

To: Casts & us

Dear Engineers,

I am an eighth grade student who has broken my fibula.

My cast is itchy. Please design a cast to help me

with my problem. Could you please hurry? My bone heals

in five more weeks.

Sincerely,

Suffering Student

Forest Grove Middle School



## STUDENT WORKSHEET

### Poster Session

Scientists and engineers often share their ideas with posters. You and your teammates will be designing a poster to explain your cast design to other members of your class. Include the following topics on your poster:

- The engineering design process.
- The problem your group was trying to solve.
- Any preliminary sketches you have made as well as your final design.
- A description of your prototype.
- A list of materials used.
- A description of what properties the materials have (e.g., weight, flexibility, or strength).
- Examples of how you evaluated your design to determine if it works.
- An analysis of whether the new design solves the original problem.
- A description of how you would improve your prototype if given time for a redesign.