

Roller Coaster Model Contest Rules

The following are the official rules for the Roller Coaster Model Contest in conjunction with Indiana Beach Academic Days. Failure to adhere to these rules may result in penalties or disqualification.

Models must be designed to use a regular sized golf ball for the coaster.

Ball must travel without extra propulsion. Exception: a lift mechanism may be constructed to lift the ball to the top of the lift hill, if desired.

Total model height must not exceed 36 inches.

Base perimeter must not exceed 144 inches.

Model may be made from any material excluding K'Nex, Legos, Coaster Dynamix model kits, etc.

Teams may have up to 4 members involved in design and construction.

Each team will have five attempts to complete the run.

Coasters must be in the Ballroom for judging by 10:30 a.m. EDT

Scoring:

35% Safety Score

Ball stays on the track, completes run to lift hill or loading station (does not get stuck). Structure does not come apart.

35% Thrill Score

Loops, Curves & Hills add to the Thrill Score. Only successful segments will count, so if your ball falls off the track before completing a loop, the loop will not count.

30% Visual Score

Paint, Scenery & Theming are important in Visuals.

Bonus Points available for extra creativity and data sheets about your coaster.

For an interactive look at basic roller coaster design, visit
<http://www.learner.org/exhibits/parkphysics/>