can protect them - such as with beach cleans and using less single-use plastic.
- Take photos of the rockpools and all the critters living in them. Then share these all over your socials using these hashtags:

# #OCEANSCHOOL #OCEANACTIVISTS

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Lots of medicines come from marine plants and animals. Like coral reefs, algae and even starfish.



#OceanSchool #OceanActivists

# Spot the species guide See how many of these little critters you can spot on your ramble.



Barnacle At high tide a barnacle opens its shell and sticks its legs out to catch prey.



**ROCKPOOL RAMBLE** 

Shrimp There are over 128 species of shrimp!



Mussel Mussels have beards. They grow a hair-like substance to attach themselves to rocks.



**Beadlet Anemone** The beadlet anemone catches prey using its tentacles which are full of stinging cells.



Crab Crabs have an external skeleton called an 'exoskeleton'.



Starfish Starfish have an eyespot at the end of each arm.



Blenny A blenny is capable of living out of water for many hours.



Limpet Limpets have one large muscular foot which they use to move around rocks.

Sea Lettuce Sea lettuce makes its own food by photosynthesis.



**Moon Jellyfish** All jellyfish are 95% water and have no brain, blood or heart.



Sea Slug Sea slugs have both male and female organs

# BONUS **ACTIVITIES**

Research your own facts about these rocky shore creatures and keep an eye out for them on your ramble.

- Common Whelk
- Topshell
- Sea Squirt - Hermit Crab

Look at the person on your left. Now at the person on your right. One of these people will try to eat you. But who? A food chain is where the different organisms in a habitat eat each other to survive A krill eats some seaweed, a fish eats the krill, and a shark eats the fish. In these activities, we're going to play the parts of different marine animals, and see who can eat their way to the top of the food chain.

# **BUILD A FOOD PYRAMID**

# Do

- Make a pyramid on the beach with sticks, seaweed and stones, or just draw it in the sand.
- Separate it into four levels.
- Place the organisms at the right levels in the pyramid. Use an object or sign to represent them, or just write in the sand. It should go: Top: Shark
   Second level: Fish Third level: Krill

Bottom: Phytoplankton

# MEET THE CREATURES

# Do

Time to get into character. Get a minimum of eight friends and act out each creature in turn using these movements and sounds.

# Shark

Noise: Duuh nuh...duuuh nuh dun dun dun dun dun dun dun DUUUUH! Action: Shark fin on your back.

# **Fish**

**Noise:** Popping noise with mouth. **Action:** Weaving, snaking body.

# Krill

**Noise:** Tikatikatikatikatika (scuttling noise) **Action:** Tiny swimming arms.

# Phytoplankton

Noise: "Swish swash..." Action: Raised waving arms.

# Discuss

- Who eats who?
- What other animals might there be instead of the ones here?
- What happens to the shark? (When it dies it decomposes and feeds bottom-level plants and creatures.)

#### #OceanSchool #OceanActivists



Discuss

at the end?

below us?

# FEEDING FRENZY (SIMPLE)

# This is a fun game to learn how our food chain works.

# Do

- You start as phytoplankton, moving around the habitat doing the actions and noises.
- When you bump into someone who's the same species as you, play rock, paper, scissors with them.
- The winner becomes the next animal up in the food chain.
- The loser starts again as phytoplankton.
- Keep going until someone becomes a shark.

# FEEDING FRENZY (ADVANCED)

# This is a more advanced game about food chains.

#### Do

- Split into the different organisms in the food chain.
- Swim around your ecosystem together, doing the actions and noises.
- The aim is to try to eat an organism the level below you. So if you meet someone the level below or above, play rock, paper, scissors to see who eats who.
- Beat a lower-level organism? You ate them! Do a big burp and turn into the creature on the level above (if you can).
- Beat a higher-level organism? A lucky escape. Swim away triumphantly.
- Lost to a lower-level organism? Sorry, you starved. Your body sinks to the sea bed and you become phytoplankton again.
- Lost to a higher-level organism? Bad news, you're poop. You settle on the ocean floor and start again as Phytoplankton.
- After a few minutes, stop the game and count how many of each organism there are.
- You can then restart the game with different amounts of each organism, to see how this affects the numbers at the end.

