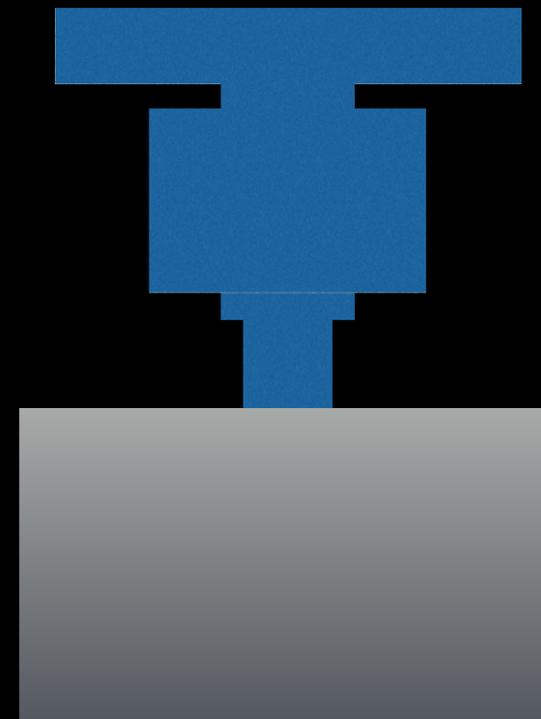


# Inertial Mass

