

Bungee Barbie: Overview

Summary

Bungee jumping requires a lot of pre-planning and testing before the real thing occurs. If it wasn't for this, if somebody just jumped off the edge of something tall with a rope, it might not be safe! In this experiment, students will be tying rubber bands to a barbie doll to recreate bungee jumping on a miniature scale. They will be making predictions on what will be happening, measuring the distance fallen against the number of rubber bands to make a model for the bungee jump, reflecting on their predictions and investigating what happened during the jump.

Curriculum Outcomes: Victorian Curriculum F-10

Levels 7 and 8

- Change to an object's motion is caused by unbalanced forces acting on the object; Earth's gravity pulls objects towards the centre of Earth (VCSSU103)
- Energy appears in different forms including movement (kinetic energy), heat, light, chemical energy and potential energy; devices can change energy from one form to another (VCSSU104)

Levels 9 and 10

- The description and explanation of the motion of objects involves the interaction of forces and the exchange of energy and can be described and predicted using the laws of physics (VCSSU133)
- Analyse patterns and trends in data, including describing relationships between variables, identifying inconsistencies in data and sources of uncertainty, and drawing conclusions that are consistent with evidence (VCSSU138)

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