DESIGN CHALLENGE

Go the Distance

Create a flying machine that travels the farthest possible distance. You will have three launch tries.

What You'll Need

- 3 craft sticks
- 1 sheet of paper
- 5 paper clips
- 1 binder clip
- 1 paper cup
- 1 sheet of circle labels
- 1 12" length of string
- 3 marshmallows

Reflection Questions:
What did you notice about each of your launches?

What, if anything, did you do differently with each launch?

Redesign Challenge:
You get four revisions to make your flying machine go the farthest. With each revision, you may only change one thing.

Overall Design Reflection Questions:
- What were some interesting discoveries you made while working on the Design Challenges?
  - About the problems? About yourself?
- What were some of the difficulties of the Design Challenges?
  - What made them difficult?
- What were some learning moments?
  - What made them so?
- How can you use what you have learned in the future?

Quote

Explain the quote listed in your own words, and then describe how it applies to the design challenge.

"It is possible to fly without motors, but not without knowledge and skill."

- Wright Brothers

For more on design and flight, check out – To Our Solar System and Back Digital Exploration on TGR EDU: Explore
tgreduexplore.org/curriculum