Eco-System Jenga

Will you be an eco-warrior or a planet polluter?

This version of Jenga raises awareness to the ways in which nature is being harmed and explores ways that we can help do our bit to restore it; providing greater care for the planet and the animals that call it home.

Game cards are focused on wildlife, habitats, human action and climate change. Making it a great fun and interactive way to explore the natural world and tie it in with the science and geography curriculum.

A selection of game cards are provided, and are geared toward ages 8 years and up.

This is game is themed around the Ocean Ecosystem

The set-up of this game is suitable for ages 6+ in compliance with the original game guidelines.

Created by young people at Child Dynamix – The Hut – Hull
As part of their Green Influencer and Erasmus project 'Trees4Seas' focusing on Climate Change and their outputs relating to Community Awareness and Education.

How to Make the Game and Rules of Play

<u>You will need:</u>
- A wooden Jenga Game
- A set of Game Cards (print and cut out the ones provided for the Ocean theme game)
- 2-4 players

<u>Creating the game:</u>
- Paint 6 blocks (each in different colors) to represent each section of the ecosystem food chain – or you can buy a pre-coloured game.
- Label these blocks to identify key species that can be found in this section of the ecosystem food chain

For this Ocean themed game, colours from top to bottom are as follows:
<u>Top</u>
- BLUE   Sharks/Whales
- GREY   Seals/Sea lion/Dolphins
- BROWN   Large Fish/Turtles
- PINK   Medium Fish/Jellyfish
- PURPLE   Small Reef Fish
- YELLOW   Sea worms/Sea slugs/Crustaceans
- ORANGE   Shrimp/Plankton
- GREEN   Algae/Seaweed/Seagrass

<u>Bottom</u>

Playing the game:
Step 1 - Stack the blocks in colour order, as above, to create the 'ecosystem'
Step 2 – Shuffle the playing cards and place face down in a pile

Each player will take turns to complete an action – removing or adding blocks.

Before a block is removed, the player will take a card off the top of the pile and read it aloud. This card will determine where in the 'ecosystem' the action will happen.

An 'Uh-Oh!' card – the ecosystem has been damaged! Remove a block from the indicated colour section

A 'Well Done!' card – the ecosystem has been helped! Restore the habitat by adding a block back into the tower within the indicated colour section
If you cannot add a block, no action is needed, your turn is over.

Place all used cards to the bottom of the card pile after each turn.

If you topple the tower you lose! Too many damaging actions have occurred and the ecosystem has collapsed.

Well Done!

You have followed the guidelines for choosing to eat sustainably caught fish – reducing the chance of whales and sharks being caught accidently as 'by-catch'

Place a blue block back in the stack

Uh Oh!

You have hunted animals for fun and killed an innocent creature for no gain

Remove a blue block

Well Done!

Not only have you fished responsibly and bought all your gear back – but you collected discarded nets at sea, preventing animals from getting tangled up

Place a blue block back in the stack

Uh Oh!

You went out fishing and couldn't be bothered to bring back your gear. You dumped all your nets and line overboard causing a 'ghost fishing' hazard

Remove a blue block

Uh Oh!

A shark has been found washed up on the beach. Investigations find it was poisoned by the plastics inside the fish it had been eating

Remove a blue block

Uh Oh!

A whale has beached itself on the sand Investigations find its stomach was filled with micro plastics

Remove a blue block

Well Done!

You have ordered coldwater prawns which are certified by the Marine Stewardship Council (MSC). You have saved the fish!

Place an orange block back in the stack

Uh Oh!

You have ordered King prawns at a restaurant. These have not been caught sustainably and add further threat to the species

Remove an orange block

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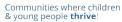
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Uh Oh!

Increased sea temperature due to climate change is affecting plankton numbers. Phytoplankton is one of the world most important producers of oxygen!

Remove an orange block

Uh Oh!

An algal and plankton bloom has occurred, creating a 'red tide'. This has poisoned fish and caused serious harm to the ecosystem.

Remove an orange block

Well Done!

These tiny microscopic drifters form the base of every ocean food chain. They are not everyone's cup of tea, but you tell everyone to help these heroes of the sea

Place an orange block back in the stack

Uh Oh!

A cruise ship has dumped its waste into the ocean during its island hopping tour, messing up the ocean chemistry

Remove an orange block

Well Done!

You have been walking places instead of driving – which is much better for the environment

Place a green block back in the stack

Uh Oh!

You have been driving everywhere, releasing CO^2 into the atmosphere. This has contributed to increasing ocean temperatures

Remove a green block

Well Done!

You have bought a large plot of land near the sea and planted lots of trees. This prevents the soil from being washed away.

Place a green block back in the stack

Uh Oh!

You have built a dock which has caused lots of soil to wash into the sea, destroying the delicate seagrass meadows

Remove a green block

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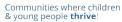& young people **thrive**!

Well Done!

