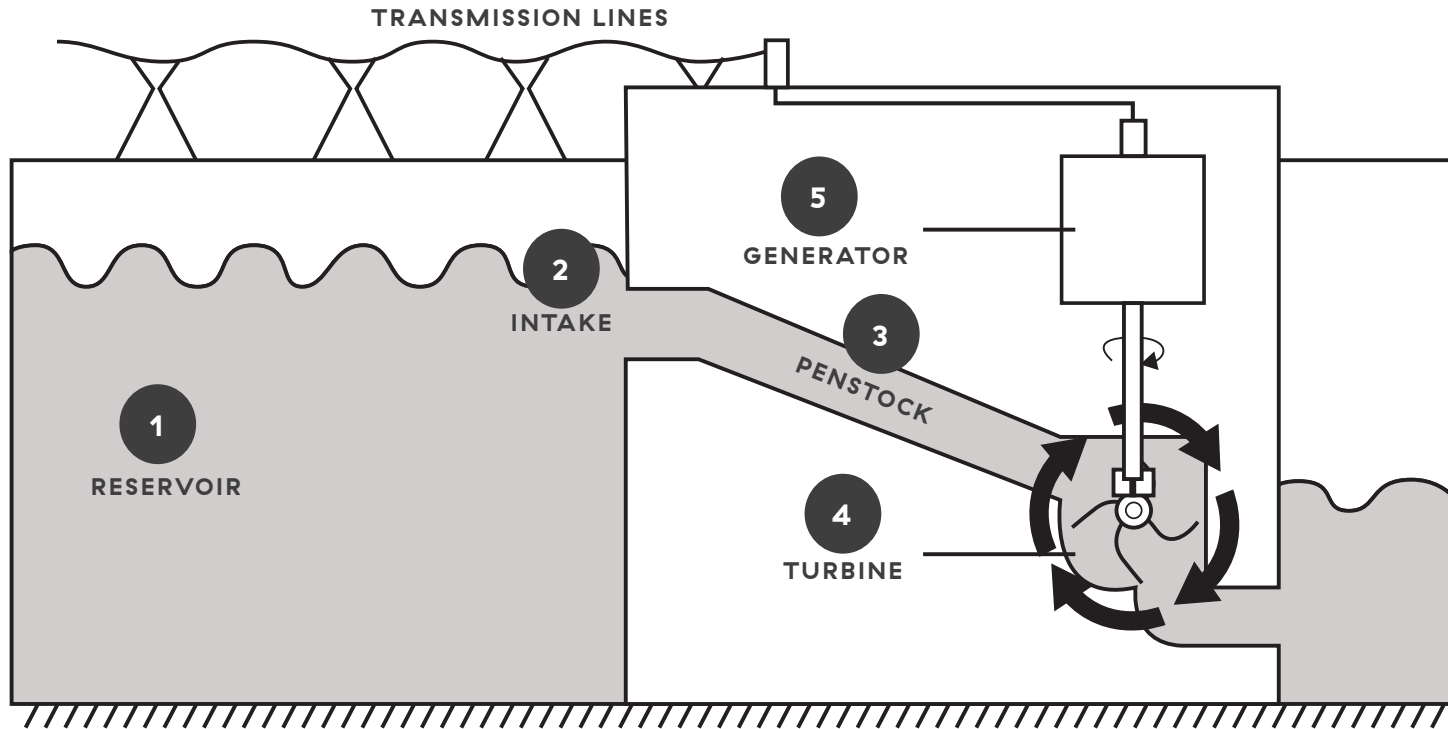


# Hydroelectric generation

## Power Smart for Schools®

- 1 The dam blocks the flow of water for a portion of a river, which leads to a raised water level on one side of the dam.
- 2 The water on this side of the dam is allowed to flow through a channel which begins at the intake.
- 3 After entering through the intake, the water travels through the penstock—a large pipe directed to the other side of the dam.



- 4 After leaving the penstock, the water enters a chamber which houses the turbine—a rotating array of blades that are driven by the motion of the water.
- 5 The turbine rotates on an axle which leads to the generator. The rotation of the axle in conjunction with the construction of the generator results in the production of electricity.