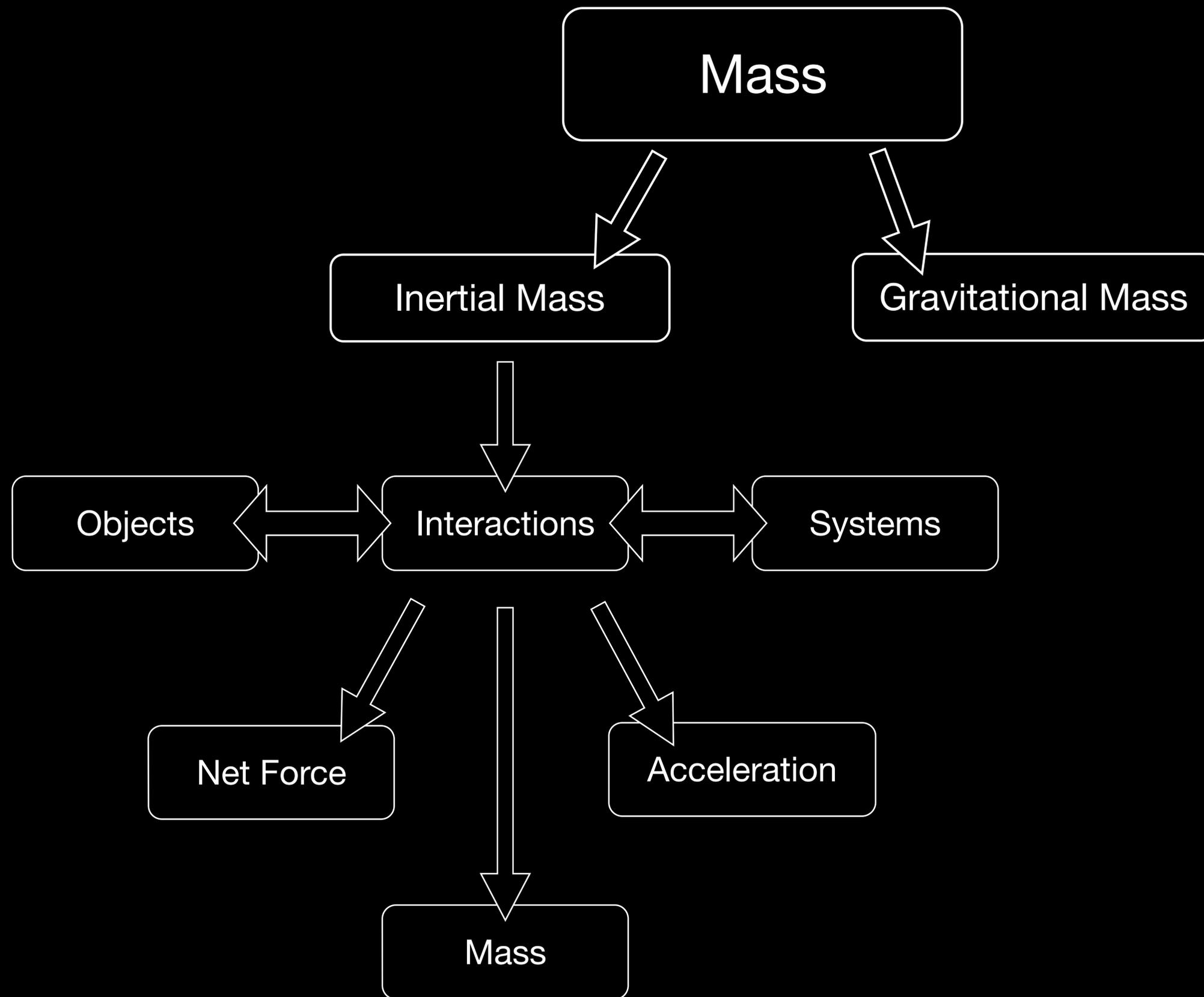


André Kuipers uses a BMMD

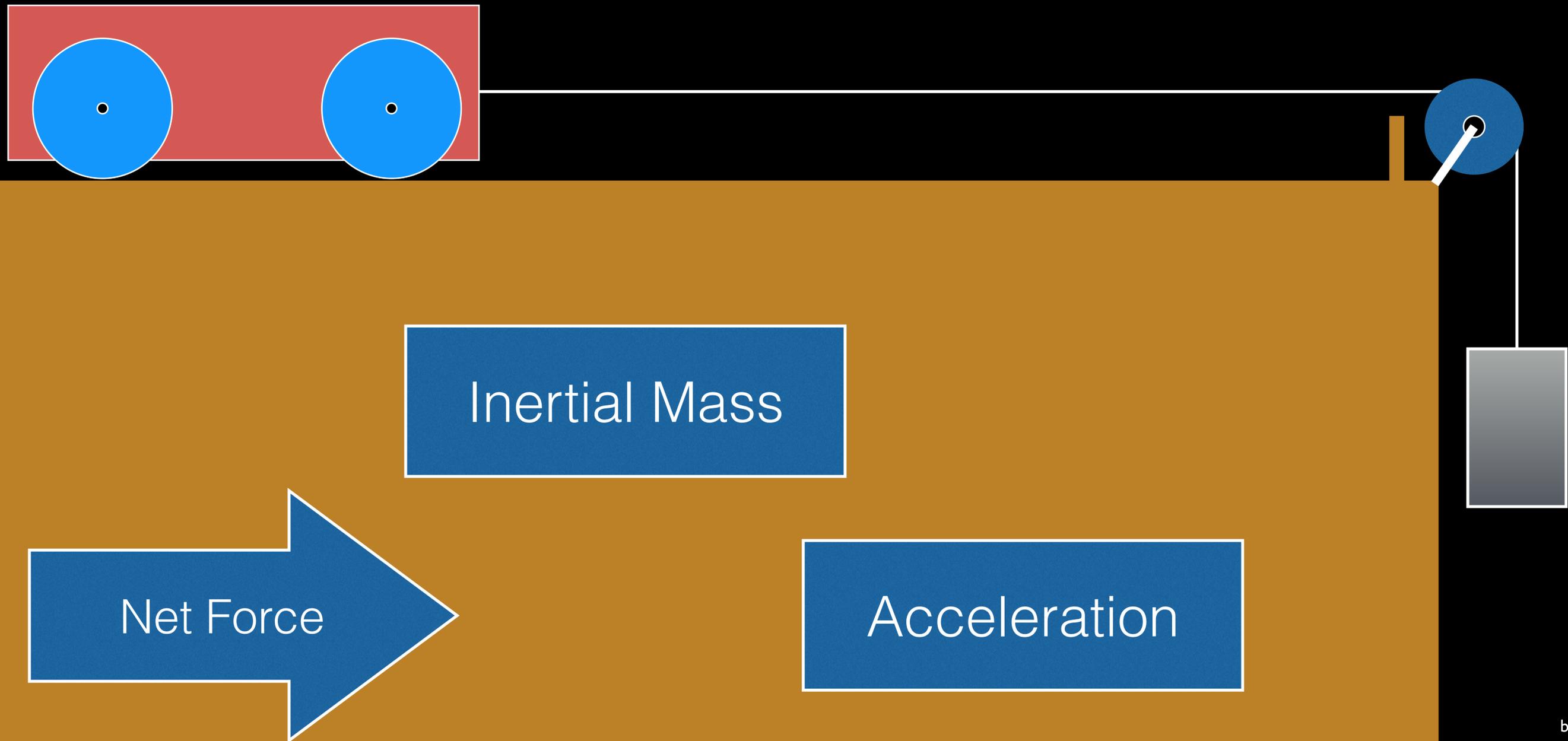


