

SECTION 5: OBSERVING THE MAGNETIC FIELDS WITH IRON FILINGS

LAB

INTRODUCTION

Iron filings can be used to see the magnetic field of various magnets.

ASSESSMENT ANCHORS ADDRESSED

- S4.A.2.1** Apply skills necessary to conduct an experiment or design a solution to solve a problem.
- S4.A.2.2** Identify appropriate instruments for a specific task and describe the information the instrument can provide.
- S4.C.1.1** Describe observable physical properties of matter.
- S4.C.3.1** Identify and describe different types of force and motion, or the effect of the interaction between force and motion.

PURPOSE

Students will study the magnetic field of each magnet by studying patterns in iron filings. Students can measure how far the magnetic field extends and compare each magnets force.

MATERIALS

For Each Pair of Students

3 magnets (alnico, ring, and ferrite)

iron filings

petri dish

plastic tray

*Teacher provides items marked with **