***X-Men***

(2000, Rated PG-13)

EQ: How does electricity affect the motion of objects? Compare and contrast static and current electricity.

[Storm: All Powers from the Films](https://www.youtube.com/watch?v=EOJxIZoIcVA)

Synopsis: They are children of the atom, *homo superior*, the next link in the chain of evolution. Each was born with a unique genetic mutation, which at puberty manifested itself in extraordinary powers. In a world filled with hate and prejudice, they are feared by those who cannot accept their differences. Led by Xavier the X-Men fight to protect a world that fears them. They are locked in a battle with former colleague and friend, Magneto who believes humans and mutants should never co-exist.

Cinema Science Focus: Storm is one of the X-Men. She is a mutant who has the ability to control weather. Among her powers is the ability to manipulate lightning. Lightning is a large-scale example of electrostatic discharge that naturally occurs when positive and negative particles in a cloud create a visible spark. Storm has power over these sparks, but can this discharge move things? Develop a lesson, investigation, or demonstration that models the effects that static electricity has on objects. Make an argument that either static or current electricity has more of an effect on objects and is, therefore, more powerful.

Concepts to Master:

* Force
* Contact Force
* Non-Contact Force
* Friction
* Gravity
* Static Electricity
* Current Electricity
* Circuit
* Electrostatic Discharge

Vocabulary: electricity, static electricity, current electricity, circuit, series circuit, parallel circuit, electrostatic discharge

Possible Resources:

* StudyJams “Electricity”
* Explainthatstuff.com “Electricity for Kids and Everyone Else”
* CK-12.org “Static Electricity and Static Discharge” Read
* CK-12.org “Using Static” Real World
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