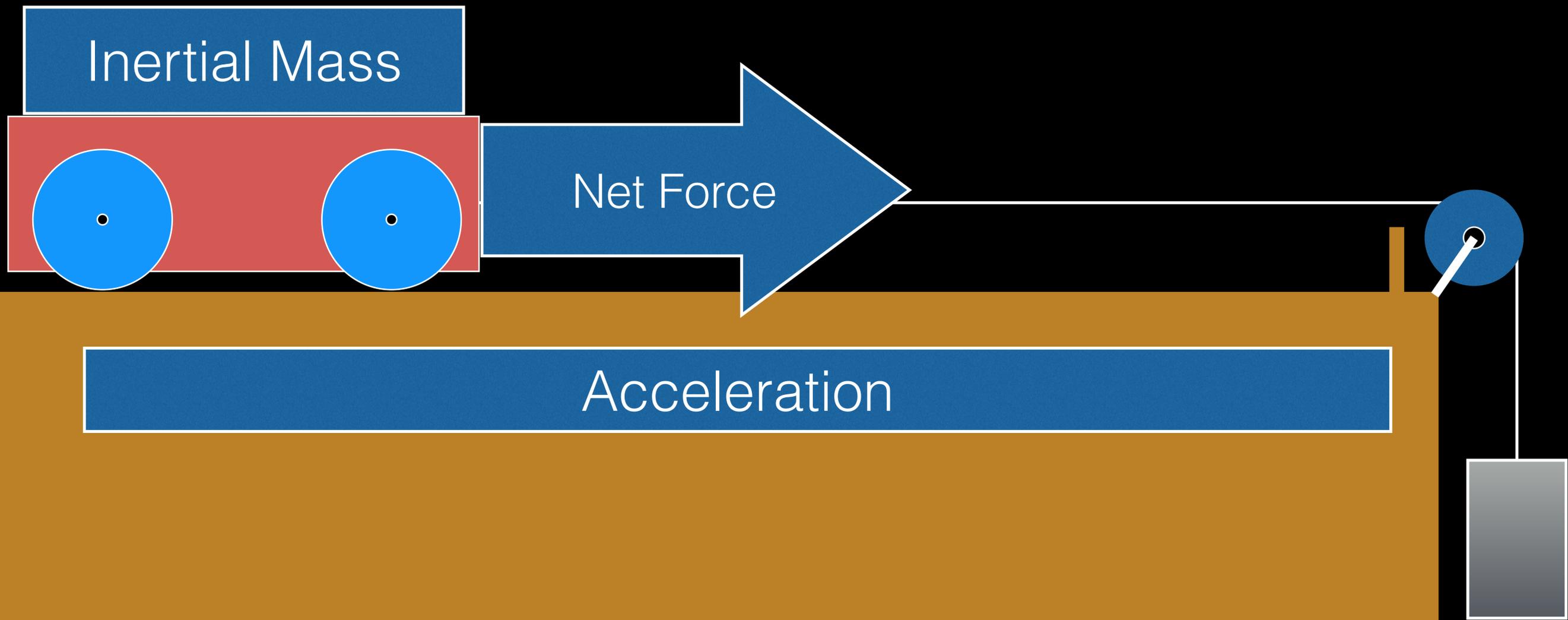
AP Physics 1

