



# INVENT THE SUMMER

## Week 1: Roller Coaster

### 1 Complete the Challenge.

Build a working roller coaster using only recycled materials. The rider of your roller coaster must change directions at least three times, and must get through the entire ride unharmed.

For kids 12 and under!

The Rules	
You CAN:	You CAN'T:
<ul style="list-style-type: none"> <li>✓ Have your passenger travel in any direction: up, down, sideways, backwards or upside down. <u>It MUST change directions at least 3 times!</u></li> <li>✓ Use tape or glue to support your design.</li> <li>✓ Select any type of passenger to ride your roller coaster. It doesn't need to be recycled, but you get bonus points if you build your own!</li> </ul>	<ul style="list-style-type: none"> <li>✗ Use valuable items as passengers.</li> <li>✗ Assist your passenger once the ride begins.</li> <li>✗ Harm your passenger. Roller coasters must be safe!</li> <li>✗ Use non-recycled materials.</li> </ul>
<p>When you're done, try sending different passengers down your roller coaster. How does the passenger's size, shape and weight affect the ride?</p>	
 <b>Our tips to avoid angry parents</b> 	
DON'T	DO:
<ul style="list-style-type: none"> <li> Build your roller coaster in front of the door to the bathroom.</li> <li> Harvest materials from random places without asking your parents first.</li> <li> Leave small parts all over the place for other people to step on and clean up.</li> </ul>	<ul style="list-style-type: none"> <li> Clean up after yourself.</li> <li> Make sure your parents approve all of your building materials.</li> <li> Recycle your materials when you're done.</li> </ul>

## 2 Create a video of your Roller Coaster.

Try to keep your video under 1-minute long and include the following:

- The name of your solution.
- How does it work?
- What kind of materials did you use?
- Did you have any problems figuring out the solution?
- What was the biggest lesson you learned?

Remember, your video will be visible to anyone with an internet connection, so it's important to protect your privacy and stay safe. [Click here](#) to see our video submission and safety tips.

## 3 Enter the contest by 9:00pm EST on June 27, 2021.

Ask a parent to upload your video to [YouTube](#) or [Vimeo](#). Then use our [online entry form](#) to send us the link. All entries must be completed by a parent or legal guardian.

All contest entries will receive **1** ticket for our big end-of-the-summer prize drawing! You can receive bonus tickets anytime someone enters their first *Invent the Summer* challenge and credits you for telling them about us!

*\*All videos will be reviewed prior to publishing online to ensure the content is appropriate for all ages.*

## 4 View other solutions and VOTE!

You can see all the solutions and vote for your favorites from 8:00am EST on Monday, June 28 until 5:00pm EST on Tuesday, June 29. See our [voting rules](#) for more information.

## 5 Winners announced by 8:00pm on June 29!

**Audience Choice Award:** Goes to the solution with the most votes.

**Editor's Choice Award:** Selected by the Junior Board of Engineers. Solutions will be judged on originality, execution and presentation.

Winners receive their choice of an *Invent the Summer* t-shirt or drawstring bag.