Magnetism Lesson Plan

Physics

- Introduction (~3 minutes)
  • How many of you have used a magnet before? What do magnets do?

- Parts of a Magnet (~7 minutes)
  • Draw a picture of the magnet, showing the north and south poles. Then draw in magnetic field lines, pointing from the north pole to the south pole! Diagram on worksheet!

- Materials Affected by Magnets (~15 minutes)
  • To be done on worksheet. Pass out different materials and have the students predict which ones will be affected by the magnet and which one will not. Then do the experiment to test their predictions.

- Magnets with other Magnets (~10 minutes)
  • Have magnets pre-labeled with north and south pole, so that students can see that N-S is attracted, N-N is repelled and S-S is repelled.

- Magnets and Compasses (~15 minutes)
  • Let the students play with compasses and magnets, they should be able to see that the north end of the magnet is attracted to the north end of the compass. (This is because compasses are designed to point to magnetic north, meaning that the south end of the magnet in the compass is what points north!)

- Conclusion (~5 minutes)
  • Explain that we can use compasses to find north because the Earth can actually act like a giant magnet. This means the south pole of the magnet in the compass is attracted to the north pole of the Earth, and we can find north using this fact!