



# HERE'S WHAT YOU'RE ACTING OUT:

THE EARTH IS TILTED ON ITS AXIS. IN OTHER WORDS, IF YOU WERE ABLE TO STICK A LONG POLE THROUGH THE EARTH, FROM THE NORTH POLE TO THE SOUTH POLE, IT WOULD LOOK LIKE THIS  AND NOT LIKE THIS . THIS TILTING OF THE EARTH CAUSES THE CHANGES IN TEMPERATURE AND WEATHER DURING THE DIFFERENT SEASONS OF THE YEAR. IT ALSO EXPLAINS WHY OUR DAYS ARE LONGER IN THE SUMMER AND SHORTER IN THE WINTER.

# HERE'S HOW:

## <sup>1</sup> SPRING:

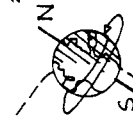
BY THE BEGINNING OF SPRING, THE EARTH IS ONCE AGAIN LIT EQUALLY AT ALL POINTS BY THE SUN BUT ON ONLY ONE DAY DOES THE LENGTH OF A DAY EQUAL THE LENGTH OF A NIGHT (12 HOURS EACH). THAT DAY IS CALLED THE VERNAL EQUINOX. IT MARKS THE START OF SPRING.



PATH OF THE EARTH'S REVOLUTION AROUND THE SUN. ONE REVOLUTION TAKES ONE YEAR.



\* NOTE: THE EARTH IS CLOSEST TO THE SUN DURING WINTER.

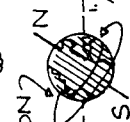


## <sup>2</sup> WINTER:

BY THE BEGINNING OF WINTER THE EARTH'S TILT CAUSES THE NORTH POLE TO BE POINTED AWAY FROM THE SUN AND THE SOUTH POLE POINTED TOWARD THE SUN. AS YOU CAN SEE, THE NORTH POLE IS NEVER ILLUMINATED BY THE SUN AT THIS TIME, AND THE SOUTH POLE RECEIVES CONSTANT SUNLIGHT. OF COURSE, DRASTIC WEATHER YOU LIVE, BUT THIS TILTING OF THE EARTH IS THE CAUSE OF OUR LONG WINTER NIGHTS THE FARTHER AWAY FROM THE EQUATOR YOU LIVE. NOTICE A CHANGE IN THE NUMBER OF DAYLIGHT HOURS DURING THE WINTER MONTHS.

## <sup>3</sup> SUMMER:

AT THE BEGINNING OF THE NORTH POLE IS TILTED TOWARD THE SUN. NOW THE DARK AND THE NORTH POLE IS CONTINUALLY MOST PART OF THE GLOBE IS CONSTANTLY LIT BY THE SUN. THIS PROLONGED EXPOSURE TO THE SUN HEATS THE AIR AT THE NORTH POLE. THE WARMED AIR MOVES SOUTH BRINGING SUMMERY CONDITIONS TO THE NORTHERN HEMISPHERE.



EARTH'S ROTATION TAKES ONE DAY

## <sup>4</sup> AUTUMN:

ON THE AUTUMNAL EQUINOX AT THE BEGINNING OF FALL, THE EARTH IS NOT TILTED AT ALL IN RELATION TO THE SUN AS THE EARTH ROTATES. ALL POINTS ON THE GLOBE GET THE SAME AMOUNT OF SUNLIGHT.

