



Design Tool 8.4: Brainstorming Procedures

Directions for students: Brainstorming is a way of getting many ideas for solving your engineering challenge. You can follow these guidelines.

Select someone to write the Teams' ideas on chart paper.

- ◆ Stay focused and on topic.
- ◆ Allow only one conversation at a time.
- ◆ Don't cut anyone off.
- ◆ Come up with ideas as fast as possible.
- ◆ Come up with as many ideas as you can.
- ◆ Everyone on the team should contribute ideas. You can build on others' ideas.
- ◆ Wild ideas are welcome.
- ◆ Do not criticize or judge others' ideas.
- ◆ Do not discuss any ideas during this time.

After you brainstorm many ideas, choose one you think will best solve the problem.

- 1 Mark out ideas if your teacher can't supply the equipment or materials you need. Mark out ideas that are too expensive, take too long, or can't be done in the class.
- 2 Mark out ideas that don't meet the criteria and constraints of the challenge.
- 3 Examine the remaining ideas. Think about which ideas might solve the problem.
- 4 Put a checkmark by those ideas that all team members agree are possible solutions.
- 5 Decide which solution the team will try. All team members should be able to support this solution, even if they are not totally happy with it. If you cannot agree, team members might combine some ideas or come up with new ideas.