Plastic Pollution Presentation Script

Slide 1

(No need to include this slide if you are a regular teacher of a group or in a school)

(Introduce yourself & your organisation & what you do)

- *Who we are*

e.g. A marine conservation charity based in London.

- *What we do*

e.g. We are trying to educate people across the UK and the world about the hazards of plastic pollution in an attempt to help save our seas.

Slide 2

(Introduce the workshop)

Today we will be learning about the topic of plastic pollution in the oceans. There will be a few different activities over the session to help you to understand this topic. First we will have,

- *A 20 min talk about plastic pollution, followed by,*
- *A game of bingo to test your new knowledge, and finally*
- *An eco-arts session to creatively recycle the plastic you have brought in*

Does this sound OK to everyone?

Slide 3

(Introduce the topic of plastic pollution and what you will be discussing today)

Q - Who has been to the beach? (show of hands)

Q - What did you see that should not have been there? (pick students for answers)

So as a lot of you have seen, plastic pollution can get onto our beaches and it also ends up in the oceans. When it gets into our oceans it has 3 major effects, it can:

- *Destroy animals homes (and affect populations)*
- *Cause animals to get entangled or ingest the plastic*
- *Be poisonous to people*

This picture is not real but represents the conecpt that our oceans and seas are a "junkyard for our plastic waste" and if we were to take all of the water out of our oceans we would be left with a "sea of plastic"

Slide 4

Plastic pollution is on the rise all around the world and to help you to understand just how much I have some facts here to show you.

In 2012, 32 million tonnes of plastic waste was created from all across the world. This is a very big number and hard to imagine, so instead, imagine how much 4 million double decker buses must weigh. This is roughly the same weight of plastic waste that was created in that one year, and less than 10% of this was recycled.

Every year this plastic waste is increasing by 4 times as much (4%) as we make more and more items out of plastic.

One of the biggest offenders is the plastic bag. 500 BILLION of these are used around the world every year. This is the same as 1 million plastic bags being used every minute! And in the UK alone we throw away 8 billion plastic bags each year

Slide 5

It is such a shame that we throw away so much plastic, as it is a very valuable resource and has become a big part of our daily lives. Did you know it takes half a bottle of oil to make one plastic bottle (500ml drinks bottle)

(Hold up a drinks bottle half filled with water to show them).

We are using our Earth's precious resources to make throwaway plastic items. Even our clothes sometimes contain plastic fibres that get washed out to sea through our drains when we wash our clothes.

Q- Who can think of some other useful items of plastic we use each day?

e.g. Chairs, tables, pens, bottles, rulers,

(Press slide)

Sadly, half of the plastic we use every day is thrown away after just one use!

This is a very big waste for such an important resource. If we lined up all of the plastic cups we threw away each day they would circle the Earth!

Slide 6

When we throw away our plastic it can end up in lots of different places like landfill, the streets, sometimes it is recycled, but a big amount of it makes its way to the ocean.

Q- Can anyone look at this picture and tell me the three ways that plastic enters our oceans?

(Let students answer and then repeat)

1. *Washed out to sea by rivers and drains- This is the main way that plastic reaches the sea*
2. *Blown by the wind from streets, landfill and beaches - when it is dumped by people*
3. *Thrown or spilt from boats – although it is now illegal to dump rubbish from boats it still happens out at sea*

Q- Who has been to the Thames (or their nearest big river) and seen all the rubbish collected on its banks?

Now you know where it will end up!

Slide 7

*This is a picture of a beach in the UK in 2010 and it had an estimated **100,000 pieces** of plastic on it.*

*Q- Would anyone **like** to pick up that much rubbish? Or go for a picnic at a beach like this?*

More and more of the UK's beaches are beginning to look like this and plastic now makes up 60% of all litter found on beaches and this is growing!

And you now know that this plastic eventually gets blown from beach or washed by the tide into the ocean.

Slide 8

When this plastic gets into the ocean it can have horrible effects on the creatures that call it their home.

One of these effects is that animals can become entangled in plastic, which causes them to struggle to catch food, or they can drown if they become trapped underwater but are air breathers like whales and dolphins.

It can also damage their habitats or smother plant life and coral meaning that the animals lose their homes or food source.

These pictures are some examples of what can happen when animals get entangled in plastic.

