JetToy Olympics

Track Description & Scoring Guide
JetToy Olympics - Track Descriptions & Scoring Guide

Distance

Objective: Student design teams will construct a JetToy car that can travel as far as possible.

- Track Specs 10m long x 3m wide
- Teams must release JetToy behind the 0m mark
- JetToy must stay on track for trial to be valid (if JetToy leaves the track, points are rewarded at point of exit)
- JetToy balloon must be inflated to an 8 inch diameter or less – Judge will check diameter before JetToy is released.

Scoring
  - Design teams get three trials.
  - Final score is based on sum of the 3 trials.
  - Point total is awarded by judge determining the scoring box and adding the total cm travel in the point box.
  - Measurements are taken from the furthest point of travel.

### Distance Track

<table>
<thead>
<tr>
<th>0 points (+ cm total)</th>
<th>1 point (+ cm total)</th>
<th>2 points (+ cm total)</th>
<th>3 points (+ cm total)</th>
<th>4 points (+ cm total)</th>
<th>5 points (+ cm total)</th>
<th>6 points (+ cm total)</th>
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<th>8 points (+ cm total)</th>
<th>9 points (+ cm total)</th>
<th>10 points (+ cm total)</th>
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</thead>
<tbody>
<tr>
<td>0m</td>
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<td>3m</td>
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<td>5m</td>
<td>6m</td>
<td>7m</td>
<td>8m</td>
<td>9m</td>
<td>10m</td>
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**Distance Track – Scoring Example**

The furthest point the JetToy traveled is 72 cm past the 5m mark. The score is 5.72 for this trial.
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Weight

Objective: Student design teams will construct a JetToy car that can carry a specific amount of weight.

- Track Specs 10m long x 3m wide
- Teams must release JetToy behind the 0m mark
- JetToy must stay on track for trial to be valid (if JetToy leaves the track, points are rewarded at point of exit)
- JetToy balloon must be inflated to an 8 inch diameter or less – Judge will check diameter before JetToy is released.
- 1 weight = 9 pennies in pack (25 grams) – must use weight provided by judge at starting line

Scoring
- Design teams get three trials.
- Final score is based on sum of the 3 trials.
- Point total is awarded by judge determining the scoring box and adding the total cm travel in the point box.
- Measurements are taken from the furthest point of travel.

Weight Track

<table>
<thead>
<tr>
<th>0 points (+ cm total)</th>
<th>1 point (+ cm total)</th>
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<th>3 points (+ cm total)</th>
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</table>

Weight – Scoring Example

The furthest point the JetToy below traveled is 56 cm past the 3m mark. The score is 3.56 for this trial.
JetToy Olympics - Track Descriptions & Scoring Guide

Accuracy

Objective: Student design teams will construct a JetToy car that can travel a specific distance.

- Track Specs 10m long x 3m wide
- Teams must release JetToy behind the 0m mark
- JetToy must stay on track for trial to be valid (if JetToy leaves the track, points are rewarded at point of exit)
- JetToy balloon can be inflated to any diameter determined by the design team

Scoring
- Design teams get three trials.
- Final score is based on sum of the 3 trials.
- Point total is awarded by judge determining the scoring box and adding the total cm(s) from the line/corner of the box furthest from the target box.
- Measurements are taken from the position of the JetToy closest to the accuracy target.

Accuracy Track

<table>
<thead>
<tr>
<th></th>
<th>0 points</th>
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<th>3 points</th>
<th>5 points</th>
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<td>3 points</td>
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Accuracy – Scoring Example

The JetToy stopped in the 7 point box. The measurement from the corner of the box furthest from the target box is 63cm. The score is 7.63.
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Time

Objective: Student design teams will construct a JetToy car that can travel for an extended period of time.

- Track Specs 10m long x 3m wide
- Teams must release JetToy behind the 0m mark
- JetToy must stay on track for trial to be valid (or exit track past 10m mark)
- JetToy balloon must be inflated to an 8in. diameter or less – Judge will check diameter before JetToy is released.
- Track judge will time the teams’ trials using a stopwatch
  - Time starts when nozzle is released
  - Time stops when JetToy forward momentum stops (JetToy can not stop and start.)

Scoring
  - Design teams get three trials.
  - Final score is based on the longest elapsed time (best) of the 3 trials (Judge will round time to 2 significant figures).

Time Track

<table>
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Time – Scoring Example

The JetToy stopped moving after 32.34 seconds. The score is 32.34 for this trial.