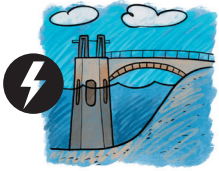
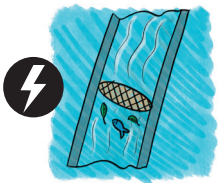




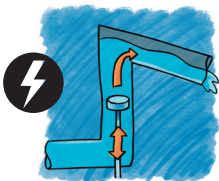
## 13 basic steps: From the river to home and back



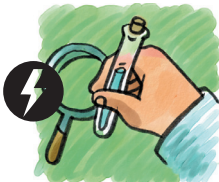
Raw water from a surface water lake or reservoir is drawn into the plant through intake structures.



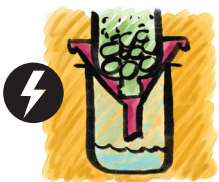
Small fish, vegetation and garbage are removed from the raw water.



Pumps lift the water to flow through the treatment processes by gravity.



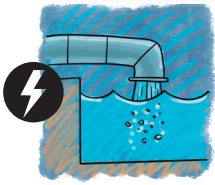
Disinfectants or other oxidants are added to disinfect or control tastes and odours.



Several water treatment steps (coagulation, flocculation, sedimentation, filtration).



Secondary disinfection.



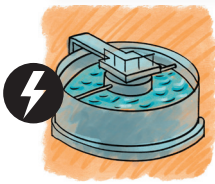
Treated drinking water is pumped through large pressure pumps to reservoirs or points of supply.



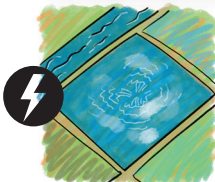
Water consumption: drinking water goes into the homes by gravity.



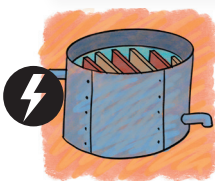
Waste water leaves homes through the waste water system and reaches waste water treatment plant.



Primary (mechanical) waste water treatment.



Secondary (biological) waste water treatment.



Optional (advanced) waste water treatment.



Purified water reaches the water basin (river, lake, sea).

By analyzing the scheme school students should come to the conclusion that energy is needed at almost every step of the long water cycle from river to home.