

Within the last hundred years mankind has made marvellous progress in the discovery of the laws which govern the forces of nature, and in the use of these forces. There is no doubt that great progress will be made in this direction in the next hundred years. The men and women who will be leading in this progress twenty years hence are now boys and girls in school, just like the boys and girls who are reading these pages, and it is quite possible that some of these readers may be leaders in the future. Some may discover new laws of nature, and all may do a great service by gaining a knowledge of the laws already known, and the way in which they affect their own lives and the lives of their neighbors, and by spreading this knowledge among their neighbors.

ANSWERS

Lesson I

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|-------------------|-------------------|------------|
| 2. 16 in. ; 4 in. | 3. 12 in. ; 6 in. | 4. 10 lbs. |
| 5. 4 ft. | 6. 25 lbs. | |

Lesson II

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|-----------|---------------|-----------|
| 1. 4 lbs. | 2. 2,250 lbs. | 3. 4 lbs. |
| 4. 2 lbs. | | |

Lesson III

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|------------|---|-----------|
| 1. 6 lbs. | 2. 19 lbs. | 3. 6 lbs. |
| 4. 25 lbs. | 5. Yes, because one hand must exert much more force than the other. | |