Rosetta Makes Friends with a Comet

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After travelling for 10 long years, covering over half the length of the Solar System and looping around the Sun five times, the Rosetta spacecraft has finally arrived at it's destination: Comet 67P/ Churyumov–Gerasimenko!

Rosetta is currently orbiting 100km above the comet's surface, sending details about its new friend back to Earth. For the next few weeks, Rosetta's main task is to search for the perfect landing site for the probe its carrying, called Philae (pronounced FEE-lay).

If everything goes well, in just a few months Philae will become the first probe ever to be dropped onto a comet's surface!

But Rosetta's journey won't end there, for many months the little spacecraft will travel alongside the comet as it swings around the Sun and back out towards Jupiter again.

One year from now, the pair will approach the closest point to the Sun on their tour of the Solar System — this is where the comet will really begin to shine.

Comets are lumps of cosmic ice and rock, which means that as Comet 67P travels closer to the Sun it will begin to melt. The vapourised ice from the comet will create a magnificent tail like those we are sometimes lucky enough to see travelling across our skies.

Unfortunately, Comet 67P won't be visible in our night sky without powerful telescopes, even with its dazzling tail. Instead, Rosetta will provide us with something better — an up-close view of how the comet changes in the glare of the Sun!

COOL FACT

The mission is named after the Rosetta Stone, an ancient stone tablet that allowed us to decode ancient Egyptian Hieroglyphics. Like the Rosetta Stone, ESA's Rosetta mission will reshape our understanding of the past by unlocking the mysteries of objects made from the left overs of when our Solar System formed: comets.

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