

Talking Points

The Three Pillars of Scientific Literacy for Kids

- **Understanding the Universe and our place in it**

Did you know that you live in an unfathomably huge, mind-blowing Universe, on a watery planet that's five billion years old? Did you know that Earth orbits a star (our Sun), that's one of billions of stars in our galaxy, the Milky Way? It's hard to imagine how small humans are in the grand scheme of things, isn't it? The next time someone asks for your address, say: Milky Way Galaxy, Orion Arm, Star Sol, planet Earth. That's where you *really* live!

- **Embracing our dependency on other life forms and our planet**

You may find it hard to believe that you share a common distant ancestor with bacteria, but it's true! All life on Earth is related and intertwined, and we're completely dependent on one another and the planet that sustains the right conditions for us to thrive: moderate temperatures where water flows, an intact ozone layer, and an oxygen atmosphere. When you're in the grocery store, remember that all the food on the shelves came from nature, one way or another, and thank the wheat and the apple tree!

- **Appreciating the power of science**

Sometimes we think of science as a collection of facts, but it's not. It's a powerful *method* of sorting fact from fiction. Scientists ask the world questions, in a careful way, and listen to the answers. Sometimes scientists are wrong, but the method they follow allows them to correct their mistakes. Thus, over time, science paints an ever-more accurate picture of the Universe. Remember this the next time you take antibiotics, use an electronic device, or watch on TV a man-made rover explore the surface of Mars. Science made all these wonders possible, and so many more!