Vocabulary:

force – a push or pull one body exerts on another
speed – change in position during a unit of time
velocity – speed and direction of an object
acceleration – change in speed or direction of an object's motion
gravity – force of attraction between two objects such as the Earth and other objects
gravitation – force of attraction between all masses and causes them to attract one another
friction – force that resists motion
inertia – property of matter that keeps a moving object moving in a straight line
conductor – material through which electric current passes
insulator – material through which electric current does not easily pass
simple circuit – a closed path through which electrons flow
series circuit – a closed circuit in which there is only one path electrons can flow through.
parallel circuit – a closed circuit in which two paths exists where electrons can flow through.
magnet – an object that attracts iron or steel
electromagnet – a magnet made from a current carrying wire
magnetic field – the area around a magnet where the magnetic forces act.
magnetic energy – the push or pull of a magnet
compass – an instrument that tells direction

Skills:

Know the relationship between mass and inertia. \( I = \)
Know how to calculate speed or velocity. \( s = \)
Recognize and be able to give labels for velocity, force, and acceleration.
Recognize weight as a measure of the acceleration of gravity on a mass.
Be able to identify materials as conductors or insulators.
Explain why and how we use conductors and insulators. Ex. Electricians wear rubber gloves.
Construct a simple circuit.
Draw a diagram showing a simple circuit.

Identify or draw a circuit diagram for a series circuit and a parallel circuit.

Explain why electricity doesn't flow through an open circuit.
Use a magnet to identify materials as magnetic or non-magnetic
Know that like poles of a magnet repel and opposite poles of a magnet attract.
Draw the magnetic field around a bar magnet.
Know that an electric current produces a magnetic field.
Construct an electromagnet.