

Background

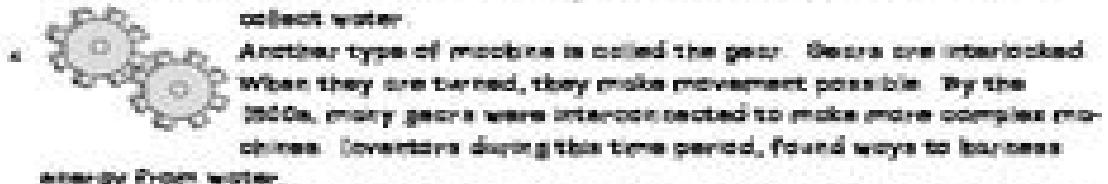
Standard RI.4.5 asks readers to determine the overall structure of text. This means to figure out if an author uses cause and effect, problem and solution, compare and contrast, classification, or even description text structures. As you read, pay close attention to how information is organized. Think about how one sentence helps you understand the sentence written right before it.

Machines

- Just like the automobile, other machines make work easier. These devices can be simple which means that they can have few parts like a screwdriver or pulley. Or, they can be complex like a television or computer.

As far back as ancient times, humans have found ways to make work easier for themselves. Until about 150 years ago, most of what people needed, they grew themselves. Collecting water, taking it back to a field, and cultivating garden plants took hard work. To make this work easier, Ancient Egyptians created an invention called a shaduf.

This device was found by rivers. A large pair of poles that were buried into the ground, held this device up into the air. On top of these poles, stood a long stick with a bucket attached to it. This raised bucket was lowered into a river to collect water.



Another type of machine is called the gear. Gears are interlocked. When they are turned, they make movement possible. By the 1500s, many gears were interconnected to make more complex machines. Inventors during this time period, found ways to harness energy from water.

Water powered mills were built near streams and rivers. The movement of the water caused a series of gears to move on the floor of a mill. As these gears turned, they made other parts in the mill move. This movement was used to grind wheat into flour. Until that time, grinding wheat into flour was a lengthy process, and took hard work. Machines that used water power made this process easier.