

8th Grade Science Unit 5: Forces (S8P5.a, b, c) Proficiency Sheet

S8P5. Obtain, evaluate, and communicate information about gravity, electricity, and magnetism as major forces acting in nature.

Lessons	Learning Target / Activity	Achievement Level Descriptors
	<p>S8P5.a Construct an argument using evidence to support the claim that fields (i.e., magnetic fields, gravitational fields, and electric fields) exist between objects exerting forces on each other even when the objects are not in contact.</p>	<p>Beginning: I can recognize that fields exist between objects exerting forces on each other even when the objects are not in contact.</p>
		<p>Developing: I can construct a limited argument based on observational evidence to support the claim that fields exist between objects exerting forces on each other even when the objects are not in contact.</p>
		<p>Proficient: I can construct an argument using evidence to support the claim that fields (i.e., magnetic fields, gravitational fields, electric fields) exist between objects exerting forces on each other even when the objects are not in contact.</p>
		<p>Distinguished: I can refine an argument made using evidence to support the claim that fields exist between objects exerting forces on each other even when the objects are not in contact.</p>
	<p>S8P5.b Plan and carry out investigations to demonstrate the distribution of charge in conductors and insulators.</p>	<p>Beginning: I can identify how the distribution of charge is different for conductors and insulators.</p>
		<p>Developing: I can carry out a provided investigation to describe how the distribution of charge is different for conductors and insulators.</p>
		<p>Proficient: I can plan and carry out investigations to demonstrate the distribution of charge in conductors and insulators.</p>

		Distinguished: I can refine investigations used to demonstrate the distribution of charge in conductors and insulators.
	S8P5.c Plan and carry out investigations to identify the factors (e.g., distance between objects, magnetic force produced by an electromagnet with varying number of wire turns, varying number or size of dry cells, and varying size of iron core) that affect the strength of electric and magnetic forces.	Beginning: I can identify the factors that affect the strength of electric and magnetic forces.
		Developing: I can carry out a provided investigation to describe the factors that affect the strength of electric and magnetic forces.
		Proficient: I can plan and carry out investigations to identify the factors (e.g., distance between objects, magnetic force produced by an electromagnet with varying number of wire turns, varying number or size of dry cells, varying size of iron core) that affect the strength of electric and magnetic forces.
		Distinguished: I can evaluate investigations used to identify the factors that affect the strength of electric and magnetic forces.

Vocabulary

Forces Gravity Magnetism Conduction Induction Friction Electromagnet Fields Electric force
Electric field Magnetic force Magnetic field

Graph Your Grade

