

<p>Grammar: All verb forms - revision Vocabulary: Mixed Skill(s): Reading / Writing Activities: Sentence completion Level: Upper-intermediate (Secondary) (Age 16-20)</p>	<p>General English</p>
<p>I Put the verbs in brackets into the correct form:</p> <p>Someday, perhaps, printers (revolutionize) the world of medicine, churning out* hearts, livers and other organs to ease transplantation shortages. For now, though, Darryl D’Lima would settle for a little bit of knee cartilage*.</p> <p>Dr. D’Lima, who (head) an orthopedic research lab at the Scripps Clinic here, (already/make) bioartificial cartilage in cow tissue, modifying an old inkjet printer to put down layer after layer of a gel containing living cells. He has also printed cartilage in tissue (remove) from patients who (undergo) knee replacement surgery.</p> <p>There is much work to do to perfect the process, get regulatory approvals and conduct clinical trials, but his eventual goal (sound) like something from science fiction: to have a printer in the operating room that could custom-print new cartilage directly in the body to repair or replace tissue that is missing because of injury or arthritis.</p> <p>Just as 3-D printers (gain) in popularity among hobbyists and companies who use them to create everyday objects, prototypes and spare parts (and even a crude gun), there (be) a rise in interest in (use) similar technology in medicine. Instead of the plastics or powders used in conventional 3-D printers to build an object layer by layer, so-called bioprinters print cells, usually in a liquid or gel. The goal isn’t (create) a widget* or a toy, but to assemble living tissue.</p> <p>At labs around the world, researchers (experiment) with bioprinting, first just to see whether it was possible to push cells through a printhead without killing them (in most cases it is), and then trying to make cartilage, bone, skin, blood vessels, small bits of liver and other tissues. There are other ways to try to “engineer” tissue — one involves (create) a scaffold* out of plastics or other materials and (add) cells to it. In theory, at least, a bioprinter has advantages in that it can control the placement of cells and other components to mimic natural structures.</p> <p>Although bioprinting researchers (make) great strides, there are many formidable obstacles to overcome.</p> <p>Dr. D’Lima acknowledges that his dream of a cartilage printer — perhaps a printhead attached to a robotic arm for precise positioning — is years away. But he thinks the project (have) more chance of becoming reality than some others.</p> <p>*Taken and adapted from <i>New York Times</i> website</p>	<p>Glossary:</p> <p><u>*to churn out</u> – to produce large quantities of something, especially not caring about the quality</p> <p><u>*cartilage</u> – a strong substance around the joints of your body that can bend</p> <p><u>*widget</u> – a small piece of equipment that you do not know the name for</p> <p><u>*scaffold</u> – a support either natural or artificial that maintains the tissue contour</p>