# **Discuss**

- How did changing the numbers of each creature affect how many were left at the end?
- How many of each creature do you think you need to keep everything balanced?
- Did you ever run out of a certain creature? And why do you think this was?
- Humans are at the top of the food chain. What responsibility do we have to the creatures below us?

# Know it all

Find out all about different food chains and how we can protect them on the next page.

How many of each thing did we have

Are there any creatures above sharks

How can we support all the creatures

Humans are at the top of the food chain.

in the food chain? (Humans)

#### **Prepare**

- Sticks and seaweed to make a food pyramid.
- Lots of energy.

#### Learn

- The hierarchies and relationships in a food chain.
- How humans impact food chains.
- How we can help protect them.

# Act

Help make sure we keep food chains balanced by understanding our role in them. This could mean not buying fish from overfished areas, and helping to clear plastic pollution from the coast.

# **BONUS ACTIVITIES**

# **Go fishing**

What would happen to your food chain if humans started catching too many fish? Play again, but with one person playing a fishing boat that removes creatures from the ocean whenever they want.

# **Add plastic**

How do microplastics affect the food chain? Play again, but this time one person is microplastics. When another creature eats them, the plastic poisons them. They'll then have ten seconds to live, or be eaten by a creature from the level above, who will then have ten seconds to live.



# **Marine food chains**

There are 1000s of animals that live in UK waters. Each animal fits into a different trophic level in the food chain.



# **Trophic levels**

Each stage in a food chain or foodweb is known as a trophic level. There are four trophic levels in this marine food chain.

# Do

Can you add five more animals to the food chain?

# **Top predators**

Sharks, grey seals and tuna can be found at the top of a marine food chain. What else do you think can be found here?

# **Secondary consumer**

Squid, cuttlefish and snapper fish are secondary consumers. Can you think of any other animals that belong in this section.

# **Primary consumer**

Primary consumers eat the plants in the bottom level of the marine food chain and include animals like herbivorous fish, crabs and sea urchins.

# **Primary producer**

Food chains always start with a producer. These are organisms that make their own food through photosynthesis. Can you describe what photosynthesis is?

If the ocean could speak, what would it say? Using everything we've learnt, seen, found and felt, we're going to do something big and brave to make a <u>noise</u> for the ocean. Draw, sculpt, write, dance, rap. There are hundreds of ways to give the ocean a voice. What will you do?

# Do

**VOICE OF THE OCEAN** 

- If there's a lot of you, get into pairs.
- Ask one important question If the ocean could speak, what would it say?
- Set a time limit, then start coming up with attention-grabbing ideas. They could be posters, poems, beach artwork or songs. Whatever will make people stop and think about doing more to protect the ocean.
- Take it in turns to share your ideas, creations and performances with the group.

# **Discuss**

- Which activities or personal experiences inspired each idea?
- What is each idea trying to get people to do?
  - Where and when would each idea be most effective?
- What makes a good ocean protection idea?

It's estimated that less than 4% of the ocean is protected. We need to aim for 30% by 2030.

# **Prepare**

- Pens and paper.
- Camera.

# Learn

- Creative thinking.
- An activist attitude.
- Empathy for the environment.
- How to draw on personal experiences. to create art.
- Listening and speaking skills.

# Act

- You now have some creative, researched and ready-to-go ideas for making a noise about ocean pollution. So think about what you could do with them.
- When and where would they have the most impact?
- Who would be most affected by them?
- If you're feeling brave, share your idea with the world and give the ocean a voice! And remember to tag us.
- You could also come up with a list of marine protection pledges to make at home and at school.
- But if that's not enough and you need to make a noise about ocean pollution Right. This. Second. Then grab a card and a stick and head to the Pupil Protest activity.

# What do we want? Ideas!

# Make a difference and make it loud. Turn up the volume on the Voice of the Ocean activity by turning interesting information into an <u>in-your-face protest.</u>

# Do

- Pick some of the facts from the next page and share them with the group.
- Choose one fact each and turn it into a catchy slogan or design to go on a placard.
- Spend some time writing and drawing each idea onto the placards.