You have volunteered your time to help make up some seagrass seed bags, ready for planting and restoring habitats in your local area

Place a green block back in the stack

Uh Oh!

An unusual and dramatic rise in water temperature has caused a toxic algal bloom. The water is not safe of wildlife or humans.

Remove a green block

Well Done!

You have completed a beach clean and saved animals from thinking plastic is food

Place a brown block back in the stack

Uh Oh!

A turtle has eaten a plastic bag after mistaking it for a jellyfish. The turtle is now very poorly.

Remove a brown block

Uh Oh!

After dodging dive bombing gulls, this newly hatched turtle made it to the ocean… but now it has become tangled in old fishing gear. It can still swim, but will be unable to grow properly.

Remove a brown block

Uh Oh!

Fish populations have been drastically overfished, causing a huge gap in the food chain. These larger animals have no food left to hunt.

Remove a brown block

Well Done!

You have disposed your medicines properly by taking them back to the pharmacy

Place a brown block back in the stack

Uh Oh!

Unused medicines have been dumped and found their way into the sea. These chemicals can disrupt breeding and cause deformities in some animals.

Remove a brown block

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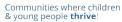
## Well Done! You have responsibly disposed of the chemicals and saved the wildlife in the ocean Place a purple block back in the stack	## Uh Oh! You have poured a chemical down the drain which has gone into the ocean which has killed some marine life Remove a purple block
## Well Done! You have taken time to help out on a Nurdle Hunt! These little plastic packing balls are often mistaken for food and you have picked up hundreds from the beach Place a purple block back in the stack	## Uh Oh! These small fish have accidently eaten micro plastics instead of plankton. This can make them poorly and cause problems up the food chain Remove a purple block
## Well Done! You have been working hard to reduce, reuse and recycle – even picking up litter in your street and down the park too! Place a purple block back in the stack	## Uh Oh! Pollution has reached the sea from the rivers. All this waste is killing off the coral reefs, leaving the small fish homeless and without food. Remove a purple block
## Well Done! You have been fishing seasonally and only taking those that meet the sizes permitted by Marine Stewardship Council (MSC) regulations Place a pink block back in the stack	## Uh Oh! You have been overfishing an area which has caused the jellyfish population to dramatically increase. This has ruined the balance in the ecosystem. Remove a pink block

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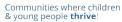& young people **thrive**!

Well Done!

You are ditching the single use plastic and joining the reuse revolution
Goodbye plastic straws, bags and cutlery you are outta here!

Place a pink block back in the stack

Uh Oh!

You decided to get fish and chips for tea, but the fish you were served was too young to be caught – meaning it was fished illegally

Remove a pink block

Uh Oh!

Aliens are taking over!
A non-native and invasive species has been spotted and its outcompeting the other species for food and shelter

Remove a pink block

Uh Oh!

You are buying plastic bottles of drink every single day instead of re-filling one. Did you know? Plastic takes over 400 years to breakdown, but it only gets smaller. It NEVER disappears.

Remove a pink block

Well Done!

You love fluffy clothes – they are so soft! But seal hunting still goes on, and you have been wise enough to check what you have chosen isn't real fur

Place a grey block back in the stack

Uh Oh!

Climate change has caused a huge and destructive storm. Not common this time of year, it has destroyed the seals usual breeding and pupping ground

Remove a grey block

Well Done!

You notice a seal on the beach and you don't want to stress it out. You carefully and quietly watch from a distance, giving it the space it needs to rest

Place a grey block back in the stack

Uh Oh!

Top predators have been eating fish poisoned with chemicals. Although it is not always obvious in the adults, passed on in the mother's milk, it makes the pups very poorly.

Remove a grey block

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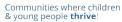& young people **thrive**!

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Uh Oh!

Underwater noise from boats and industry can impact whales and dolphins ability to communicate (through echolocation), find food and navigate the seas.

Removed a grey block

Uh Oh!

Fishing nets have been abandoned at sea! if the dolphins get trapped underneath they cannot come back to the surface to breathe

Remove a grey block

Well Done!

You remember to always turn off the lights, TV and any electric devices when not in use – you are reducing your carbon footprint!

Place a yellow block back in the stack

Uh Oh!

The ocean is absorbing too much carbon dioxide, making the water more acidic. This is dissolving the protective shells of many marine creatures

Remove a yellow block

Well Done!

Eating locally picked seasonal fruit and vegetables is an easy way to reduce your carbon footprint. Better yet, grow your own!

Place a yellow block back in the stack

Uh Oh!

Increased carbon dioxide levels and the warming sea temperatures are affecting the corals reef building abilities. Many species shelter in and around coral reefs.

Remove a yellow block

Uh Oh!

Many small creatures filter their food from the water – but the water has been polluted. This works its way up the food chain. Even to Humans.

Remove a yellow block

Uh Oh!

Sea creatures and sea shells are regularly collected and dried for decoration, putting unnecessary pressure on animal populations

Remove a yellow block

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