SCIENCE QUESTIONS.

By Franklin T. Jones.

University School, Cleveland, Ohio.

Propose questions for solution or discussion.
Send in solutions of questions asked.
Send examination papers in the sciences.

This is in answer to the question in the January number of School Science and Mathematics: To what height would a person have to rise above the earth's surface to observe its revolutions, providing it was possible to see so far?

Assuming that "revolution" means rotation on its axis, and that "stationary" means fixed with reference to the stars, I believe the observer would need no greater elevation than the thickness of a sheet of paper in order to be convinced that "the world do move." But he would need considerably more elevation to escape danger from trees, sky-scrapers, etc., approaching him, in this latitude of New York, at the rate of more than eighteen miles per minute. He would also find the atmosphere of the earth rushing past him, creating—for him—a breeze of 1,000 miles an hour.

Yet, again, if we are to consider the revolution of the earth around the sun, and the observer started to get off the earth in front, that is, on that side of the earth that faces in the direction of the earth's flight through space, he would not have to go more than an inch to find the earth immediately coming towards him. But he might have to go a long way in a straight line in order, at length, to get "off the track" of the earth and let it go flashing past at the rate of 111 miles per minute.

W. M. Bennett.

Rochester, N. Y.

Proposed by John J. Farrell, South Norwalk, Conn.

There is a train of flat cars one mile long traveling at a rate of one mile a minute. A man stands on the front end and also one on the rear end who has a rifle that will shoot a ball at a rate of one mile a minute. When he shoots at the man on the forward end will the bullet reach him or not?

HOW TO OBTAIN EXAMINATION QUESTIONS.

Examinations do not prove whether a pupil has profited or not by his course of study, but they do afford a reasonable test as to his mastery of the fundamentals of the subject and his ability to reproduce knowledge gained. Sometimes the fact that examinations cannot test attainment perfectly is advanced as an argument for abandoning them altogether. The fallacy of this argument is self-evident.

Because many teachers are desirous of testing their pupil's knowledge and attainment as completely as possible, and because the college