

BIBLIOGRAPHIC INPUT SHEET

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Batch 59

1. SUBJECT CLASSIFICATION	A. PRIMARY	TEMPORARY
	B. SECONDARY	

2. TITLE AND SUBTITLE  
Primary school readiness testing, feasibility study

3. AUTHOR(S)  
(100) Horst, D.P. (101) SEMEO/INNOTECH Regional Center for Educational Innovation and Technology

4. DOCUMENT DATE 1972	5. NUMBER OF PAGES 71p.	6. ARC NUMBER ARC
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7. REFERENCE ORGANIZATION NAME AND ADDRESS  
AID/ASIA/TR/EHR

8. SUPPLEMENTARY NOTES (Sponsoring Organization, Publishers, Availability)  
(In INNOTECH/PP-1/7)

9. ABSTRACT  
(EDUCATION R&D)

10. CONTROL NUMBER PN-AAD-577	11. PRICE OF DOCUMENT
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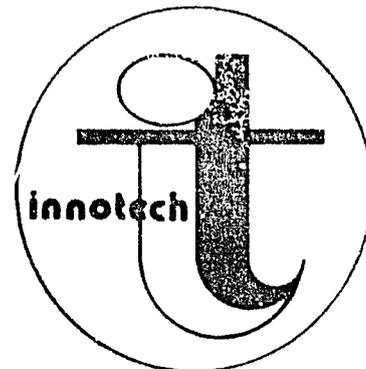
12. DESCRIPTORS	13. PROJECT NUMBER
	14. CONTRACT NUMBER AID/ASIA/TR/EHR
	15. TYPE OF DOCUMENT



**REGIONAL CENTER  
FOR EDUCATIONAL  
INNOVATION AND TECHNOLOGY**

**PRIMARY  
SCHOOL  
READINESS  
TESTING  
FEASIBILITY STUDY**

SEPTEMBER 1972



PRIMARY SCHOOL READINESS TESTING:  
FEASIBILITY STUDY

Donald P. Horst  
American Institutes for Research

October 1972

## FOREWORD

Is it feasible to conduct a large-scale testing programme in the primary schools of SEAMEO member countries? According to this report by Dr. Donald P. Horst such a programme is entirely feasible, but there are numerous pitfalls which must be avoided if it is to be successful. Above all, there is no substitute for expertise and planning, be it in the preparation of objectives and tests, in the translation to a variety of languages or in the administration of tests to school children. This report both identifies the numerous pitfalls and gives many thoughtful recommendations for avoiding them in the future.

In addition to being a feasibility study, the project served as a vehicle to give practical research experience to educators from SEAMEO countries who were participating in a three-month training programme at INNOTECH. Under the guidance of our professional staff, the participants did the bulk of the work reported herein. Our thanks to them for their diligence and cheerful cooperation.

I also wish to extend my personal thanks to Dr. Horst who, during the past two years, has been untiring in his efforts to conduct meaningful research and to assist us in the development of a viable training programme. Our only regret is that he is leaving us by the end of this month to return to his home office in California. Our best wishes to Dr. Horst and his beautiful wife Nena, and especially to little Collin Horst who was born during his daddy's tour of duty at INNOTECH.

It is to be noted that this project entitled "Primary School Readiness Testing: Feasibility Study" is only a preliminary study, designed essentially for training purposes. The intention of the Center is to conduct more in-depth studies and research at the primary level which will lead ultimately to the elaboration of a prototype solution to the curriculum problem of the region.

Ly Chanh Duc  
Director, INNOTECH  
September 1972

## ACKNOWLEDGEMENTS

The success of the readiness testing feasibility study was the result of the efforts of a great many people. Special thanks are due to the Ministers of Education from the SEAMEO member countries for their support of the project. We also acknowledge the many officials from the Ministries of Education who helped to make the arrangements for testing (in many cases personally entertaining the project staff) and to the principals and teachers of the fifty-six schools whose cooperation and support made the study possible.

Thanks are also due to the project staff:

Mrs. Estelita B. Capina, Manager  
Mr. Pragas Sangpetch, Associate Manager  
Mr. Abdullah bin Marzuki  
Mrs. Murniati Basuki  
Miss Pham Thi Lap  
Mrs. Bertha Leo  
Mr. Nou Phonr Tonn  
Mr. Somchith Singharaj

to the Innotech Interns who assisted the project staff;

Mr. Ishak bin Hashim  
Mr. Khamphone Phonekeo  
Miss Marcelina S. Magno

to Dr. Jerry G. Short who acted as project adviser, and to Mr. Ly Chanh Duc, Innotech Director who encouraged and supported the project at all stages.

