



## The risk of flood hazards: the hydraulic aspects of rivers WORKSHEET 1

What does the speed of the flowing water depend on?

Choose the correct words:

- 1) If the slope decreases, the speed increases / decreases
- 2) If the river bed shrinks up, the speed increases / decreases
- 3) If the river bed is impermeable the speed increases / decreases
- 4) If the roughness of a riverbed decreases, the speed increases / decreases

5) If the hidden and cemented watercourse is open (daylighting) the speed increases / decreases

Write below the formula for the kinetic energy

In your opinion, if the flow velocity increases, does the kinetic energy increase or decrease? Can you say in what proportion?

Write a consideration on the variation of speed and energy of the water in the stretches of the waterways that have been cemented like the hidden river.

What happens in a river when speed and energy increase?

How can you observe this phenomena in the river?