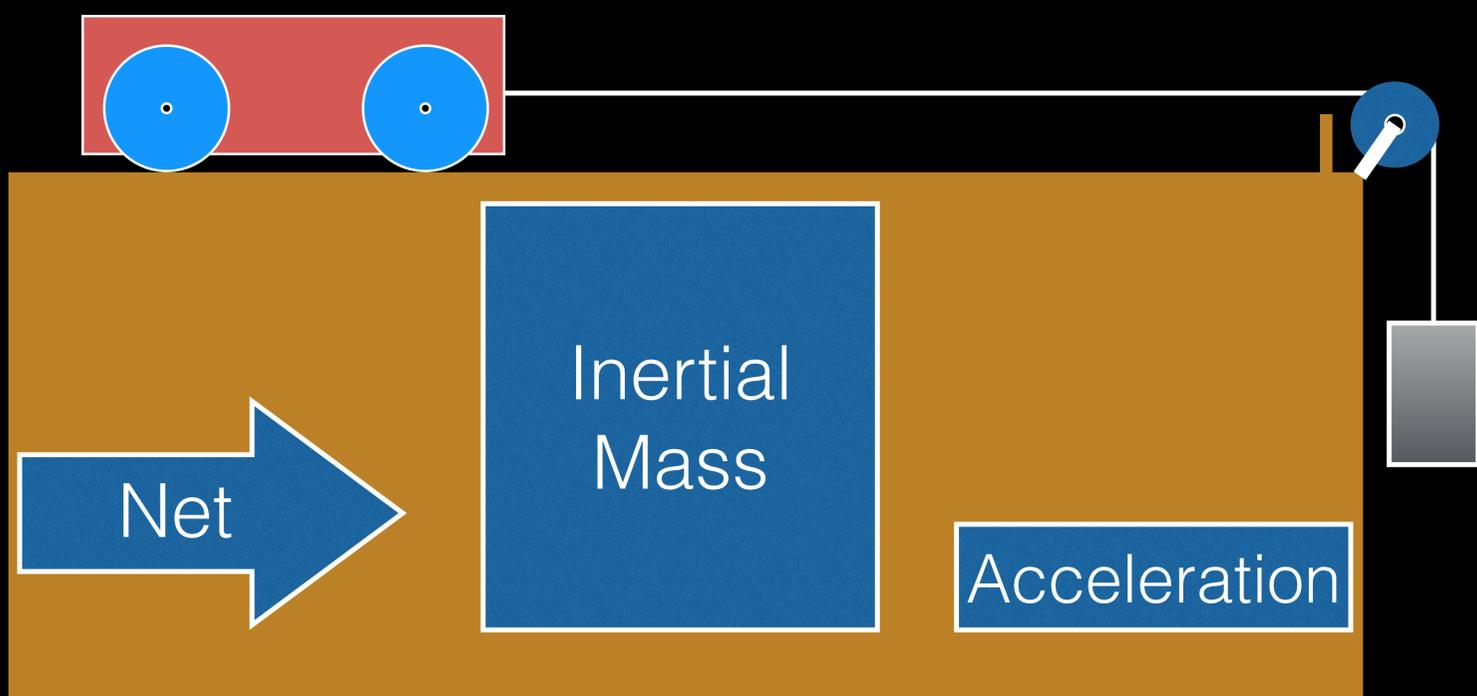
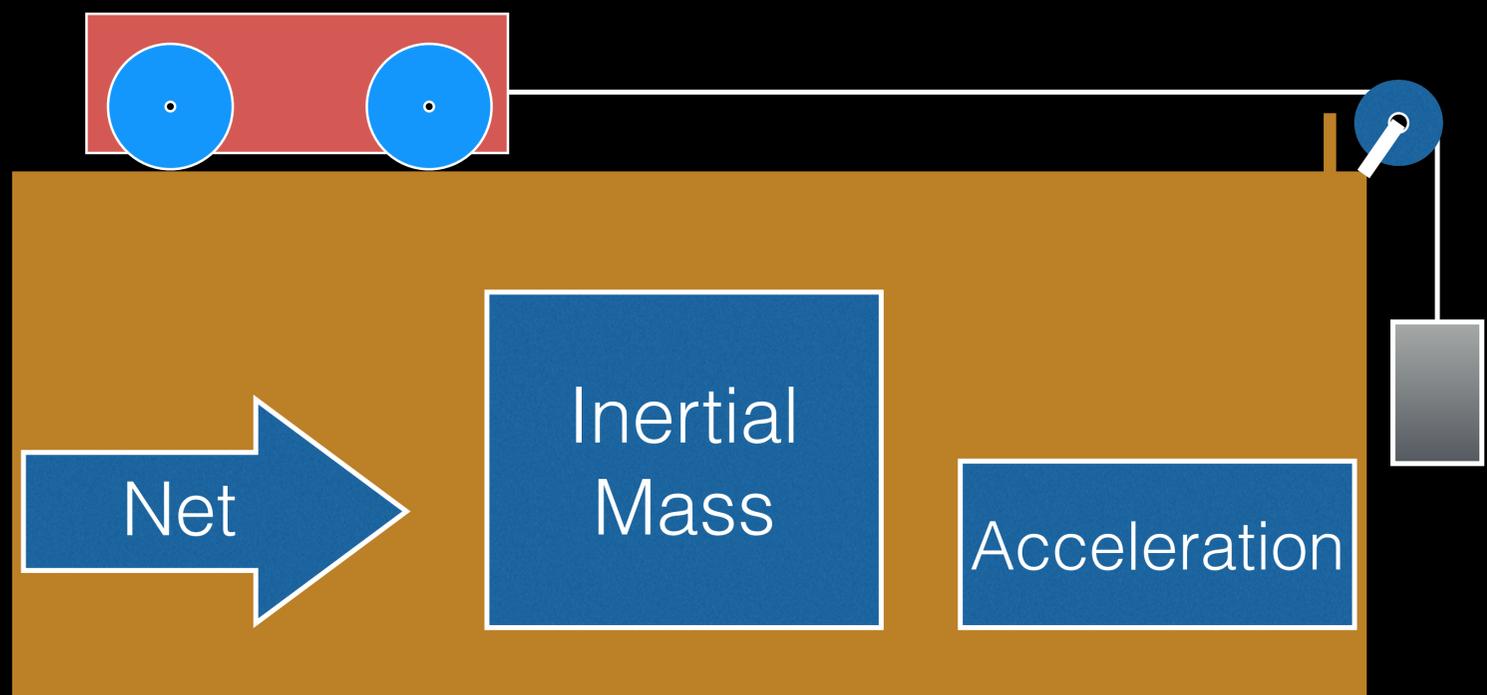
