

## No. 6.

1. Give proofs of the sphericity of the earth, and also of its diurnal motion.
2. Explain the cause of the Trade Winds. Why do they not blow in the Indian Ocean?
3. How is the latitude of a place determined by knowing the *Meridian Altitude* and *Declination* of the sun?  
At a place on March 20th., the meridian altitude of the sun is  $47^\circ$  and when it is 9.15 a.m. at Greenwich it is 10.36 a.m. at this place; find its latitude and longitude.
4. Why does the day vary in length, and why is it longer during summer than during winter? Draw a diagram showing the position of the earth in her orbit to-day, marking by an arrow the direction in which she is moving.
5. Compare the corresponding latitudes of Europe and North America in regard to climate, and explain the cause for any existing difference. Which receives the greater amount of the sun's heat, the northern or southern hemisphere? Why?
6. Trace the course of the Ganges and of the Indus. Name the most important places on them, and also the passes leading from India into Afghanistan.
7. Name the most important islands to the east and south-east of Asia, and state the country to which each of these belongs.
8. Describe the great river basins of South America, and name the rivers which drain each and the direction in which they flow.
9. What are the most important exports from each of the following places:—Montreal, Charleston, New Orleans, Buenos Ayres, and Liverpool.
10. Describe the position of, and state for what each of the following places is noted:—Granada, Leipsig, Leeds, Saratoga, Salamanca, Delhi, Pultowa, Cronstadt, Utrecht, and Lyons.