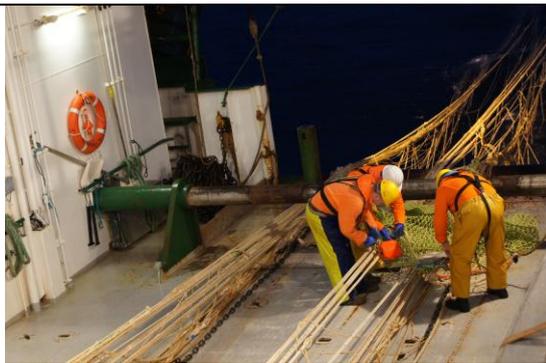


Date	Class level Fourth Class	Subject Mathematics
<b>Strand</b> Measures	<b>Strand Unit</b> Time	
<b>Title:</b> Erica's Timetable working on the Research Vessel Celtic Explorer		
<b>Objective(s)</b> The aim of the lesson plan is for children to be enabled to consolidate the concept of the passing of time. Using a schedule of work on the research vessel RV Celtic Explorer, the children will solve practical tasks involving the addition and subtraction of hours and minutes.		
<b>Skills Required</b> Reading the analogue clock, identifying the passage of time.		
<p><b>Learning objectives</b></p> <p>The child should be enabled to:</p> <p>Consolidate and develop further a sense of time passing.</p> <p>Solve and complete practical tasks and problems involving timetables, times and dates and the addition and subtraction of hours and minutes.</p>	<p><b>Learning activities</b></p> <p><b>Talk and Discussion:</b> Through questioning recall prior knowledge of time-hours and minutes. Introduce the addition of hours and minutes. Guide the children through the practice.</p> <p>Introduce students to the types of working activities that take place on board the marine research vessel RV <i>Celtic Explorer</i>. Discuss how marine scientists need to know their time schedules when they are working on the ship at sea.</p> <p><b>Pair Work/Group Work:</b> Working in pairs/groups the children are given copies of a TV schedule. Direct the children to elicit information from the schedule. One to one oral work to consolidate the practical application of timetables. Solve practical problems and tasks using a timetable of events over a selected period of time.</p> <p><b>Worksheet:</b> Complete the worksheet to consolidate learning. Show students a photograph of the Research Vessel to illustrate where Erica works.</p>	

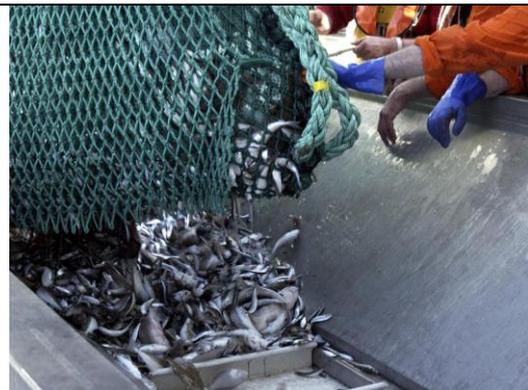
	<p><b>Resources</b></p> <p>Timetables e.g. Television guide.</p> <p>Clock face stamper / pupil clock / teacher's clock.</p> <p>Pencil</p> <p>Worksheet (attached)</p> <p>Internet access is possible or see pictures attached.</p>
<p><b>Differentiation:</b> Differentiate individual tasks and group activities by availability of concrete materials.</p>	
<p><b>Assessment:</b> Question and answer, oral feedback from children, teacher observation, teacher check, pupil work samples, End of unit test (worksheet)</p>	
<p><b>Linkage and Integration:</b> English: Functional Writing: ask students to write a "Diary for a Day". Reading: Author's Chair: Students share their diary entries with the class. ICT: Ask students to create a table of their diary using word processing. Include day/date and time.</p>	



*The Research Vessel RV Celtic Explorer is used to research the fish in our ocean.*



*The Research Vessel RV Celtic Explorer's crew put out the nets to catch the fish.*



*The crew lands the fish from each trawl into a holding tank on the RV Celtic Explorer.*



*The scientists sort the fish on a conveyor belt in the wet lab into the different types of species.*



*The scientists on the RV Celtic Explorer measure the length of and weight of a sample of fish caught. They also determine the age and sex of the fish.*

Fourth Class		Strand: Measures	Strand Unit: Time
Erica is a marine scientist and works on board the research vessel RV <i>Celtic Explorer</i> . She is always busy carrying out her daily tasks on this research vehicle. Sometimes she forgets to log the times. Can you help her to complete her timetable?			
Time	Task		
7.30am	Nets are put out for the first trawl of fish by the crew. (30 min)		
8.00	The crew bring in the first trawl and the fish trawl is landed on deck (30 min)		
8.00	Breakfast for the scientists (30 min)		
?	Erica gets her wet gear on in the wet lab ready for the fish to come through the hopper. It takes about 15 min to get dressed into the gear.		
8.45	The crew put the fish through the hopper (the fish are put into a holding tank which are then put on a conveyor belt and moved through a flapper into the wet lab) (15 min)		
9.00	Erica and other scientist sort the fish species on the conveyor belt in the wet lab (1 hour)		
?	Erica and the other scientists start sampling the fish to get information about the fish size e.g. length and weight; the fish age; the type of sex etc. (45 min)		
10.45am	The second trawl of fish has been landed and is put through the hopper		
	Erica goes back to the conveyor belt to start sorting through the second trawl of fish (1 hour and 15 min)		
	Lunch		
1. What time did the nets go out on this particular morning?			
2. How long, were the nets in the water before the first sample of fish was caught?			
3. What time did the first sample of fish land on deck?			
4. At what time did Erica finish breakfast to put her wet gear on?			
5. At what time did Erica begin to sample the fish from the first trawl?			
6. What time di Erica stop to have lunch?			
7. If it took Erica 20 seconds to measure the length a fish how long would it take to measure 90 fish? Circle the answer you think is correct: 30 seconds                      30 minutes                      30 hours			
7. It takes Erica 3 minutes to work out the age of each fish, measure its length and weight, as well as determine its sex. How long will it take to process 30 fish from the first trawl and 60 fish from the second trawl? 90 minutes                      500 minutes                      270 minutes			