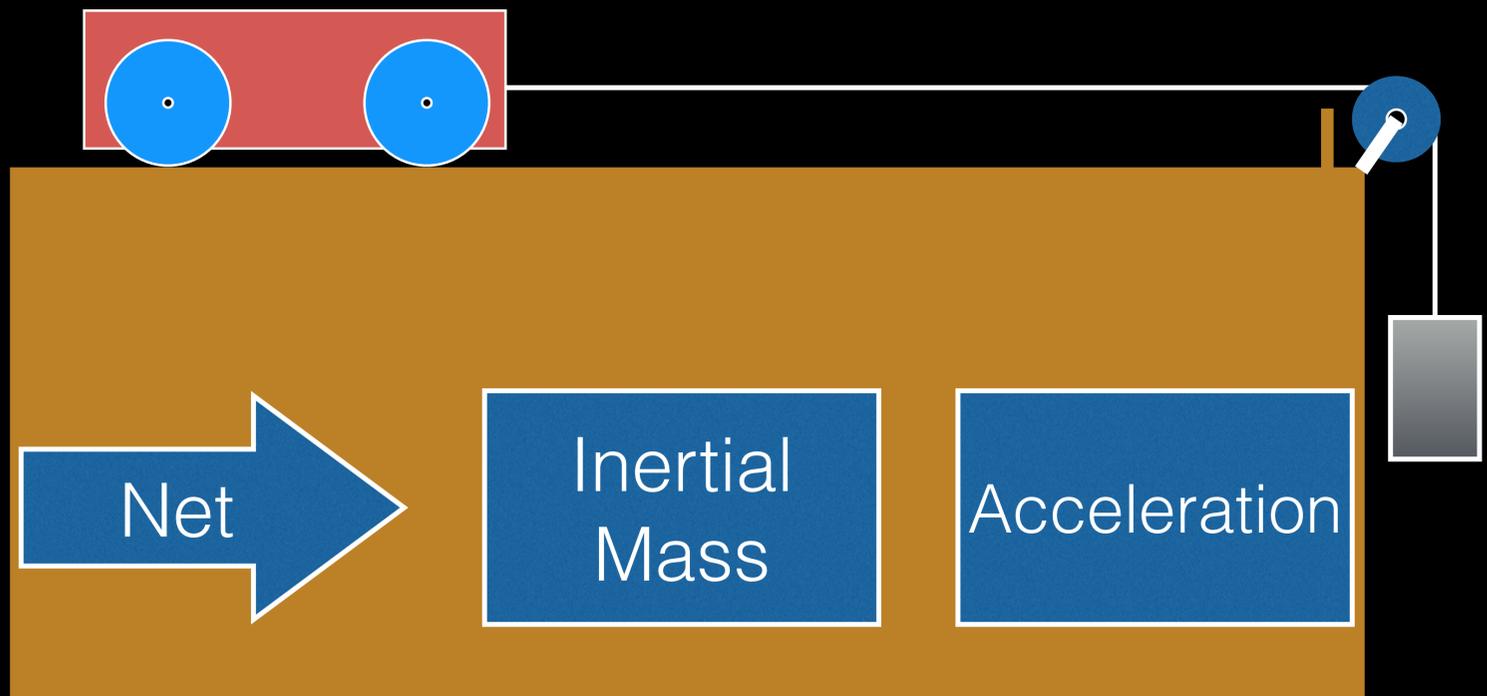
Physics Essentials - 009

