Images of Example Prototype Prostheses

Example 1: A pipe is chosen to provide structure. To provide some comfort for the knee, a piece of sponge is cut and taped to the top of the pipe. For stability, a student's shoe is taped to the other end of the pipe. The student's knee is taped to the prototype prosthesis, providing a connection to the body.

It works!



Biomedical Engineering and the Human Body: Lesson 1, Prosthetic Party Activity — Images of Example Prototype Prostheses **Example 2:** A cardboard tube is used for flexibility and lifelikeness. A metal strip is run through it to provide structural support. To provide some comfort, folded cardboard is duct-taped to the top of the tube. A piece of rope is threaded through a hole in the metal, providing a way to connect the prosthesis to the body. Through a hole poked in the cardboard tube, a student's shoe is tied to the other end of the tube, providing stability. The rope ties the prosthesis to the student's knee, which rests on the cardboard tube. Even with a flimsy cardboard tube, **it works!**



Example 3: For structure, a piece of open-sided, round duct was duct-taped into a tube shape. The knee end of the tube was closed using more duct tape and a piece of the metal duct material. Some comfort came from the tape and the air underneath it.



Lifelikeness: Wrapping a piece of wood with a towel can make the prosthesis appear and feel more lifelike, especially once covered by a pair of pants!



Comfort: Get creative to find different ways to make the prosthesis comfortable! (left to right) Perhaps a crumpled piece of paper taped to a copper pipe, a piece of bubble wrap taped to a piece of wood, or the rubber head of a toilet plunger.



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