

## Galileo's falling bodies experiment

Galileo wondered about the fall of objects in the early 17<sup>th</sup> century. According to the legend, Galileo dropped weights off of the Leaning Tower of Pisa.



**Hypothesis:**

In your opinion, which object will touch the ground first?

- The heaviest
- The lightest
- They will touch the ground in the same time

**Experiment:**

- o Measure masses of our two objects:

$m_{ball} =$   $m_{paper} =$

- o Make a movie of a falling ball and piece of paper (dropped at the same time).
- o Open "Fizziq" app
- o Select "Outils" -> "Etude cinématique" -> "Vidéo" -> "Mes vidéos"



- o Select your movie
- o Enter 1 as "Longueur de la règle" then select "Pointage"
- o Move the target on one object (paper or ball) and tap your screen
- o Continue for the rest of the movement
- o At the end, take a picture with the camera logo.



**Observations:** What do you observe after this first experiment?