

Extreme Weather Vehicle Mini Challenge

Name: _____

Date: _____



Problem Scenario:

Storm chasers need to redesign the vehicle they use while observing extreme weather. The challenge for you is to design a vehicle that will provide protection AND relay important information about the weather.

Challenge: How can you design a vehicle that can withstand extreme weather?

Criteria:

paper/ pencil / computer

- Document the differences in weight between a traditional vehicle and a vehicle used to chase storms
- Be able to show the technology needs during storms--wifi, etc.
- Create a chart demonstrating how many vehicles may be needed in any given year

1. Brainstorm: Use the space below to brainstorm the design and approach to building an extreme weather vehicle. .

- What are the weather conditions the vehicle will be able to withstand? Be specific
- What weather information will be collected with your vehicle?
- What are the strongest materials you can think of?

2. Design:

Use the space below to draw your vehicle.
Include a written statement explaining the material that will be used and an explanation of the shape, function and form of your design.

4. Evaluate:

- How well will your vehicle perform?
- What instruments are you including? Size?Shape?Materials?
- Carrying capacity (number of people, weight)
- Travel Speed
- Safety features

5. Modify

Based upon the evaluation of your design, what can be added or improved? Describe:

3. Build:

Take your design and build a model or create a detailed drawing.

6. Share:

Share your creation on Social Media!
Tag us on Facebook, Twitter or Instagram @pastfoundation
Use the hashtag #ThisIsPAST or #DesignThinking