

Teaching and learning activities of flight and paper planes

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Abstract

Human beings are always interested in and curious about flying. Basically, the physics of flight are the three Newton's Laws of Motion. The forces acting on a flying object include the gravity, the lift, the drag, the thrust and the upthrust etc. Every flying phenomenon is due to the resultant of these forces. Hence, flight is not just an interesting topic for students. It also provides a context in which students can apply corresponding physics knowledge. This paper first briefly summarizes the history and the physics of flight. Some common errors on the explanation of the production of lift are discussed. In order to avoid complicated fluid dynamics calculation, we use a phenomenological approach to explain how the lift is produced. Then, some teaching and learning activities of flight and paper planes are introduced.