

First Year Number Work.**PRINCIPLES UNDERLYING INSTRUCTION.**

1. All number work for the first month should be objective.
2. The beginner should not be required to copy much from the board the first month.
3. All beginning work should lead to the learning of numbers as wholes, without the process of counting.
4. No analysis of the number learned should be attempted the first month.
5. Perception and the power of expression are the chief things to be cultivated at first.
6. The principle, "Go from the known and present to the absent known" is the first step away from the sense-grasp of objects. And from the known to the related unknown is the second step in the learning process.
7. No word, naming a number, should be used disconnected from the name of some thing. The power of "abstraction" in little children is very slightly developed.
8. All things (objects) which may be used in the school-room to objectify number teaching will have these attributes: *color, form, size*. This attributes must be disregarded at first; nothing should come between the child and the *number* of things.
9. Nothing so fixes knowledge with the child as making, or representing. So the child should be regularly called on to make two birds, three apples, four squares, etc.
10. All primary number-teaching which results in words only, is time badly wasted. Every number name, and later, every process name should recall definite concepts of numbers of things and of processes.
11. Reach the child's consciousness in as many ways as possible: through sight, hearing and touch.
12. Do not force upon the child any set form of expression.
13. All arithmetical processes may be illustrated with numbers of things.
14. The movement of the learner's mind is from processes with real things to operations with symbols of things.
15. There should be perfect correspondence between the language used to describe a process and the operation actually performed with numbers of things.
16. Knowledge and skill are valuable only when they become habitual. Hence, first find out the number fact or relation, and then fix the fact by repeated drill.
17. The aim of all school work should be to give the child freedom. This is reached through the self-activity of the child's own powers.

TESTS.

Tests to determine the accuracy of the pupils' knowledge of the numbers studied as wholes.

1. The teacher shows the number. The pupils name it. This tests the power of the pupils to apply the correct name upon seeing a given number.

The teacher names the number. The pupils show the number called for. This proves the power to associate the correct number with a given number.

3. The teacher shows a number. The number is then placed out of sight. The pupils bring or show the number. This proves the power to hold the number concept in consciousness.

4. The teacher taps three times. The pupil draws as many circles on the board. This is a step toward eliminating the attributes of size, color, and form from the number notion.

5. The teacher shows a number. The pupils point out the number from among other and larger numbers. This shows definiteness of the number concept.

6. Teacher calls for the names of things in which some number is prominent. (Name something in which two is prominent: three, four, etc.) This tests the memory and leads to observation.

7. Pupils are asked to make a large number, say nine or fifteen (the number if not known to the pupil or teacher) into threes, or fours, etc. This leads to the habit of analyzing in a natural, easy method.—*School News*.

N. B. Normal School Entrance.

Class 1.

Time 1 hr. 30 min.

BOOK-KEEPING.

Mr. J. Vroom, Examiner.

1. What are the advantages of double entry?—*Value 10.*
2. Describe your method of closing the ledger.—*Value 10.*
3. Explain the use of the trial balance.—*Value 10.*
4. Journalize the following:
 - (a) Our agent, John Brown, has sent us an account sales of merchandise, consigned to him, showing receipts \$1100 and expenses 45; and has remitted cash for the same less his commission of 2 per cent.
 - (b) Lost a pocket book containing two \$10 bank notes. Money returned to us and we paid the finder \$1.
 - (c) Gave our check on People's bank in payment of James Black's note of \$300, which we had endorsed and discounted at the bank, and which he failed to pay at maturity.
 - (d) Accepted Green & Co.'s draft on us at 30 days for \$265.
 - (e) Black has compromised with his creditors at 80 cents on the dollar, and has given us an accepted order on Jacob White for our proportion of the above \$300, which we receive in settlement of the claim.—*Value 25.*