

Daisy Mechanical Engineering Roller Coaster Design

Pillar: STEAM

Outcomes: Sense of Self, Challenge Seeking

Daisies will earn their badge by:

Engineer your own roller coaster and see how its design affects its speed.

1. Make a simple roller coaster car

a. You can construct a car out of materials that you find around your house, or use marbles, coins, small rubber balls, anything that will roll to act as your roller coaster car.

2. Build a model of a roller coaster

a. Use objects from around your house to build your roller coaster. To make your track you can cut pool noodles in half, roll pieces of construction paper or index cards, cut the crinkled edges off the paper plates to make loops, the sky is the limit! Check out our Pinterest page for more ideas.

3. Test your roller coaster

a. Test your roller coaster with your family and see how you like it. Are there changes you would like to make? No problem! Change the things you don't like and try it again!

Need supplies to complete this badge? ScrapsKC has badge kits for sale with supplies for steps 2 and 3.

Online additional resources:

https://www.pinterest.com/gprograms/daisy-resources/badge-roller-coaster-design/

When you're finished: Congratulations, you have earned your badge! Order your Daisy Mechanical Engineering: Roller Coaster Design Challenge Badge here: https://www.girlscoutshop.com/Daisy-Roller-Coaster-Design-Challenge No shipping charges apply at this time.