# Discuss

- How did you come up with your ideas?
- Which is your favourite placard? And why?
- If you could show anyone in the world your placard, who would it be?

# Prepare

- Blank placards.
- The protest fact sheet.
- Pens and pencils.
- Your imagination.

#### Learn

- A range of ocean conservation facts and statistics.
- Communication skills.

# Act

- So you have a bunch of ready-made protest placards and some energised ocean activists. What to do, what to do... (if you do decide to take your protest to the streets, good for you! Just remember to obey the law and keep everyone safe at all times.)
- Or you could take a picture of you all holding your placards and post it on your socials - tagging us as well of course.

# EVEN THE SMALLEST OGEAN AGTIVIST GAN MAKE A HUGE DIFFERENCE.



#OceanSchool #OceanActivists

# Get the facts

# THE OCEAN AND OUR IMPACT 95% of the ocean is unexplored. In fact we know less about it than the surface of Mars. Just recently a 392 year old Greenland Shark was discovered! Without ocean life, we wouldn't be able

- to breathe. More than half the oxygen in the atmosphere is created in the ocean, by things like marshes and underwater
- kelp forests. Lots of medicines come from marine plants and animals. Like coral reefs, algae and even starfish.

# PLASTIC POLLUTION

- Every minute, enough plastic to fill a rubbish truck enters the ocean. That's
- around 12 million tonnes a year. There are an estimated 5.25 trillion macro
- and micro plastic pieces floating in the open ocean. This weighs up to 269,000 Tonnes.
- In just 15 years the amount of plastic washing up on UK beaches has almost
  - At current rates, by 2050, there could be doubled.
  - more plastic in the ocean than fish.

# MARINE LIFE

- Recent studies found marine plastic pollution in the bodies of 100% of marine turtles, 59% of whales, 36% of seals and 40% of seabird species examined.
- Plastic pollution is mistaken for food by almost all marine animals. Some even
- think it's a toy. Every 30 seconds a marine animal dies because of plastic pollution. That's over 100,000 marine mammals and turtles and 1 million seabirds every year.

# SINGLE-USE PLASTIC

- Plastic bottles are made to be used for minutes. But they cause harm for
  - hundreds of years. A plastic bottle takes over 450 years to
  - break down in the marine environment.
  - 38.5 million single-use plastic bottles are
  - used every day in the UK.

# PLASTIC PRODUCTION

- The world produced more plastic between 2002 and 2012 than in the whole of human
- history before that. In 1950 we produced 1.5 million tonnes
- of plastic. This had grown to 448 million
- Plastic production is set to double by 2030. tonnes in 2015.

# CLIMATE CHANGE EMERGENCY

Climate change = ocean change. Whenever people burn fossil fuels, carbon dioxide is added to the atmosphere. And the ocean absorbs a lot of it. This changes water temperature, ocean acidification and deoxygenation. Which leads to changes in oceanic circulation and chemistry, rising sea levels, more intense storms, and dying marine species.

# ACID OCEANS

- Over the last few decades, the amount of carbon dioxide dissolved in the ocean has increased all over the world.
- In the ocean, carbon dioxide reacts with seawater to form carbonic acid, which makes seawater more acidic. More acidic seawater makes it harder for corals to build skeletons and for shellfish to build the shells they need for protection.

# CORAL BLEACHING

- Global heating and ocean acidification have already severely bleached up to 33% of all warm water reefs. And the rest are vulnerable to even a fraction of a degree more warming.
- Temperature spikes of only 1-2° can trigger mass bleaching on up to hundreds of miles of coral reef.
- Coral bleaching affected 70% of the world's coral reefs between 2014 and 2017.

# CUTTING OUR CARBON

Lowering our carbon emissions is essential if we want to stop the worst effects of climate change. The UK can end its contribution to global warming within 30 years by committing to zero greenhouse gas emissions by 2050.

# A sandy, stony ceremony.

We've become more connected to the ocean We've explored and investigated important marine issues. We know how to help protect our coastal environments. And we have the certificate to prove it.

