

Physics

Delprov A3 engelsk version

Årskurs

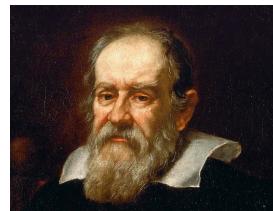
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Elevens namn och klass/grupp

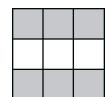
Planning a systematic investigation in physics

How does mass and volume affect the time it takes for an object to fall?

Galilei is a famous scientist who lived in the 16th century. He studied how the time it takes for an object to fall a certain distance is influenced by its mass and volume.



12. Your task is to plan an investigation where you will determine how the variables mass **and** volume affect the time it takes for different balls to fall in air.



Choose among the balls in the table. Investigate the variables mass **and** volume separately.

| | Tennis ball | Table tennis ball | Soccer ball | Golf ball | Beach ball | |
|-----------|-------------|---------------------|--------------------|----------------------|--------------------|-----------------------|
| Variables | Mass | 60 g | 3 g | 400 g | 45 g | 60 g |
| | Volume | 175 cm ³ | 35 cm ³ | 4200 cm ³ | 35 cm ³ | 35000 cm ³ |

In your plan, you will:

Describe a method of investigation

Write an instruction where you describe, step by step, how to carry out the investigation **and** how to reach a result.

The plan must be so detailed that someone else can follow it.



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