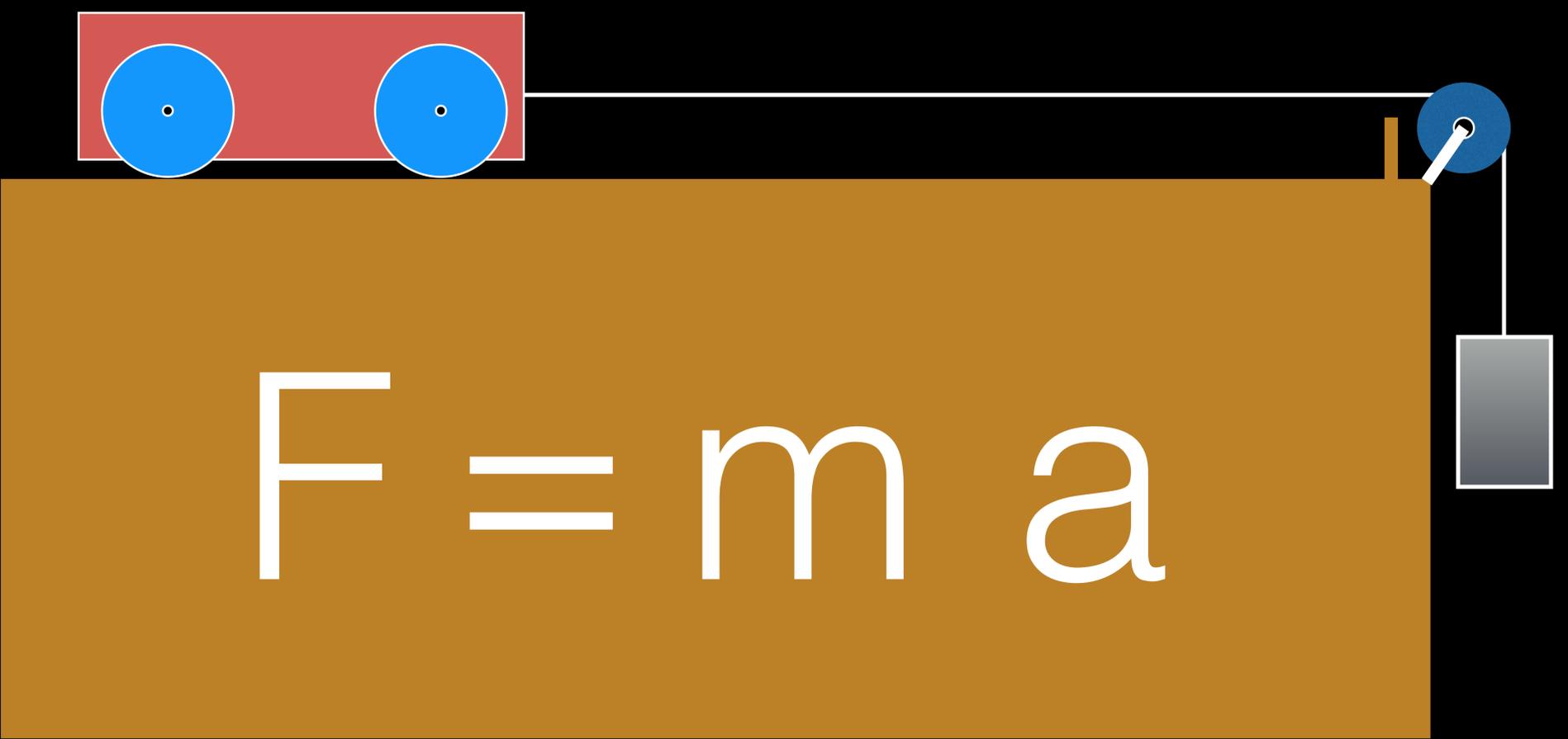


# Experimentation



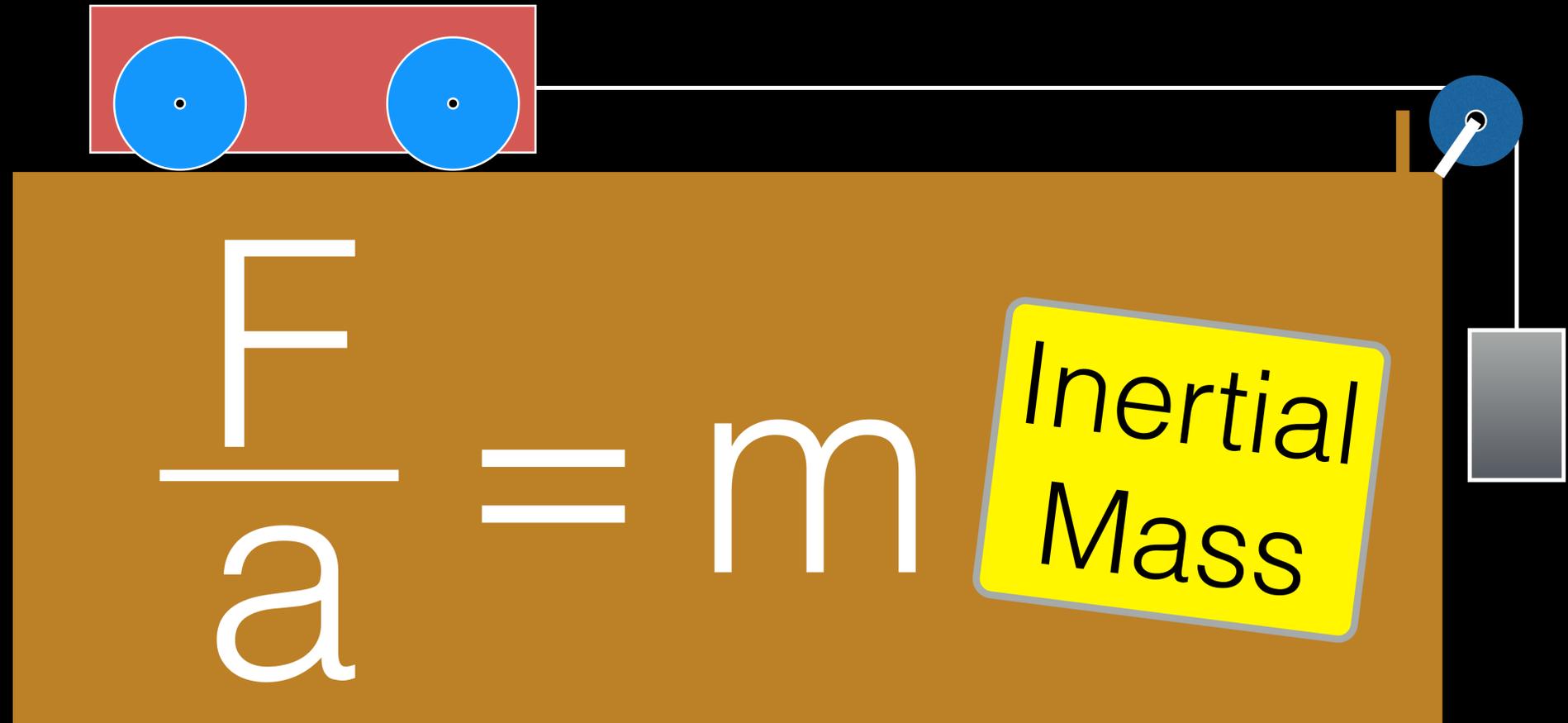






A diagram showing a red cart with two blue wheels on a brown table. A white string is attached to the cart, passes over a blue pulley at the edge of the table, and is connected to a grey hanging mass. The equation  $F = m a$  is written on the table.

