

## Separating plastic waste

After a party, Leonie and Moritz gather up the waste: bottles, chip bags, plastic plates, etc.

Moritz thinks about what will actually happen to the plastic waste. After all, they have learned that plastic can be recycled only if it has been separated by type.



“But there are all sorts of different plastics in the recycling bins – is it even possible to separate them again?” he asks Leonie.

She quickly replies, “I know how I would do it. I only need water and salt.”

### Your task

Find out what Leonie will probably do. Assume that there are only **three types of plastic: polyethylene, polystyrene, and polyethylene terephthalate (PET), in small pieces.**

One more thing: The three types of plastic have different densities:

Plastic	Density [g/cm <sup>3</sup> ]
Polyethylene	0.96
Polystyrene	1.05
PET	1.38

If you want to **use the online hints to solve the task**, scan the QR code with the **H**.



You can try to solve the task without using the provided hints.

When you are finished, compare your result with the sample solution. To do so, scan the QR code with the **S**.

