

scale; test tubes may also frequently take the place of beakers; pickle bottles, or other wide-mouthed bottles, will serve for the collection of gases.

Where coal gas is not available, spirit lamps may be used for heating.

In many cases it is advisable that pupils work together in pairs; this saves apparatus, and the work is accomplished more expeditiously.

The experiments described have all been carried out by High School classes and have been found to be well within the capacity of these pupils. Each exercise as arranged can be completed in less than an hour (except No. XXXVIII), if it has been read up beforehand by the pupils and if the necessary supplies are at hand. An accurate balance should be provided for every four pupils, if possible, though it is required only in the case of about eight of the exercises.

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