Magnet	Magnetism	Permanent Magnet	Temporary Magnet
 An object that attracts, or pulls on, certain materials, mainly iron or steel 	 A magnet's property of attracting certain materials, mainly iron and steel 	 A magnet that keeps its magnetism for a long time Refrigerator magnets are examples of permanent magnets. 	 Magnets that don't keep their magnetism for a long time An electromagnet is an example of a temporary magnet.
1	2	3	4
North Pole	South Pole	Maglev	Lines of Force
 The north-seeking pole of a magnet When left to move freely, a magnet's north pole will point north. 	 The south-seeking pole of a magnet When left to move freely, a magnet's south pole will point south. 	 A type of train that uses magnets to float above its track Maglev is short for <u>magnetic levitation</u>. They can reach speeds of 300 miles per hour. 	 The lines that form a pattern showing the size and shape of a magnet's magnetic force field
5	6	7	8

 Magnetic Field The space in which the force of a magnet can act A magnet will only be attracted to an object (like iron or steel) that is in its magnetic field. 	 Four Properties of Magnets 1. A magnet attracts objects made of iron. 2. The force of a magnet is greatest at its poles. 3. Like poles of two magnets repel each other. 4. Unlike poles of two magnets attract each other. 	Attract To attract means to pull toward. Magnets are attracted to objects made of iron. Unlike or opposite poles of two magnets will attract to each other. 	 Repel To repel means to push away. Like poles of two magnets will repel each other.
9	10	11	12
Lodestone	Compass	Aurora	Earth as a Magnet
 A naturally magnetic rock found at or near Earth's surface 	 A compass is a tool used to show direction. It has a magnetized needle that is allowed to swing freely. 	 Bright light displays seen in the sky near the North or South Poles Caused when particles of matter in space get caught in Earth's magnetic field 	 It has two magnetic poles that are different from the geographic poles. It has a magnetic field with lines of force. Compasses work because they are affected by Earth's magnetic field.
13	14	15	16