## INTRODUCTION

The primary school readiness testing project was part of an experimental attempt to combine two kinds of long-range INNOTECH goals. One of these goals was to assist the member countries in specifying educational objectives for primary level education and to develop suitable measures for the attainment of these objectives. The second, a major INNOTECH training goal, was to train change agents, that is, educators who will develop or encourage the development of more effective methods of education. The strategy for achieving these dual goals was to include trainees in the INNOTECH staff on a part-time basis, working under the supervision and guidance of permanent INNOTECH professional staff. It was intended that such procedure would not only provide more effective training than a conventional lecture programme but also be of benefit to INNOTECH by greatly increasing research output.

During the first year of INNOTECH's interim operations a three-month training programme was established to which 24 educators from SEAMEO member countries were invited as participants. This programme provided for a realistic tryout of the principle of using INNOTECH training programme participants as INNOTECH research staff members. It remained for the staff to design research projects that could be conducted by the programme participants with the support of the available INNOTECH staff and material resources. Three projects were planned, including the readiness testing project. Letters were sent to the member countries requesting one staff member from each member country to work on each of the projects. Included with the requests were descriptions of the programme and of the three specific projects. The descriptions emphasized that participants were not coming to a conventional training programme but were coming to serve as part-time staff members in INNOTECH research projects.

The rationale for the readiness testing project comes from INNOTECH's basic commitment to a systematic approach to solving educational problems of the region. This approach set a high priority on a project to assist the member countries in specifying the objectives of their primary level education. Associated with the need for specifying instructional objectives was the requirement to adapt or develop test instruments to measure attainment of the objectives and to determine exactly what children were and were not learning in conventional educational systems.

Because of the large manpower requirement for test construction and validation in an area like the SEAMEO region with diverse language and cultural groups, test development was identified as a potentially good way for participants to assist INNOTECH's research programmes. The participants might provide INNOTECH with the required manpower, while receiving high quality training in test development. The Three-Month Programme offered an excellent opportunity to try out this possibility.

The specific plans for the project were drawn up on the basis of pragmatic considerations. It was clear that an exploratory attempt to have programme participants develop test instruments should not be overly ambitious. It was decided to develop readiness tests for mathematics and reading, primarily because there already existed some consensus among educators as to what constitutes reading and mathematics, and consequently there was extensive material on these subjects for the participants to draw on.

The decision on level of objectives was a compromise between research and training objectives. From a research stand-point, a test of terminal primary objectives might well lead to the most immediate application. However, from a logical stand-point, readiness objectives come first. Then too, the test development concepts (criterion referenced tests of objectives which were in turn based on learning hierarchies) would be new to participants. For these reasons it was felt that it would be more practical to start at the logical beginning of the sequence. It was assumed that if the procedure of using programme participants to develop test instruments proved effective, then the remaining tests needed to complete the hierarchy for primary level mathematics and reading skills could be completed in a relatively short time.

#### PROJECT OBJECTIVES

##### Development of reading and mathematics readiness tests.

The intended product of this study was a pair of tests to indicate whether children had mastered the skills required to begin primary level reading and mathematics. It was decided to base the behaviors to be measured on the model of learning hierarchies developed by Robert Gagne<sup>1</sup>. The instruments were to be developed as criterion referenced tests rather than as conventional norm referenced tests (Popham and Husek<sup>2</sup>).

Administrative feasibility of regional and testing projects.

More important than the above specific product was the information that could be gained to guide INNOTECH's future test development projects:

- a. **Testing taking skills:** What kinds of tests are appropriate for children in the region? Can paper and pencil tests be used for mass testing programmes? Would the difficulty of responding to such tests make them inappropriate instruments for determining whether or not the children had actually mastered the concepts INNOTECH wished to test?
- b. **Language:** What difficulty could INNOTECH expect in conducting large scale regional testing programmes? What would be required in order for INNOTECH to produce accurate translations of tests originally developed in a single language? How would language differences affect the administration and results of tests?
- c. **Logistics:** What kind of problems could INNOTECH expect in travelling to the member countries? What kinds of difficulties would arise in making arrangements with the various educational organizations whose cooperation is needed for such a project?
- d. **Trainees as staff:** Would it be feasible to use short-term programme participants to carry out test-development projects?

