14. What does this motion cause?

A. Day and night.

15. What is the other motion of the earth?

A. A revolution round the sun.

16. How long does it take the earth to go round the sun?

A. A year, or about three hundred and sixty-five days.

REVOLUTION OF THE EARTH ROUND THE SUN.

17. What does this motion cause?

A. The changes of the seasons.

LESSON III.

MAPS AND CIRCLES.

18. What is a Map?

A. A picture of the earth's surface.

Toward the top of a map is North, the bottom South, the right hand East, and the left hand West.

19. What do the lines drawn on maps represent?

A. Parts of imaginary circles* extending on the earth's surface.

20. Why do you say *imaginary* circles?

A. Because they are not actually drawn on the earth; but are only imagined or supposed to be drawn.

21. How are circles supposed to be divided?

A. Into three hundred and sixty equal parts called degrees. (*Degrees are thus marked*, (°).)

22. What is a semicircle?

A. Half of a circle.

23. How are the circles on the earth designated?

A. As Great Circles and Small Circles.

24. What is a Great Circle of the earth?

A. One that divides the earth's surface into two equal parts.

25. Which are the Great Circles of the earth?

A. The Equator and the Meridian Circles.

26. What is a Small Circle of the earth?

A. One that divides the earth's surface into two unequal parts.

27. Which are the Small Circles of the earth?

A. The Tropics, Polar Circles, and Parallels.

LESSON IV.

CIRCLES OF THE EARTH DEFINED.

28. What is the Equator?

A. A great circle on the earth's surface, everywhere equally distant from the poles.

29. What are the Meridian Circles?

A. They are great circles that extend north and south round the globe.

30. What is a Meridian or Meridian Line?

A. It is the part of a meridian circle which extends from one pole to the other.

31. How many meridians are commonly drawn on globes?

A. Twenty-four; but every place is supposed to have a meridian passing through it.

32. What are the Parallels?

A. They are small circles passing round the earth parallel* to the equator.

33. What are the Tropics?

A. They are two parallels, one north, and the other south, of the equator, and each at a distance from it of $23\frac{1}{2}$ degrees.

34. What are the names of the Tropics?

A. That north of the equator is called the Tropic of Cancer; that south of it, the Tropic of Capricorn.

35. What are the Polar Circles?

A. Two circles surrounding the poles, each at a distance of $23\frac{1}{2}°$ from the pole it surrounds.

36. What are the Polar Circles called?

A. The one about the North Pole is called the Arctic Circle; the one about the South Pole, the Antarctic Circle.

* The term *circle*, here, and in the succeeding paragraphs of Lessons III. and IV., is employed in a restricted sense, applying only to the *circumference* of the circle. (*See Definitions mathematically stated, page* 12.)

* Circles are parallel to each other when every point of the one is equidistant from every corresponding point of the other.