

Épreuve de DNL Anglais Physique-Chimie

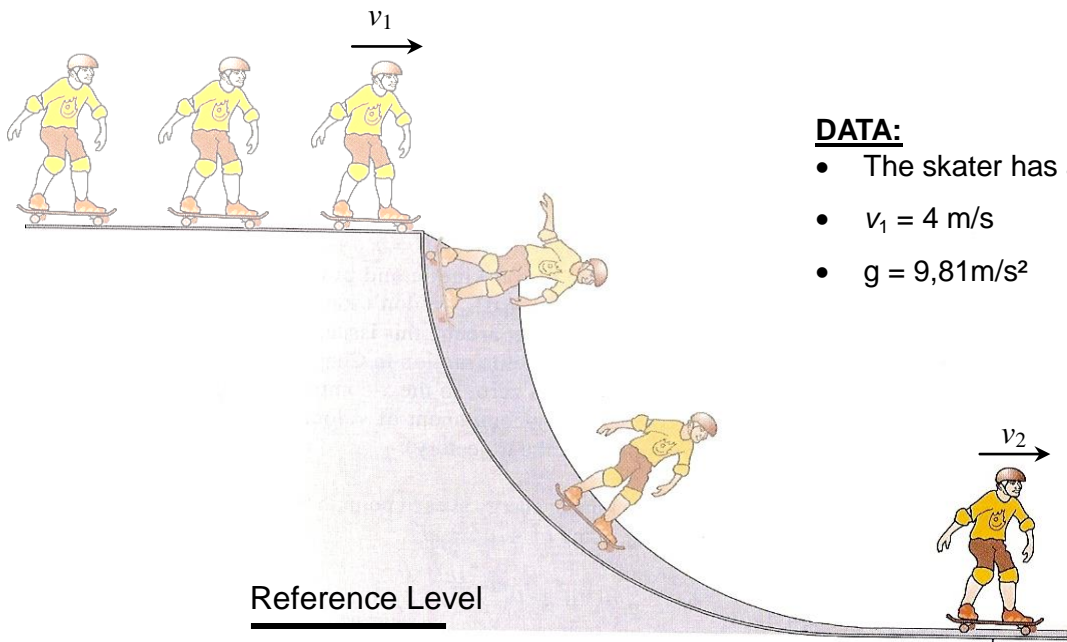
Sujet n°4 – Série S

Durée de l'épreuve : 40 minutes

- 20 minutes de préparation
- 10 minutes de présentation et 10 minutes d'échange avec le jury

The energetic skateboarder

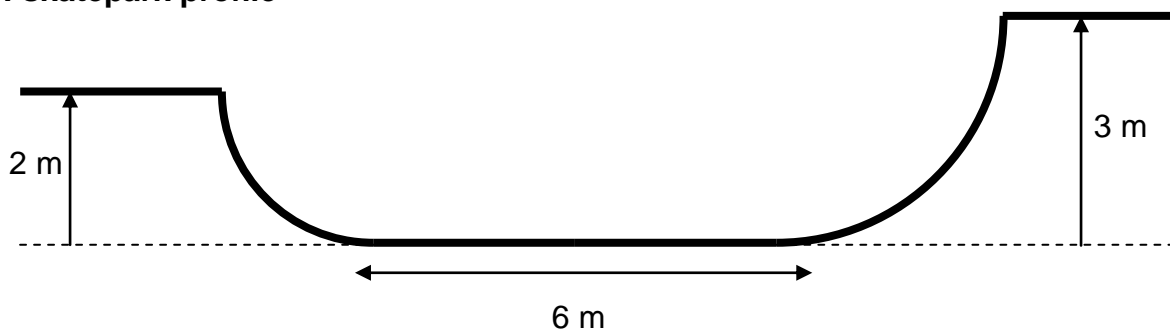
Doc 1 : chronophotography of a skateboarder



DATA:

- The skater has a mass of 60 kg.
- $v_1 = 4 \text{ m/s}$
- $g = 9,81 \text{ m/s}^2$

Doc 2 : skatepark profile



Source : from University Physics Vol 1, Freedman & Young

TASKS:

- Present the documents.
- Describe the motion of the skater.
- Explain the energy changes of the skateboarder throughout his motion.
Say whether the skater can get to the next platform or not. Explain why.
- Explain how physics can be helpful in everyday life.