PROJECT ACTIVITIES AND PROCEDURES

The readiness testing project included four phases: assessment/training, test writing, field tryout, analysis and reporting. The first three phases were completed during the Three-Month Programme, 12 April through 25 June 1971. The first five weeks of the programme were spent on phases one and two. During this time participants completed an assessment battery, and carried out a two-day field project involving interviewing the director of a Singapore educational institution and preparing a report of the interview. Based on the results of the assessment, the INNOTECH staff selected a project leader and an associate leader. These two participants were given considerable responsibility for the direction and coordination of project activities. Following the assessment assignments, participants reviewed learning hierarchies, preparation of behavioral objectives, and criterion referenced testing, and studied examples of commercial readiness tests prepared in other regions.

The test writing phase lasted about three weeks. The mathematics test was first tried out in one Singapore school, then revised and tried out in several schools in Johore, Malaysia. After a second revision, the Singapore field tryout data were collected. The Singapore tryout was held during the fourth week and served as a dress rehearsal for phase three, the field tryout in the remaining seven member countries. Following the Singapore tryout, minor revisions were made and translations into member country languages were completed where required.

Due to time pressure, the reading test was written after the Johore tryout of the mathematics test, and the first draft of this test was used in the Singapore tryout. Major sections of the reading test had to be translated into member country languages. Most of the fifth week was spent on this translation and on reproducing the tests so there was time for only very limited revision.

A major feature of the Three-Month Programme was a three-week study tour of the SEAMEO member countries. Phase three of the readiness testing project was one of the study tour activities. Since the tests were still in rough draft form, the emphasis in phase three was on determining the feasibility of regional testing or test development projects. Member countries were asked to identify a range of urban and rural primary schools where the readiness tests could be administered, but no attempts were made to sample schools systematically. Although the tests were intended for use as diagnostic instruments with children just entering primary schools, practical considerations dictated that the feasibility study should be carried out with the first year students who were in class at the time of the study tour. This meant that, depending on the school year schedules for the different countries, children had completed from two weeks to ten months of school at the time they took the test.

The Three-Month Programme participants were divided into two groups for the study tour. One group visited Indonesia, Thailand, Laos, and the Khmer Republic. The other group visited Malaysia, Vietnam and the Philippines. Testing was carried out in a total of 56 schools (including Singapore), ranging from three to eleven schools in each country. In general, two classes were tested in each school, one class taking the reading readiness test, the other taking the mathematics readiness test.

Tests were designed to be administered by the classroom teacher with as little intervention as possible from the tour personnel, but in some cases the teachers required considerable assistance. An attempt was made to control testing procedures across schools, and procedures were established for recording irregularities that might affect test scores. Due to the large number of inexperienced personnel involved, however, it was not possible to determine the extent of variation accurately.

At the end of each day of testing, students responses were coded numerically and transferred to IBM key punch forms. The original test booklets were destroyed before leaving each country.

Phase four, analysis and reporting of the feasibility tryout, was begun when participants returned to INNOTECH for the last three weeks of the Three-Month Programme. Participants organized their notes on problems encountered so that their experiences could be summarized later by the INNOTECH staff. Analysis of student responses to the tests was begun in order to identify the kinds of revisions required in the test materials.

## RESULTS AND RECOMMENDATIONS

### Administrative feasibility of regional testing projects.

The use of paper and pencil tests for young children was generally satisfactory. Even in rural areas there were few major problems with procedures. Of course there were specific problems with the content or format of particular items. These problems are discussed below.

The difficulties of conducting a large scale testing project were well documented in diaries kept by project staff members during the study tour. Excerpts from the diaries are reproduced in Appendix B. It is clear from the reports that most of the difficulties encountered were simply those to be expected with an inexperienced staff on a preliminary tryout. Problems of language and logistics arose, but most could be avoided with adequate experience and preparation.

The problems indicate that unless project staff members are experienced and data collection procedures for a specific project are carefully developed, the model of using a big staff to collect large quantities of data in short amount of time from the entire SEAMEO region is probably unsound. The use of short-term programme participants compounds the problem. It would, in general, be more effective to work

with a smaller staff on a more flexible time schedule. Sufficient time must be set aside to develop basic procedures thoroughly, plan carefully and make the necessary arrangements in each geographical area of data collection. Tryout and revision of procedures in each area also is necessary before committing the staff to a massive data collection programme.

#### Development of reading and mathematics readiness tests.

The test instruments in the versions that were tried out are found in Appendix A. Appendix A is divided into two parts. Part I is the reading readiness test. Part II is the mathematics readiness test.

The reading and mathematics tests are each divided into three sections. Section A contains the set of specific behavioral objectives which the test items were intended to measure. Section B consists of the teacher's materials for administering the test, including the translations from the English version into six member country languages. Section C consists of the test booklets used by the pupils as answer sheets.

For the reading test, Section C (test booklets) includes an English version plus seven translations into member country languages. The test booklet for the mathematics test includes only symbols and drawings which are not language specific, so there are no translations of the test booklet for the mathematics test.

#### Development of hierarchical objectives.

The tests were intended as criterion referenced, diagnostic instruments. Ultimately, their usefulness depends on both diagnostic and predictive validity. That is, if the hierarchy of objectives adequately represents the component readiness skills needed by most children, and if the test items measure mastery of these skills accurately, then the tests will tell us both who is not ready to read or learn mathematics, and what specific skills he lacks.

The objectives included in the readiness tests suggest some confusion between conventional predictive tests and learning hierarchy-based diagnostic tests, because some of the objectives do not appear to represent important pre-reading skills. For example, it is obvious that the various "discrimination" skills contained in the objectives must be mastered before conventional reading is begun, and in that sense, the skills are critical. However, the feasibility study suggests that the test items probably are not testing "discrimi-

nation." In particular, a normal child who can discriminate well may not be able to follow the instructions and respond correctly. "Instruction following" and appropriate "responding" are probably important pre-reading skills, and the items may test them well, but they are not the skills stated in the objectives. As a second example, the objective that calls for children to sequence a set of three pictures may not be relevant to any specific skill needed for beginning reading.

Scores on the test items for these objectives may very well correlate highly with speed in learning to read. That is, a child who cannot understand the question as read by the teacher and then mark the correct answer may very well be a child who also has difficulty in reading. As predictive items they may be quite satisfactory. But as diagnostic items they are of dubious value. It seems unlikely that the child who fails either these items or the discrimination items would be helped much in his attempts to learn to read by receiving training on additional discrimination problems of the same type, or on additional picture sequencing problems.

On balance, however, programme participants did a creditable job on both objectives and tests given the time constraints within which they had to work. The confusion between diagnostic and predictive testing is understandable; numerous authors and researchers fail to make a clear distinction. If the objectives developed for the present study are to be revised, careful attention must be given to this distinction, and additional time should be devoted to a more-thorough examination of learning hierarchies.

#### Development of instructions for testers

Section B of the reading and mathematics tests consists of two parts: first, orientation materials and instructions for the tester (teacher), and second, the script that the teacher is to use in administering the test. These materials were found to be unsuitable for use by untrained classroom teachers.

Several kinds of problems were encountered with the instructions. Perhaps most important was that many teachers did not understand why they needed to follow the instructions closely. Another problem was that project staff members expected to supplement the printed directions with verbal briefings. These briefings were often ineffective due to language problems. These problems cannot be solved by improving the materials.

Implications for future INNOTECH testing projects depend on the intended use of the tests. Where INNOTECH is using a test to collect data for research purposes the most effective procedure would normally be to use carefully trained test administrators. In such projects, the characteristics of tester orientation manuals, if any, would depend on the specific tester training system requirements.

The presence of strangers disrupts the classroom, but the attempt to use the regular classroom teachers did not solve this problem in the field tryout since teachers required extensive supervision from INNOTECH personnel. The test administrators should be from the area in which they are working in order to preclude language problems. This means that most projects which cannot use regular INNOTECH staff should schedule adequate time for on-site training of test administrators.

Tests which might be developed as INNOTECH products for use by classroom teachers in the region present a different problem. The level of testing sophistication varies greatly in the region, but it appears that even the most sophisticated teachers did not follow the readiness testing instructions very well. A careful research programme would be required to determine what types of tests would be suitable for use in the various member countries. Ultimately, INNOTECH may be able to cooperate with national teacher training institutions in upgrading training in the area of testing.