$$F = m a$$

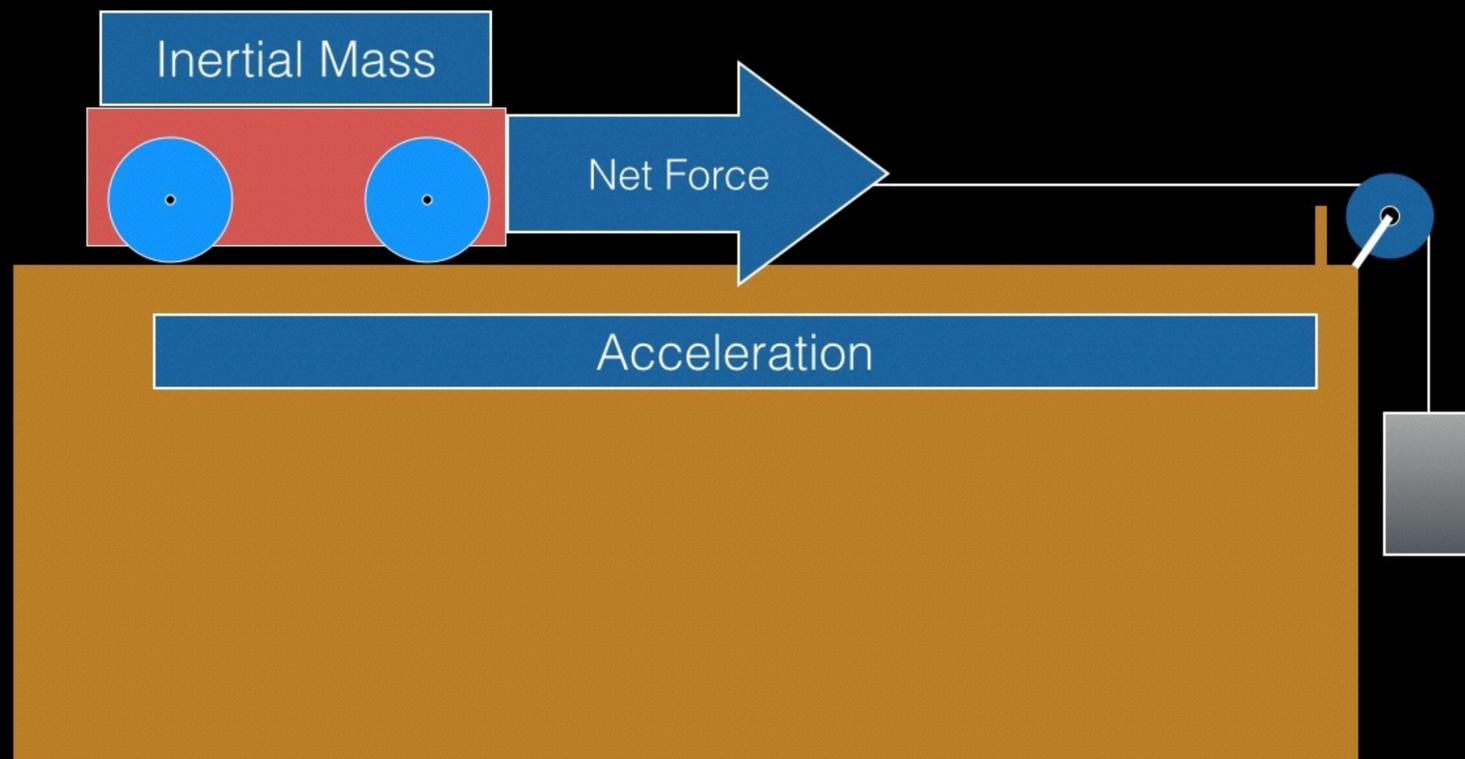


A diagram showing a red cart with two blue wheels on a brown table. A white string is attached to the cart, passes over a blue pulley at the edge of the table, and is connected to a grey hanging mass. The equation  $\frac{F}{a} = m$  is written on the table.

$$\frac{F}{a} = m$$

Inertial  
Mass

Did you learn?



To design an experiment for collecting data to determine the relationship between the net force exerted on an object, its inertial mass, and its acceleration.

## Acknowledgements

*NASA. English: European Space Agency Astronaut Andre Kuipers, Expedition 31 Flight Engineer, Uses a Body Mass Measurement Device (BMMD) in the Zvezda Service Module of the International Space Station., June 26, 2012. <http://spaceflight.nasa.gov/gallery/images/station/crew-31/html/iss031e157943.html>. [http://commons.wikimedia.org/wiki/File:ISS-31\\_Adr%C3%A9\\_Kuipers\\_uses\\_a\\_body\\_mass\\_measurement\\_device.jpg](http://commons.wikimedia.org/wiki/File:ISS-31_Adr%C3%A9_Kuipers_uses_a_body_mass_measurement_device.jpg).*



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