

# 8J Magnets and Electromagnets



Your task is to put together a fact file about the uses of magnets in every day life.

Week to be completed in:	Instructions	I have completed it
Week 1	Task 1: To research how compass' work. Look into the Earths magnetic field. Use illustrations or images you have found that are fully annotated.	
Week 2	Task 2: Make your own compass. For this task you will need a needle or a straightened paper clip. Something small that floats - a piece of cork, the bottom of a Styrofoam cup, a piece of plastic or the cap from a milk jug. A dish, with about an inch of water in it. Now you have the tools research how to make a compass. Take pictures and add to your fact file. (HINT: Howstuffworks is a very useful website for this task)	
Week 3	Task 3: Migratory birds fly south for the winter but how do they do this? Scientists have research that suggests birds use the Earths magnetic field to find their way. When flying through cities with large skyscrapers some birds can fly off track and become lost. Why do you think this is?	
Week 4:	Task 4: Electromagnets are very useful in industry and can be found in many of the appliances that you use at home. USA, Japan, Germany, China and Italy all use a type of transport that does not emit Carbon Dioxide, has almost 0 noise pollution and uses parts that almost never wear out. Research the term Magnetic Levitation and find out which mode of transport currently uses this technology. What are the advantages/disadvantages and what are your personal thoughts.	

Final hand in date: