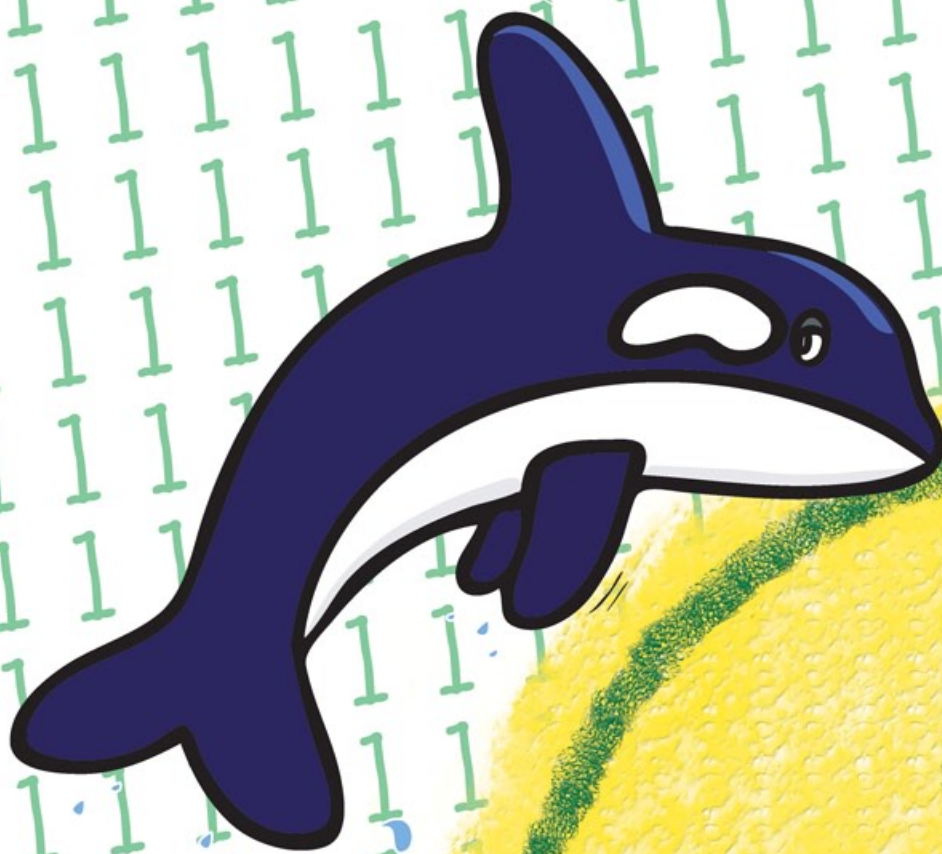


Horizons

Math



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Readiness Evaluation

Part A

WHY EVALUATE READINESS?

Teaching could be defined as the process of starting from what a student knows and guiding him to a knowledge of new material. While this may not be a dictionary definition of teaching, it is descriptive of the processes involved.

Determining a student's readiness for first grade mathematics is the first step to successful teaching.

TYPES OF READINESS

True readiness has little to do with chronological age.

Emotional maturity and mental preparation are the main components of academic readiness. The teacher who is dealing directly with the student is best able to determine a child's emotional maturity. An emotionally immature student may need special student training in their problem areas. It might be wise, in this case, to delay placing them in the first grade until the next year. A child's mental *preparation* can be more easily discerned with a simple diagnostic evaluation. Observing the child's attitude of confidence or insecurity while taking the evaluation may help you determine their emotional readiness.

DETERMINING READINESS

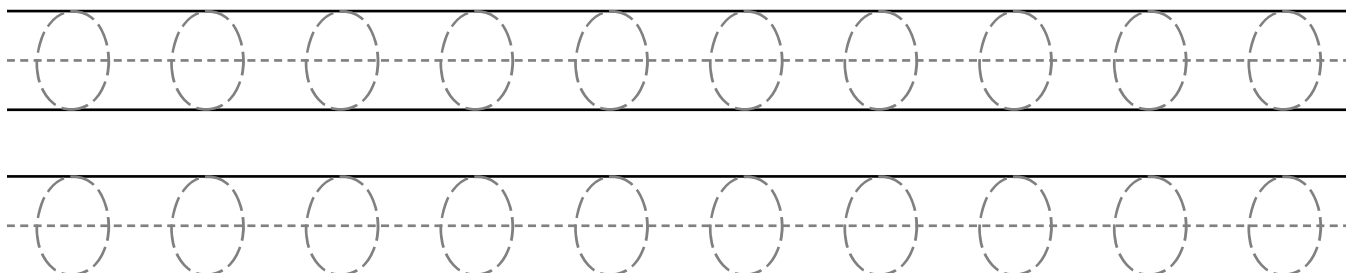
While administering *Part A* of the evaluation, keep in mind that each question has suggestions for proper remediation if the student should fail to demonstrate sufficient skill in a concept area.

If a student of any age is not able to listen and follow directions, complete an assigned task, or read and write well enough to communicate; they will experience great difficulty with this course. Likewise, if a student has not acquired the concepts of color, size, shapes, direction/position, matching/categorizing, sets, numbers, counting, addition, subtraction, and number sequence, they may fail from the beginning. In other words, if a student has missed the concepts taught in a formal kindergarten program, they need to acquire that knowledge before entering this course of study.

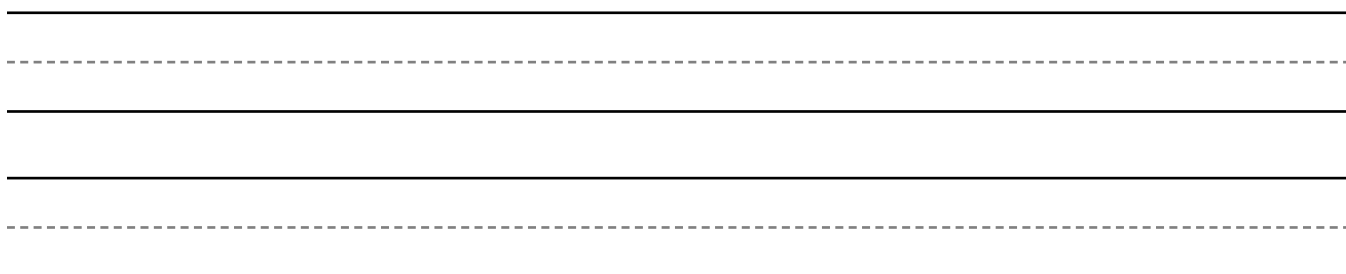
zero 0

0 boats

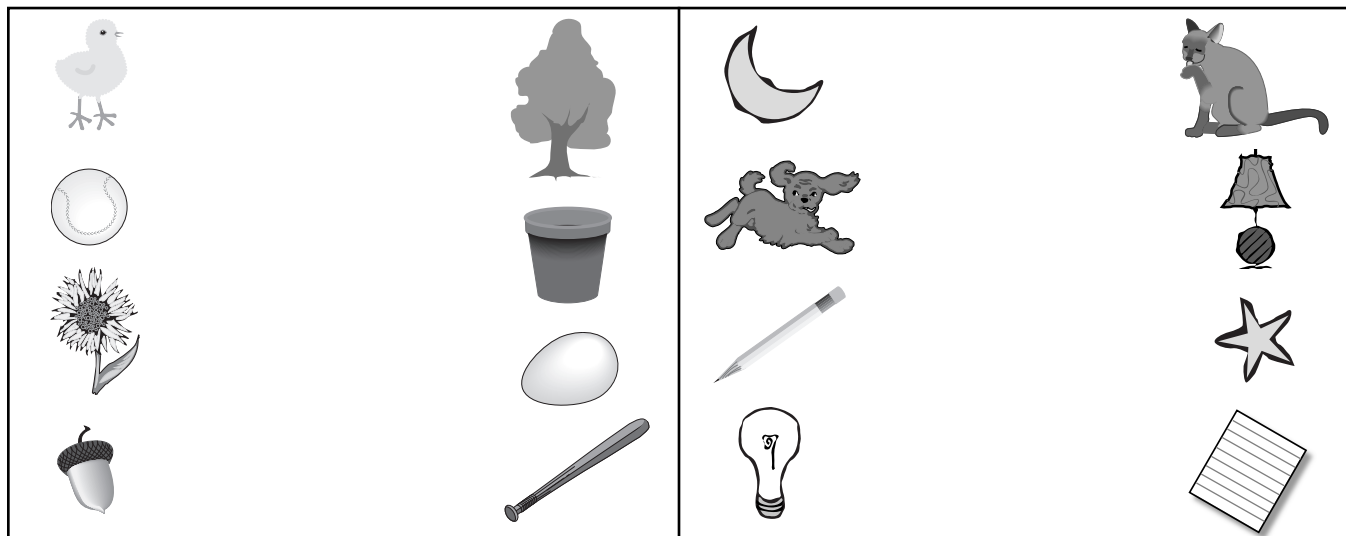
1 Trace the number zero.



