[Wanted: An orbiting garbage collector to clean up space](https://newsela.com/read/elem-cleaning-up-space-junk/id/43608/?search_id=aba80745-40f8-41d5-8322-66824bd09bc1) by Rachel Feltman, Washington Post, adapted by Newsela Staff (MAX Lexile)

[Scientists turn to nature for ideas as space junk soars](https://newsela.com/read/orbital-debris-geckos/id/32491/?search_id=e826e1ff-2c40-42ec-9c0d-1ac41189c6e9) by Christian Science Monitor, adapted by Newsela Staff (1130L)

**Key Ideas**

**There is a lot of space junk in Earth’s orbit.**

* Leftover space machines that crash into each other
* 23,000 pieces larger than four inches & 500K-100,000K more pieces that are smaller (according to NASA)
* old satellites can stay in orbit for decades
* Department of Defense tracks large pieces
* many fragments are too small to track

**This space junk is a problem.**

* Space junks moves really fast (“super impact speed”) so when it hits something it can do a lot of damage
* Small debris can punch a hole in a satellite; bigger pieces of space junk can completely destroy things
* Makes it harder to do ISS (International Space Station) space walks
* The ISS has to navigate around space junk
* Old satellites are taking up space in Earth’s orbit
* We need satellites for almost anything we do with our smart devices so if the satellite gets damaged, there might be trouble
* It’s not really clear who should clean up the mess

**Innovative solutions are being proposed to solve this problem.**

* NASA - making sure each new mission makes plans to dispose of old spacecraft and other junk
* ISS - project called REMOVEDebris that will try to “capture” debris
* Parness’ JPL (Jet propulsion lab) and Stanford – a trash collector with sticky pads that grip debris like a gecko’s feet grip
* Inter-Agency Space Debris Coordination Committee (IADC) created guidelines in 1993