



AS THE WORLD TURNS

How fast is the Earth spinning?

name _____

date _____

Act One: Spin Cycle

- 1 The circumference of the **Equator** is approximately 24,900 miles. Based on this, how fast is Quito, Ecuador (Q), traveling due to the rotation of the Earth?

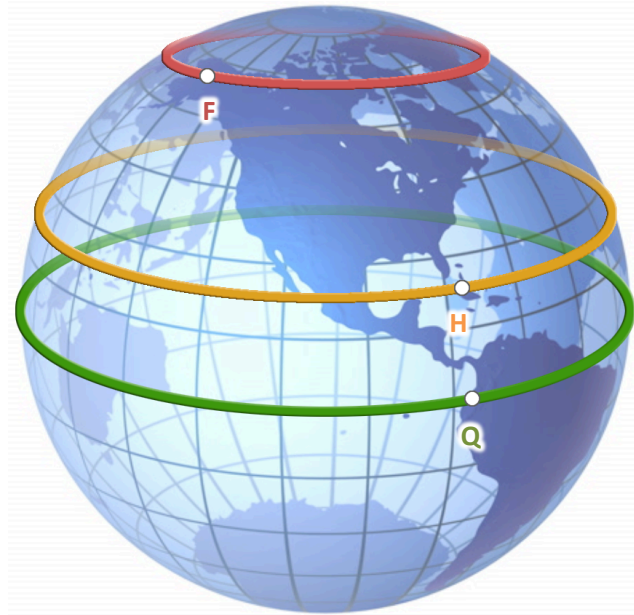


- 2 Find where you are on Earth. Do you think you're spinning faster than, slower than, or at same speed as Quito? Explain.



Act Two: SpeedometEarth

- 3 Havana, Cuba (H), lies on the **Tropic of Cancer**, which has a circumference of approximately 18,000 miles. Fairbanks, Alaska (F), lies on the **Arctic Circle**, which has a circumference of approximately 10,000 miles. How fast is each city traveling due to the rotation of the Earth?



- 4 As you move farther away from the Equator, what happens to the speed at which the Earth is rotating *and why*?
- 5 Based on your answer above, how fast would you say the Earth is spinning at the absolute North Pole...and is this what you'd expect?