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| **Ocean’s Deep** Year: 8 | | Lesson Sequence: A | |
| Lesson Title: **The Ocean conveyor belt** | | Suggested number of lessons:1 | |
| Learning Objective:   * To map the largest oceans and seas in the world * To explain how rubber ducks teach us about the ocean   Which level can I reach?   * **ALL** – explain what an ocean current is. **MOST** –explain why ocean currents are so important **SOME** –Explain the term thermohaline | | | |
| Key words: Current Thermohaline Salinity | | | |
| Learning Activities | Resources: |  | |
| **Starter**: Have the video playing when students come into room – good settling intro to the module. Students to try and put the oceans sizes into order.  (May want to use an internet atlas picture of the world oceans as extra resource for lower groups). | Class set of map worksheet | **Risk Assessment:** | Differentiation  High ability convection currents and density changes |
| **Main Activity**: Students watch a brief BBC video about the rubber ducks that came off a container ship. Students can add their journeys to the map. They then write a short paragraph on the importance of the ocean currents,  The second part of the lesson deals with the cause of these thermohaline currents. There are two teacher demonstrations and the following video links may be us:e in planning how to carry these out:  **Salinity**: <https://www.youtube.com/watch?v=w_8mw-1HYFg>  **Temperature**; <https://www.youtube.com/watch?v=bN7E6FCuMbY>  The theory provided will depend on the group but top set students should understand convection current and density changes. There is a video attached which summarises thermohaline so they can then explain its importance and add to their original paragraph. | Large tanks x 2 full of room temp water.  Large beaker of blue salty water  1 glass rood  Ice cubes dyed blue  Small plastic bottle  Red dye  Hot water | The lesson has been spilt into two tiers  3-6  5-7 |
| **Plenary:** Complete the Plenary triangle exercise on last slide |  | Helpful Hints: use video links to see how to carry out the demos |

