Unit Summary

	Magnetic Forces Lessons 1–5	Magnetic Materials Lessons 2 and 6
Overview	Children manipulate magnets with magnetic and non-magnetic objects to learn about magnetic force and the properties of magnets. They plan simple investigations to test their ideas about magnetic force.	Children test if various everyday materials are attracted or not attracted to a magnet, and draw general conclusions about what magnetic materials all have in common. They look at common objects that use magnets to work, with a special emphasis on how a compass works.
Science Content	• Magnets cause a push or pull (a force). This force can work at a distance through air or other materials. • Different magnets have different strengths. • Magnets can attract or repel other magnets.	• Magnets are attracted to other magnets and some metal objects. • Magnets are used in many useful ways.
Science Center	• Continue to investigate with magnets and a collection of magnetic and non-magnetic objects. • Further explore different materials the force of a magnet works through. • Test the pulling strength of different magnets. • Further explore repelling forces.	• Continue to investigate with magnets and a collection of magnetic and non-magnetic objects. • Create a collection of common objects that use magnets.
Family Links		• Go on a scavenger hunt at home to look for and document examples of magnetic objects. • Look for and document common household items that use magnets.
Further Science Explorations	• Investigate how the thickness of a stack of index cards affects the force of a magnet. • Use a paper clip to find a hidden magnet. • Observe the interaction between two bar magnets. • Plan a simple investigation to test the repelling strength of different magnets. • Use repelling forces to race magnets.	• Use a magnet to separate a mixture of magnetic and non-magnetic materials. • Make a compass. • Use a compass and magnet to investigate how distance affects magnetic force.
Cross-Curricular Extensions	**Art:** Make a magnet maze. **Language Arts:** Use magnet puppets to act out a story or a poem. **Mathematics:** Prepare a "Magnetic Fish Pond" to reinforce math skills in a game format.	**Art:** Make refrigerator magnets. **Language Arts:** Research lodestones. **Social Studies:** Research the invention of the compass. Investigate how compasses changed navigation. **Technology:** Discuss magnetic levitation trains.