

4. What effect does cooking have on meats?

5. What forces contain all the elements which form blood?

## IX.

## ARITHMETIC.

1. Express by Roman notation the year Columbus discovered America.

2. How many dollars and cents are there in two pounds, English money?

3. If two gross of pens cost \$4, what will one pen cost?

4. If a ten cent loaf weighs 12 oz. when flour is \$6 a barrel, what should it weigh when flour is \$7 a barrel?

5. A man planted 25 bushels of potatoes and harvested 26 bushels, what per cent. did he make? Write the reason of the method taken in solving this problem.

## X.

1. A piece of land is 4 rods wide and 750 feet long, what part of an acre does it contain?

2. Each side of a triangular piece of land is 150 feet long, what part of an acre does it contain?

3. A rectangular piece of land is 250 feet long and 50 feet broad, what part of an acre does it contain?

4. Two sides of a triangular piece of land are 250 feet, the other side is 200 feet, how many square rods does it contain?

5. Give the length of the sides, in rods, of a piece of land containing 25 acres.

## XI.

1. Show by illustration how a fraction can be reduced to higher terms.

2. Invent a practical problem that will require addition of mixed numbers.

3. What will three turkeys cost, each weighing  $12\frac{3}{4}$  lbs., at  $15\frac{1}{2}$  cents a pound?

4. What will  $2\frac{1}{2}$  cwt. of coal cost, at  $\$6\frac{1}{2}$  a ton?

5. If a tree 40 feet high is represented by a drawing  $1\frac{1}{2}$  in., what will represent the height of a tree 45 feet high?

## XII.

1. Show by illustration the difference between a composite and a prime number.

2. Show by an example what a prime factor is.

3. Make an example of your own, explaining cancellation.

4. Show by an illustration what a denominator is.

5. Why cannot 5-6 be reduced to lower terms?

## XIII.

## GEOGRAPHY—ELEMENTARY.

1. Name some river in North America.

2. Which way does it flow?

3. From what mountains does it get its water?

4. What kind of water is it, fresh or salt?

5. Into what does it flow?

## XIV.

1. What kind of water does the Hudson mingle with at its mouth?

2. Is there any large city near it?

3. Tell something you know about that city.

4. Do you know of any other important city in North America?

5. Tell why it is important.

## XV.

1. Which are the most important mountains you think about?

2. Why are they important?

3. In which direction do they extend?

4. Name some river that runs from them to the east.

5. To the west.

## XVI.

1. What large body of water flows from the Rocky Mountains to the west?

2. To the east?

3. Do you know of any smaller bodies of water that are not rivers?

4. Name one.

5. Is it connected with any other body of water?

## XVII.

1. Where does the water from Lake Michigan go?