

Name \_\_\_\_\_

## The Magic of 3D Printing: Transforming the World One Layer at a Time

### Open-Ended Response Answer Key

1. The 3D printing process involves creating three-dimensional objects layer by layer from a digital file. It uses materials like plastic, metal, or food ingredients, and the object is built up by adding successive layers until it's complete.
2. One possible answer could be: 3D printing has positively impacted the medical industry by allowing doctors to create custom implants and prosthetic limbs tailored to individual patients, improving their quality of life.
3. Answers may vary but could include reasons like advancements in technology, increased accessibility, and the development of new materials and applications.
4. Possible challenges or drawbacks of 3D printing could include concerns about the quality and durability of printed objects, potential copyright issues, and the environmental impact of certain materials used in 3D printing.

