

**This student text explains**  
***“Why was Tempel One chosen for the Deep Impact mission?”***

**Comet Tempel One passes through the inner Solar System orbiting the Sun every five and one-half years. This makes Tempel One a good target to study evolutionary change in the mantle, or upper crust.**

**Scientists want to know whether or not comets give up all of their supply of gas and dust to space. Or do they seal the gas and dust inside their crusts?**

**Scientists want to study the structure of a comet's interior. How is it different from its surface?**

**The Deep Impact mission gave us some answers to these questions.**