*At the bottom left (**Point)** is a picture of a famous turtle called peanut, who crawled through a can holder when he hatched form his egg and as he grew with the can holder around him he became an odd shape which meant his spine became exposed. This is a very dangerous situation for a turtle.*

Or for example, the sea bird at the top has become entangled in plastic party string meaning that it can't fly anymore and this will make it hard to catch food or escape from predators.

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Another effect plastic has on sea creatures is when they swallow or ingest the plastic.

***(*Take a plastic bag, hold it upside down and move it up and down in the air so it imitates a jellyfish swimming)**

Q- Can you imagine what this plastic bag could look like to a turtle when it is floating through murky water? (a jellyfish)

Turtles often mistake floating plastic bags for Jellyfish, their favourite food, when they are hunting and many turtles die each year from eating plastic bags.

Other animals who are filter feeders, like whales, swim through the water with their mouths open and suck in plastic along with their food like fish or krill.

This can cause serious problems like choking or starvation because the plastic blocks their throats and stomachs.

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Plastic in our oceans sadly kills animals in these ways every year and it is estimated that at least 663 different species have been affected by plastic pollution around the world.

This includes 1 million seabirds that die from eating plastic and 100,000 whales and dolphins that get entangled in plastic and die every year.

Q- How does this make you feel?

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Plastic pollution not only affects sea creatures it can also affect us, human beings.

Slide 12

When plastic enters the oceans it starts to degrade by reacting with saltwater and sunlight.

Q- who can tell me what degrading means?

Because plastic is man-made it is harder for it to break down and disappear than other natural materials and can sometimes take up to 1000 years to even start degrading.

(press slide to show bottle degrading)

The plastic breaks down into tiny pieces and releases chemicals as it is doing so, but it never really goes away.

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This picture shows a close up of grains of sand and a tiny piece of plastic that has broken down into the size of a grain of sand, but it never fully goes away, it will always exist in our oceans in some shape or form.

Slide 14

When it reaches this tiny form and has released chemicals by degrading it can get into our food chain, which is how plastic impacts human health.

Q- who can tell me what a food chain is?

So plastic chemicals get absorbed by fish and plankton, and as they are eaten by bigger fish, and bigger fish, and so on, the chemicals move up the food chain and can eventually end up on our plates!

This can cause big problems for people with their liver or hearts, or cause cancers amongst other diseases.

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As plastic naturally floats it can travel thousands of miles on the ocean currents

There are areas of the ocean called Gyres, where plastic accumulates because of the currents and forms a "plastic soup" - the biggest one is estimated to be 6 times the size of the UK!

It also reaches other parts of the oceans and affects marine creatures and people all over the world.

For example, a small whale was recently found dead off the coast of Spain from having 17kg of plastic in its stomach which included bags from UK supermarkets.

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So when you go to use something plastic, before you do or before you throw it away, think about your OCEANS:

***O**nly drink tap water if you can (in the UK)*

Or use a refillable sports bottle to take treated/distilled water or water from a larger bottle at home

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***C**arry a canvas tote bag and say NO to plastic bags*

Q- Whose parents use a bag like this to go shopping with?

Slide 18

***E**ncourage recycling by following local rules*

Put the right recycling in the right bins and encourage others to do the same

Slide 19

Artistically recycle your plastic waste - something that we will be doing in a little while and will help you to understand that plastic "waste" can be a creative resource

Slide 20

***N**otify your friends and family.*

Tell others about what you have learnt today and spread the word

Slide 21

***S**tart a class recycling scheme*

Find other ideas to up-cycle your plastic in your classroom or talk to your teacher about getting a recycling box for plastic.

Ideas:

- *Pencil holders from bottles/milk cartons*
- *Plant pots from tubs/trays*
- *Class art project to build a plastic sculpture or recycling mascot*

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End of Talk

Slide 23

Plastic Pollution Bingo - (instructions on bingo question sheet, available to download)

Slide 24

Eco Arts Activity

- Get the children to think about their favourite sea creature or take inspiration from the pictures on the board.
- What kinds of shapes do they see that are similar to the plastic items they have brought in?
- How can they turn the plastic they have made into a beautiful sea creature and piece of artwork?
- e.g. A 2L drinks bottle could be the shape of a Squid, or the body shape of a dolphin/whale/shark.
- Help them by cutting the tough bits of plastic into shapes for their animal
- Help them to cut and stick their animals together

  Perhaps you can arrange a classroom display for the models by hanging them from string along the ceiling, or mounting on a giant wall display to spread the message!