

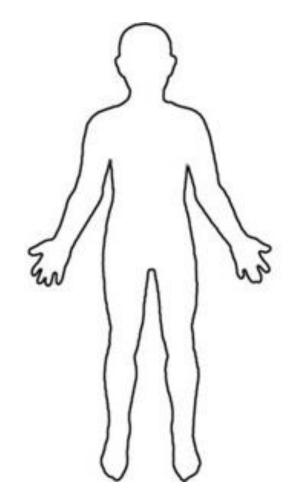


The Everyday Cyborg

The **cyborg**, a being that is **half human** and **half robot**, is a common feature in science fiction stories. But did you know that technology has been used in medicine for hundreds of years? Indeed, with the advances being made in medical engineering, **implantable technology** is becoming more and more **common**. We are truly at the age of the **'everyday cyborg'**. What do you know about today's medical implants?

Below is a list of some of the more commonly used implantable technologies. But can you describe what each device does and mark where on in the body it is used?

	Name	Function
1	Coronary stent	
2	Intraocular lens	
3	Cochlear Implant	
4	Deep brain stimulator	
5	Artificial heart valve	
6	Pacemaker	
7	Gastric band	
8	Hip replacements	
9	Knee replacements	
10	Implantable insulin device	









Answers:

	Name	Location	Function
1	Coronary Stent	Arteries of the heart	A tube shaped device placed inside arteries to keep them open for the smooth flow of blood.
2	Intraocular lens	Eyes	An artificial lens to focus light in the eye, replacing those affected by cataracts or unable to function properly.
3	Cochlear Implant	Ears	A device that bypasses the normal hearing process by electrically stimulating the auditory nerve to provide a sense of sound to those with hearing loss.
4	Deep Brain Stimulator	Brain	A device that delivers preprogrammed electrical stimulation to malfunctioning areas of the brain.
5	Artificial Heart Valve	Heart	A replacement for faulty valves in the heart that allow the flow of liquid in one direction only, preventing dangerous backflow
6	Pacemaker	Heart	A device that delivers electrical stimulation to heart tissue in order to correct abnormal cardiac rhythms.
7	Gastric Band	Stomach	An inflatable silicone device placed around the stomach to reduce its size, in order to reduce food consumption.
8	Hip Replacement	Hips	An artificial joint designed to replace damaged or worn joints.
9	Knee Replacement	Knees	An artificial joint designed to replace damaged or worn joints,
10	Implantable Insulin Device	Pancreas	A device that delivers insulin quickly to the liver, in order to closely match the way insulin is normally delivered in the body.

