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Coriolis Force

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Understanding the Coriolis effect is essential for explaining the movement of air masses and ocean currents. The lesson we propose aims to familiarize students with the manifestation of the Coriolis effect. Students are guided to build, using the GeoGebra software, a simulation of the motion of a body, related to a rotating reference system. The mathematical expression of the Coriolis force is deduced, for particular cases, and the Foucault's pendulum is presented and explained.
Students have the opportunity to deepen the subject, by developing materials related to topics such as:
• Global Wind Pattern
• Ocean Currents
• Coriolis Effect in Long Range Shooting
• Finding the latitude with a Foucault Pendulum