

Watch that spill

With the increasing amounts of oil transported there is always a chance of an accidental oil spillage in this day and age. Methods have been developed to clean up oil spillages and to minimise the damage to the environment. These methods involve dispersing, absorbing, skimming, containing (keeping in one place), coagulating (making it stick together) or even sinking the oil. The method used depends upon the type of oil and where it was spilled.

Before starting, put a piece of squared paper under a bowl of water and, using a dropper, drop a known amount of oil onto the water. Using the squared paper, estimate the area of the 'oil slick' created. Get the children to think about the size of a spill created by:

- A tanker truck holding 32,000 litres
- A ship holding 1,200,000 litres
- A supertanker holding 332,000,000 litres

It might be an idea to split the children into groups and tell them they are part of an Environmental Protection Agency which is to be sent to a huge oil spill. They are to try and clean up the oil in the most effective way.

List the equipment available and either allocate equipment or ask the children to choose their own.

Determine as a class the effectiveness of the different methods and rate them 1-5.

USED, OILY MATERIALS SHOULD BE PLACED INTO A PLASTIC RUBBISH BAG AND DISPOSED OF PROPERLY.

COMMUNICATING TO OTHERS

Record a news broadcast on a tape recorder about an oil disaster and the methods which are being employed to clear the spill.

EXTENSIONS

Children could research into major oil disasters such as Exxon Valdez in Prince William Sound and the Braer tanker in the Shetlands.

Investigations could be made into how best to 'contain' the spillage. How will they tell/show their friends what they found?

MATERIALS

Clear (plastic) shallow containers

Twigs

Water

String

Cooking oil

Sand

Drinking/art straw

Detergent

Sponge

Cotton wool

Wood chippings

Rubbish bag

Styrofoam pieces

Paper towels

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DISCUSS

What happens when oil meets water?

What happens when oil tankers have accidents at sea?

What can be affected by the oil spill?

Which is the best way of cleaning up the spill?

Devise an investigation to find the best method of cleaning up the spill.

 **Wear protective clothing.**