2 Write the number zero.



3 Draw a line to match the objects.



one

1



1 boat

4 Trace the number one.

Two sets of handwriting practice lines. Each set consists of a solid top line, a dashed middle line, and a solid bottom line. The first set is divided into 10 equal-width boxes, and the second set is also divided into 10 equal-width boxes.

5 Write the number one.

Two sets of handwriting practice lines. Each set consists of a solid top line, a dashed middle line, and a solid bottom line. The first set is divided into 10 equal-width boxes, and the second set is also divided into 10 equal-width boxes.

6 Circle one object in each group.

| | | |
|--|---|---|
| Four pencils are arranged in a group. Two are pointing towards the top-left, and two are pointing towards the bottom-left. | Three sunflowers are arranged in a group. One is at the top, one is at the bottom-left, and one is at the bottom-right. | Two chicks are arranged in a group. One is at the top and one is at the bottom-right. |
|--|---|---|

NUMBERS



Concepts:

Counting by ones and number line

Definition: A number line is a graphic representation of how far a number is from zero.

Objectives:

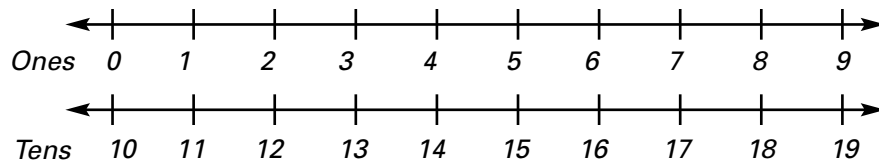
1. The student shall be able to count by ones and twos up to 100 out loud from memory.
2. The student shall be able to correctly form all the numerals from zero through nine with a pencil.

Teaching Tips:

1. When doing activity 4, have each student stand up when the name of each number family (10, 20, 30, 40) is called while counting out loud. For example, when counting by ones to 100 the student would stand on ten, twenty, thirty, forty, fifty, etc.
2. If a student asks about the arrows at the ends of the number line in activity 3, give the illustration of standing on a railroad track. If you look in either direction the tracks seem to go on forever. In the same way, the number line seems to have no end.

Materials, Supplies, & Equipment:

1. Number line segments in families [or draw on chalkboard]



2. Number chart arranged in families either horizontally or vertically.

Vertical

| | | | | | | | | | |
|---|----|----|----|----|----|----|----|----|----|
| 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 |
| 1 | 11 | 21 | 31 | 41 | 51 | 61 | 71 | 81 | 91 |
| 2 | 12 | 22 | 32 | 42 | 52 | 62 | 72 | 82 | 92 |
| 3 | 13 | 23 | 33 | 43 | 53 | 63 | 73 | 83 | 93 |
| 4 | 14 | 24 | 34 | 44 | 54 | 64 | 74 | 84 | 94 |
| 5 | 15 | 25 | 35 | 45 | 55 | 65 | 75 | 85 | 95 |
| 6 | 16 | 26 | 36 | 46 | 56 | 66 | 76 | 86 | 96 |
| 7 | 17 | 27 | 37 | 47 | 57 | 67 | 77 | 87 | 97 |
| 8 | 18 | 28 | 38 | 48 | 58 | 68 | 78 | 88 | 98 |
| 9 | 19 | 29 | 39 | 49 | 59 | 69 | 79 | 89 | 99 |

Horizontal

| | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 |
| 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 |
| 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 |
| 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 |
| 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 |
| 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 |
| 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 |

Note: For a complete listing of materials and where they are used in the curriculum, see page 40 in the introduction.