

| Date   | Class level<br>Third Class and Fourth Class  | Subject<br>English |
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| Strand<br>Reading  | Strand Unit<br>Receptiveness to language.<br>Competence and confidence in using language.<br>Developing cognitive abilities through language.<br>Emotional and imaginative development through language.   |                    |
| Title<br>Jigsaw discussions on Ireland’s Mackerel Fishery  |  |                    |
| Objective(s)<br>The aim of the lesson plan is for the children to develop their reading skills while learning about Ireland’s Mackerel Fishery. The children will learn skimming, scanning, note taking and summarizing. The children will explore non-fiction texts for a variety of purposes. They will also get to use information retrieval techniques in cross curricular settings. |  |                    |
| Skills Required<br>Reading; Listening; Understanding; Developing Imagination, Creativity and Confidence in using oral language; Attention, Memory, Logic and Reasoning<br>Auditory Processing, Visual Processing and Processing Speed.   |  |                    |
| Learning objectives  | Learning activities  |                    |
| The child will be enabled to:<br><br>Work as part of a group to obtain a rounded knowledge of the mackerel fishery.<br><br>Summarize a perspective on the mackerel fishery and present it to their group.<br><br>Ask questions to clarify points.  | Divide students into 5 person jigsaw groups. Appoint one person from each group as a leader.<br><br>The topic of the fisheries is divided into 5 different points of view-<br>Fisherman<br>Fishmonger<br>Customer<br>Scientist<br>Angler<br><br><b>Active Learning:</b><br>Assign each student one of the points of views to study. Ensure that they only have access to their own segment.<br><br>Give the pupils time to read their segment a few times - there is no need for them to learn it off by heart.<br><br>Form expert groups by having one child from each jigsaw group join others who were assigned the same segment. |                    |

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|  | <p>In these groups, the children are encouraged to discuss the most pertinent points of their segments and to rehearse the presentations that they will make to their jigsaw groups.</p> <p><b>Talk and Discussion:</b><br/>Bring the jigsaw groups back together. Have each person present their segment. The others in the group are encouraged to ask questions on the topic.</p> <p>At the end, ask questions on the topic of the mackerel fishery to ensure that all children have grasped the subject.</p> <p><b>Resources</b></p> <p>5 reading topics (attached)</p> |
| <p><b>Differentiation</b><br/>Mixed ability grouping. Higher and Lower Order Questioning.</p>  |   |
| <p><b>Assessment</b><br/>Questioning at the end. Teacher Observation and Questioning. Ability to work within the Jigsaw group.</p>   |   |
| <p><b>Linkage and Integration</b><br/>English-Writing: Ask students to write an advertisement for mackerel being sold at their local fishmongers.<br/>Geography: Show students a map of where mackerel are found in the north east Atlantic. This can be found in the Atlas of Commercial Fisheries published by the Marine Institute. Search for “Atlas of Commercial Fisheries around Ireland”. Then use the words “target mackerel” in the find tool to locate a map of where mackerel are caught around our coastline.<br/>History: Show student’s images of old fishing boats such as the “Manx mackerel nobby” which was used for fishing mackerel and modern fishing boats. Ask them to discuss how they are different.</p> |   |



## Mackerel Fishery Reading Cards

### The Fisherman

Mackerel are a fast moving fish which are closely related to the tuna family. They do not have a swim bladder which means that they must swim constantly or else they will sink. Mackerel swim with their mouth open and feed as they move. Their diet incorporates plankton, small fish and fish larvae. Mackerel prefer to swim in water that is warmer than 6 degrees.

Ireland has a long history of fishing mackerel, but in the early 1900's fishermen used to consider it as a nuisance as it was not widely eaten by people. Mackerel has always migrated to the north during summer-time (like swallows) to feed. As a result of changes in the ocean to the far north, mackerel changed its migration routes in the past ten years and now swims as far to the north west as Iceland and Greenland. Because mackerel is now found in different places other countries have started to fish for mackerel. This has led to disputes between the countries which used to fish for mackerel and the new countries (like Iceland and Greenland) which now fish for mackerel. These disputes have become known as the "mackerel wars" (although there is no real fighting with weapons!).

Ireland has a lot at stake in the mackerel crisis. Thirty years ago, Ireland led the way in creating cutting edge technology to exploit the abundant shoals of mackerel. Fishermen and businesses invested a lot of money in building big safe boats which were able to catch the mackerel safely and in large quantities. Now they see other countries taking a share of the resource which they had always used, and that means a smaller share for countries like Ireland.



## Explorers Education Programme

### **The Angler**

Anglers highly value fresh mackerel as a bait to catch other fish. Frozen mackerel does the trick but it does not work as well as fresh mackerel. Anglers are encouraged to catch mackerel using feathers at surface, mid-water and depth. Mackerel are regarded as being very easy to catch.

There are a few indicators which show that a shoal of mackerel may be present. These could be sea birds feeding feverishly or current lines of sea weed. Mackerel can be used to entice anything from small fish to big sharks. Mackerel when cut into strips can even be used to lure other mackerel.

Anglers consider that they do not impact the health of the mackerel stock, because they only catch a few fish in comparison to the big trawlers which catch much more.



## Explorers Education Programme

### **The Fishmonger**

Nowadays, people are becoming increasingly concerned with purchasing sustainable seafood. A particular seafood is sustainable if it comes from a fishery with practices that can be maintained indefinitely without reducing the target species' ability to maintain its population; and without endangering other species within the ecosystem by removing their food source, accidentally killing them, or damaging their physical environment.

Mackerel is an extremely popular fish amongst customers. It is very good value and extremely good for you. It is packed to the gills with Omega -3. One kilogram of mackerel costs about ten euro. When people buy mackerel they want it to be as fresh as possible with a shiny body and shiny eyes. They should be firm feeling and rigid and not droop if held horizontally by the head. Mackerel has a very strong flavor and is often served with something sweet like goose berries or rhubarb to compliment it.



## Explorers Education Programme

### **The Consumer**

Mackerel has become extremely popular in recent years due to increased public awareness about its many health benefits and the fact that several celebrity chefs have promoted its use. However the Marine Conservation Society took mackerel off its sustainable fish list last year due to overfishing. It recommended that consumers only occasionally eat mackerel and instead eat other oily fish such as herring and sardines. However, the marine scientists now say that mackerel is sustainable again.

The Marine Conservation Society suggest if consumers wish to continue eating mackerel, they should ensure that they buy it from as sustainable a source as possible.



## Explorers Education Programme

### **The Scientist**

Mackerel have always been an abundant fish around Ireland. Although, the abundance of the stock has gone up and down over the years, marine research shows that the mackerel stock is currently very healthy.

The waters around Ireland contain some very important fish nurseries within the North Atlantic Sea. The main mackerel spawning area for the North Atlantic occurs off the west coast of Ireland.

The Marine Institute, which is the national agency for marine research recognised the importance of this and advised the government that the area be recognised as a biologically sensitive area.

Different fishing regulations now apply within this area to ensure stocks remain healthy and abundant.