# Do

- Write each young activist's name on an Ocean Activist Certificate (it's quicker to do this before beginning Ocean School).
- Get together at the end of the trip.
- Take it in turns to say the biggest thing you learnt.
- Say one thing you're going to do to help the ocean.
- Once you've all shared, hand out the graduation certificates.
- Mark the moment with a big group photo. Chuck some seaweed in the air, give a shaka, jump up holding your certificates, whatever looks the most awesome.

# Discuss

- Now you're all certified Ocean Activists, what will you do to make a difference?
- If you did Ocean School again, what would you like to do?

# **Prepare**

 Filled-out Ocean School Ocean Activist Certificate.

# Act

Share the picture on your socials, along with how you'll be taking action for the ocean in the future. Make sure you tag us.

**#OCEANSCHOOL** 





# IS NOW AN OFFICIAL SAS

ACTIVIST

OGEAN





# Peace out

Let's finish Ocean School feeling as relaxed as when we started. This final mindfulness moment is all about reconnecting to the ocean and reflecting on what we've learned and experienced today.

# Do

- Whip off your socks and shoes.
- Get comfy sitting or lying on the sand, digging your fingers and toes in.
- Close your eyes and take some long, deep breaths.
- Think back over everything you've achieved so far and what you can do in the future by reading these facts:
- The tide comes in and out twice a day. Listen to the ocean, does it sound closer or further away than when you arrived?
- Every piece of plastic removed from the ocean helps protect fish and sea life. What objects have you seen on the beach today?
- The more we know about the ocean, the more we can do to protect it. What's the most surprising thing you learned today?
- Listen to the sounds of the beach, now open your eyes and look around. Who would you like to bring here and inspire to become an Ocean Activist like you?

# Know it all

 Find out more about what we can all do to protect the ocean <u>here</u>

# Discuss

- How do you feel after Ocean School? Educated? Engaged? Enraged?
- If you're having strong feelings about ocean conservation, what can you do to make a difference?

# Act

Get involved in our campaigns at sas.org.uk.

# What does it all mean?

#### **Activist**

Someone who takes action to make real change happen.

#### **Climate Change**

A change in average temperature, rainfall or other weather patterns and conditions in a certain area over a long period of time.

#### **Circular Economy**

The opposite to a Linear Economy, where products would be reused and recycled: Make > Retail > Use > Reuse > Recycle > Design > Make...

#### Ecosystem

All the living and non-living things in an area. This includes the plants, animals, and other living things that make up the communities of life.

#### **Fossil Fuels**

Fuels like coal, oil, or natural gas, formed in the earth from plant or animal remains. Fossil fuels will run out, so they aren't a sustainable resource.

#### Linear Economy

Where products are made, used once and then thrown away: Make > Use > Dispose

# Marine Conservation Zone (MCZ)

Designated areas of the ocean which aim to protect nationally important, rare or threatened habitats and species.

# **Ocean Conservation**

Protecting and caring for the ocean and everything living in it. And when we take care of the ocean, we take care of the whole planet.

#### Organism

Any living thing, from the smallest bacteria to a humongous blue whale.

#### **Phytoplankton**

A microscopic marine algae which provides food for a wide range of sea creatures.

#### **Photosynthesis**

The process where plants make their own food using carbon dioxide, water and sunlight.

#### Recycle

Using something again or reusing waste material by converting it into something new.

#### **Rocky Shore**

Where the land meets the sea - home to thousands of creatures living in extreme conditions.

#### Strandline

Things like seaweed and driftwood that get carried by the waves and gather just above the high tide line.

#### **Sustainable**

To be sustainable means using natural resources responsibly without causing harm to the natural environment. So they can support us and future generations.

# SCHOOL'S OUT

But not for long. The ocean always needs activists like us. So take everything you've learnt and help your family, friends and school do more to save the ocean. And if you want to really make some noise, share what you know about ocean rubbish with the big polluters and help us teach them a lesson.



# Share your Ocean School story here:

@SurfersAgainstSewage
 @SurfersAgainstSewage
 @SasCampaigns
 #OceanSchool #OceanActivists