

**Activity 1.2.1 Design Process**

1. Log in to a computer with headphones and listen to one of the Design Squad videos from Season 2. Use this URL: <http://pbskids.org/designsquad/>, then choose from one of the design challenges that the Design Squad completed. You can choose from: Cardboard Furniture, Gravity Bikes, Backyard Thrill Ride, Big Bugs, Aquatic Robotics, and Off-Road Go-Karts 1.
2. Complete the Design handout after watching the video on the computer.
3. Type all answers in a color other than black.
4. Complete the conclusion questions in complete sentences and turn in the activity using MyPLTW.

 **Design Squad**

1. Which video did you watch?
2. In your own words, describe the problem/challenge that was given to the teams.
3. List the criteria and constraints that were given to the teams.
4. Complete the table below, describing what each team did at each stage of the design process.

 Green Team Purple Team

|  |  |  |
| --- | --- | --- |
| Define Problem |  |  |
| Generate Concepts |  |  |
| Develop a Solution |  |  |
| Construct and Test Prototype |  |  |
| Evaluate Solution |  |  |
| Present Solution |  |  |

Conclusion Questions

1. Why do we use a design process?
2. Which stage of the design process do you think is most important? Why?
3. Teamwork is an important part of completing projects and design challenges. If you were working on a team, how would you contribute to the team?
4. Which team won the challenge that you viewed? Based on what you saw, how would you explain their success?