***Justice League*** 

(2017, Rated PG-13)

EQ: How are speed, velocity, and acceleration related?

[The Flash Featurette](https://www.youtube.com/watch?v=4pnR7GRVCcQ)

Synopsis: Fueled by his restored faith in humanity and inspired by Superman's selfless act, Bruce Wayne (Ben Affleck) enlists newfound ally Diana Prince (Gal Gadot) to face an even greater threat. Together, Batman and Wonder Woman work quickly to recruit a team to stand against this newly awakened enemy. Despite the formation of an unprecedented league of heroes -- Batman, Wonder Woman, Aquaman (Jason Momoa), Cyborg (Ray Fisher) and the Flash (Ezra Miller) -- it may be too late to save the planet from an assault of catastrophic proportions.

Cinema Science Focus: Flash’s super speed allows him to not only move fast, but also bend time and space. This begs the question ‘Exactly how fast is Flash able to move?’ Is his speed scientifically quantifiable? Do changes in direction affect his speed? Develop a lesson, investigation, or demonstration that models variables that positively affect (increase) speed. Make an argument for or against the idea that Flash is a scientific representation of speed force as we understand it.

Concepts to Master:

* Speed
* Velocity
* Speed vs. Velocity
* Acceleration
* Speed vs. Accleration

Vocabulary: speed, velocity, acceleration, deceleration

Possible Resources:

* TedEd, Joy Lin’s “If Superpowers Were Real: Super Speed”
* StudyJams.com, “Newton’s Second Law: Acceleration”
* CK-12.org “Speed” (Read)
* Discovery Education Exploration, “Need for Speed”
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