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# ENHANCINGN STUDENTS' CONCEPT ON PROJECTILE MOTION BY CLASSROOM AND OUTDOOR ACTIVITIES

We have designed and created learning activities in classroom and outdoor experiments in Physics on Projectile motion. The purpose of the experiments is to increase learning achievement. The activities are composed of classroom experiment to obtain the relation between vertical and horizontal motion on the dimensions of positions and times. The students were also provided video about projectile motion in action and predicted simulation. The outdoor activities consist of projectile motion in different situations such as throwing a ball at different angles and pitching an object vertically while moving horizontally. These activities can improve students' understanding the concept of projectile motion. The students' attitude towards learning physics is positive.

Keywords: Projectile, learning activity, outdoor and indoor, normalized gain

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