

Amaze Your Brain *at Home!*

EXTRA INFO

BEST FOR
Grades
4-8

BRINGING DINOSAURS TO LIFE with 3D Printing and Scanning



ABOUT

On the *TECH Truck*, we constantly use our 3D printers to build and prototype things such as robots, machines, and tools that we use on our programs. In our spare time, some of us are even 3D printing personal protective equipment to send to hospitals! We can also use our printers to recreate fossils and other specimens. Since these objects can be so fragile, 3D printing allows people to touch and feel replicas of the real thing.

3D SCANNING

3D scanning has become an important tool for paleontologists because it allows them to create 3D models to print of delicate specimens before fully excavating them. This is especially helpful when identifying unknown species. 3D scanning has even helped scientists discover new information on dinosaur nervous systems and more!



A portable 3D scanner at work.

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Per[**]t**
Museum of Nature and Science

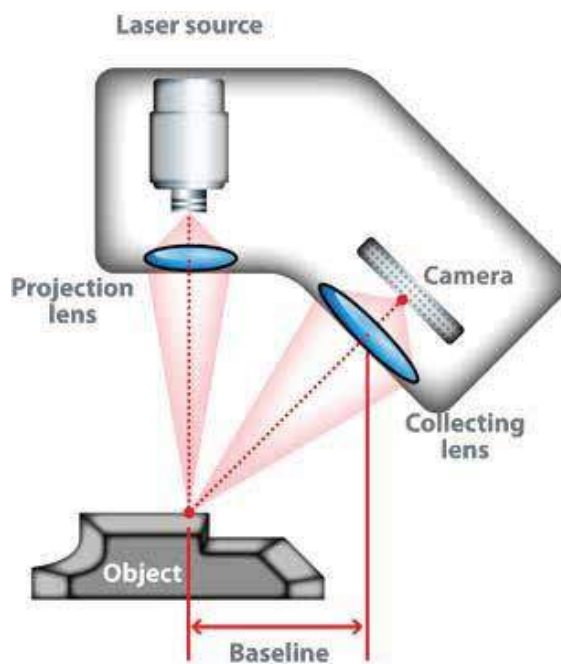
BRINGING DINOSAURS TO LIFE

with 3D Printing and Scanning (CONT.)

HOW DOES A 3D SCANNER WORK?

Scientists use different types of 3D scanners to capture image scans. A laser scanner uses a combination of cameras and laser projectors to capture the shape of an object.

As the scientist passes the scanner back and forth above the object, the machine creates a three dimensional map of the specimen. It does this by recording a mesh of points along the surface and measuring their distance in space. The scanner's software connects these points to generate a 3D model.



A 3D scanner measures spatial distance.

For more information:

- <https://3dprint.com/200131/dinosaur-fossil-3d-scanning/>
- <https://www.sculpteo.com/en/3d-learning-hub/basics-of-3d-printing/what-is-3d-scanning/>



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