

A sea of oil

1	<p>Overall aims:</p> <ul style="list-style-type: none"> ● Exploring the concept of pollution; ● Knowing the causes of pollution; ● Developing and improving the manual skills; ● Developing the ability to make and test hypotheses; ● Make observations and predictions
2	<p>Vocabulary - keywords</p> <p>Water; Pollution; Sea</p>
3	<p>Sustainable abilities developed</p> <ul style="list-style-type: none"> - Knowing how the pollution acts; - Knowing the causes of pollution; - Interiorizing the importance of adopting sustainable actions
4	<p>Pillars of sustainability included</p> <p>Environmental sustainability</p>
5	<p>STEAM domains</p> <p>Science; Engineering; Art</p>
6	<p>Teaching methodologies/activity outline</p> <ol style="list-style-type: none"> 1) The children fill plastic caps with oil and place these 'barrels' on the boat. 2) They then place the tanker in the water. 3) They simulate an accident: the children spill the oil and observe how it spreads; 4) The teacher now asks them to clean up the sea by scooping up the oil with a spoon, trying to absorb it with cotton balls. 5) The children realise that even with so much effort it is almost impossible to remove the oil completely. 6) The teacher asks the children to dip their feather into the spilled oil and tell what they notice.



	Oil spills are very dangerous for wild animals and kill thousands of seabirds, fish and other species living in the seas.
7	Expected learning outcomes The pupils will know: <ul style="list-style-type: none"> - The causes of pollution - How the pollution acts; - Observe; - Test hypotheses;
8	Assessment <ul style="list-style-type: none"> ● Initial evaluation: assessing what pupils already know about the general concepts; ● Middle evaluation: assessing what pupils are learning during the experiment; ● Final evaluation: assess, through systematic observation, whether pupils reached the goals.
9	Equipment and materials to be used in learning unit (tools, ingredients etc) <ul style="list-style-type: none"> - A large plastic container filled with water (e.g. a basin) - A plastic boat; - Two plastic caps; - Vegetable oil; - One teaspoon; - Cotton balls; - A feather
10	Kind of setting - lab, kitchen, outdoor etc. Indoor
11	References - source: Litton, J. & Margan, P. (2020). Il mio pianeta: ecologia [What on earth? The environment]. Giunti Editore.