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How does an Electric Motor work? (DC Motor)

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This video is sponsored by Brilliant. We'll cover the basics of electricity and magnets and then put it all together to understand how the motor works. The magnets do n't have to be in this shape, for example , some magnets might be more flat like this. We 'll come back to it in a moment to explain the concept of the spinning magnet. The electromagnet is special in the sense that it can be turned on or off. It can do the same things that a permanent magnet can. It has a north and a south pole, which will attract or repel other magnets. Instead of flipping the battery, an easier way to do this is to switch the wires. We need to add something to the armature called a commutator. It 's a ring with gaps in the opposite sides. The electromagnet switches polarity, which will cause armature to keep spinning. Electromagnets are stronger when there are more wires. Stronger torque means a faster spin.

What I 've shown you in this video is called a DC motor. If you have a device that moves and is powered by a battery, there 's a good chance' there will be an electric motor in it. The motor will have stronger electromagnets, which means it will spin faster. The spinning of the motor can be converted to other types of movement, such as the side-to-side motion we see in this fan. The first 200 people will also get 20 % off their annual Premium membership. (upbeat music) to brilliant.org/jaredowen. (upbeat music) The first. 200 people get 20% off their. annual Premium Membership. to brilliant. org/Jared.

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