KENNEDY Space Center™
VISITOR COMPLEX
LOOK UP.

WHERE THE MOST AMAZING THINGS ON EARTH LEAVE EARTH. LOOK UP.

Fasten Your Seatbelt!

If you are someone who has trouble sitting still, you may be surprised to learn that, even when you aren't moving at all, you're hurtling through the universe at **astronomical** speeds. Use the following facts and your math skills to learn just how fast you really are going.

Earth's equatorial diameter = 12,756 km

Earth's average distance from the Sun = 149,597,870 km

1 solar year = 365.25 days

1 day = 24 hours

Your current latitude: _____ degrees North (or South)*

Earth's equatorial circumference = _____ km

      Rotational speed at the equator = _____ kph

Earth's circumference at your latitude = _____ km

      Rotational speed at your latitude = _____ kph

Circumference of Earth's orbit** = _____ km

      What portion of the circumference does Earth travel each day?** _____ degrees/day

      How far does Earth travel each day? _____ km

      How fast is Earth revolving around the Sun? _____ kph

How fast are you traveling through the solar system right now? _____ kph

THINK ABOUT IT … This does not include the speed at which the solar system is traveling through the universe. Do some research to figure it out, then add that to the speed you are traveling through the solar system. How fast are you REALLY going while you're sitting still?

*To find your latitude, use a GPS device or a website such as https://www.maps.ie/coordinates.html.

**Assume Earth's orbit around the Sun is a perfect circle. (It isn't, but we're keeping the math simple.)