



Science Virtual Learning

8th Grade Science

May 4, 2020

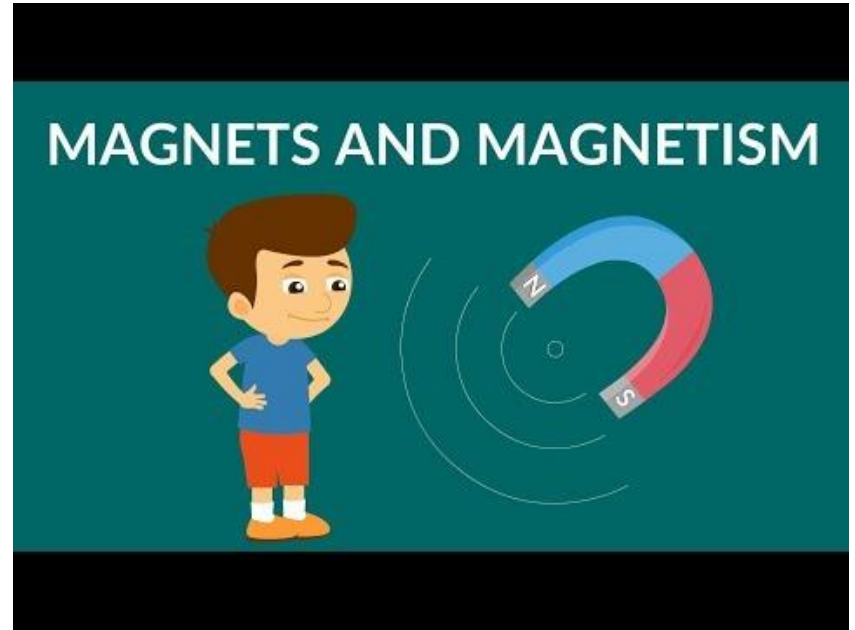


8th Grade Science
Lesson: May 4, 2020

Objective/Learning Target:
I can list and explain factors that affect the strength of electric and magnetic forces.

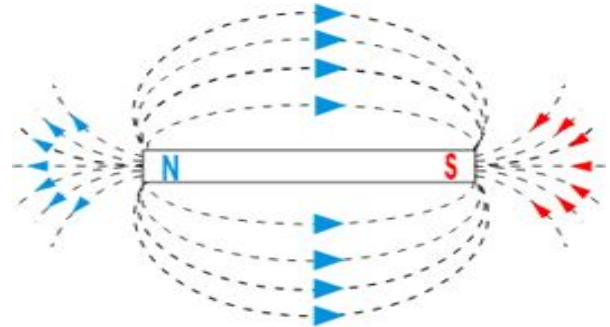
Bellwork

1. To start us off, watch the video about magnetism and answer these questions.
 - a. What is a magnet?
 - b. What're the different kinds of magnets?
 - c. Which way does the magnetic force flow?
 - d. What're examples of non-magnetic objects, and examples of magnetic objects?



Magnetism

- Magnetism is an invisible force or field caused by the unique properties of certain materials.
- In magnets the molecules are uniquely arranged so that their electrons spin in the same direction.
- This arrangement of atoms creates two poles in a magnet, a North-seeking pole and a South-seeking pole.
- This creates a magnetic field around a magnet.
- Have you ever held two magnets close to each other? They don't act like most objects. If you try to push the poles together, they repel each other.



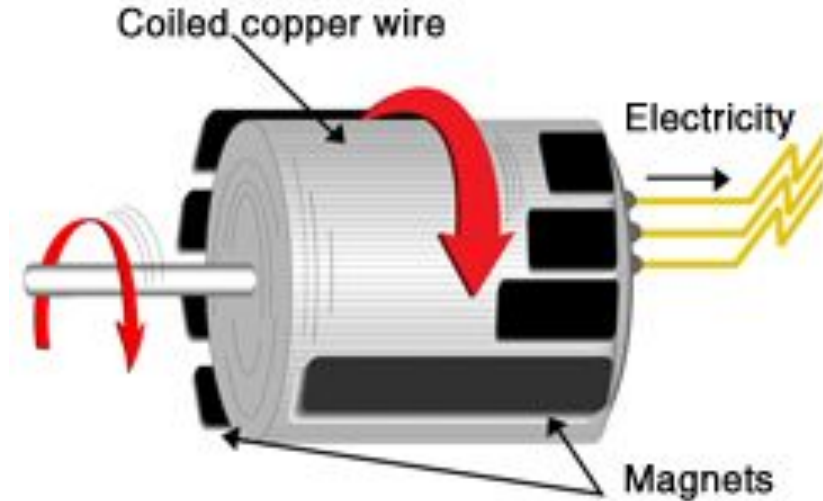


Magnetism

- The north and south poles on earth are actually the positive and negative poles of the Earth's giant magnet.
- It's very useful to us as it lets us use magnets in compasses to find our way and make sure we are heading in the right direction.
- It's useful to animals such as birds and whales who use the Earth's magnetic field to find the right direction when migrating.
- Maybe the most important feature of the Earth's magnetic field is that it protects us from the Sun's solar wind and radiation.

Magnetism

- Magnets can also be created by using electricity.
- By wrapping a wire around an iron bar and running current through the wire, very strong magnets can be created.
- The magnetic field created by electromagnets can be used in a variety of applications. One of the most important is the electric motor.





Magnetism

Now take this [quiz](#) to see what you remember about magnetism.
Take this as many times as you need to get them all correct.

Use this [matching activity](#) to help you remember some things about magnetism.



Review

1. Play this Quizizz Twice... [Magnetism Quizizz](#)
2. Play [Magnetic Getaway](#) to test your knowledge over magnetism!



Answers

1. Bellwork

- a. A rock or piece of metal that can pull certain kinds of metal toward itself.
- b. Temporary magnets, permanent magnets, and electromagnets
- c. From the north pole to the south pole
- d. Non-magnetic objects: paper, glass, plastic. Magnetic objects: Iron, cobalt, nickel.

2. [Matching activity answers](#)