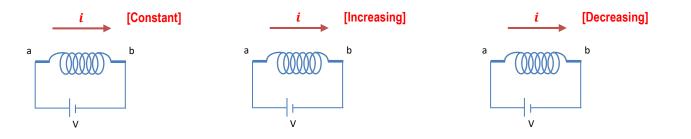
CONCEPT: INDUCTORS IN CIRCUITS

- A coil of wire placed in a circuit is known as an INDUCTOR
 → OR
- Because inductors are circuit elements, we use Kirchhoff's Rules on them as we go around in a circuit.
 - Remember: Inductors only do something if the current is **[CONSTANT | CHANGING]** ightarrow $\epsilon_L =$



- Use Lenz's Law to find the *direction* of the induced EMF.
 - If the direction of the induced EMF points <u>along</u> your Kirchoff Loop, the voltage is [+|-]

EXAMPLE: Write out Kirchhoff's Loop rule for the following circuit, assuming the battery's voltage is increasing.