All of the above comments apply to a large scale use of tests in the immediate future. In some small scale research studies it may be possible now to select enough sophisticated teachers who could conduct tests with very little additional training. Eventually, we can expect to find more teachers with adequate testing sophistication. In either case, the readiness test teacher's instructions and script would need revising to improve the organization and simplify the format. Several successive tryouts and revisions should be scheduled. Based on the feasibility study, the following preliminary revisions are suggested:

- a. The teacher's materials include three types of information: (1) orientation and background, (2) preparations for testing, and (3) script for the test itself. These should be clearly separated into three sections. If done properly, the teacher would need to read the orientation section only once, that is, at the time he is first learning to administer the test. The preparation section would serve as a check-list to be used in preparing for the test each time the test is given. The script would be the only part needed during actual testing.

- b. The script and preparation check list should be printed in a simple format. Teachers should be carefully trained in the testing procedures, and all repetitive instructions to the teacher should be deleted. For example, it should not be necessary to include with each item the instruction for the teacher to wait until each pupil has marked his answer. The teacher should be trained to do this before he administers the test. Items might be separated by lines, or extra spaces to make it easier for the teacher to follow the script in the testing situation.

#### Development of test items

This section deals with the test items developed to measure attainment of the reading and mathematics readiness objectives. Because of the theoretical problems with the objectives raised above, it is premature to attempt a rigorous validation of specific items. However, there are several general problems with the tests, as well as a variety of problems with specific items that should be corrected before further tryouts are scheduled.

- a. "Testing taking" skill vs. stated objectives: As discussed previously, test taking skill appeared to be a major source of variance among classrooms. According to project staff reports it was probably confounded with teacher variables, especially the extent to which the teachers gave clues to the correct answers.

The format of items seemed to contribute substantially to variance among items. This should be distinguished from the contents and the objectives of the items which have been discussed above. In particular, it seems likely that the variety of item formats was confusing to some pupils. Changes in format were often accompanied by drops in the proportion of correct responses, especially when there were no examples preceding the new format. It is recommended, therefore, that consistent item formats be developed and sufficient examples be provided to insure that the pupils understand what is expected of them.

- b. Reliability of short tests as a problem in diagnosis: Reliability is a second fundamental problem and is relatively independent of the item format problems. The reliability problem reflects the confusion between predictive and diagnostic uses of the test, discussed previously. For simple predictive purposes a respectable reliability for the total scores would be sufficient. (It must be noted that the particular reliability model chosen for these tests is critical and, in particular, the heterogeneity of items precludes the application of some popular split-half procedures.) However, if the diagnostic uses

of the tests are to be taken seriously, then the tests must permit reliable, valid measurement of each objective.

Inspection of the test materials in Appendix A shows that each objective is tested by from one to four items. This small number of items must raise immediate questions about the potential reliability of such a test. Of course, there is no theoretical reason why a small number of items cannot provide a reliable measure, but it is well known that in practice it is highly unlikely. The data from the tryout suggest that the readiness tests are quite typical in this respect. In cases where two or more items were constructed to measure a single objective, each item appears to be very similar to the others in format, difficulty, etc. However, intercorrelations among items designed to measure a single objective are low, ranging from low "30's" to middle "50's" (Appendix G). It should be clear that these coefficients are lower bounds for split-half reliability coefficients. That is, the correlation between two items is the split-half reliability coefficient for a one item test. If it is corrected for test length (for the objectives which have two, three, or four items) the values will be somewhat higher. It is also possible that test-retest reliability would be considerably higher for many items. However, it must also be noted that low item intercorrelations (and low reliabilities for single items) are characteristic of multiple choice tests. In short, there is no way of determining whether a student answers a single item correctly, because he "knows" the answer or because he made a lucky guess.

The solutions to the problems of test-taking skills and test reliability are not obvious. The simple procedures of training students to take tests, and of lengthening the test are probably not practicable for widespread testing of pre-school children. A possibility that might be explored would be the development of a two-tiered test system. The first step would be to develop a valid set of readiness objectives. Then a "screening" test could be developed which could be administered to an entire class, including appropriate examples and a reasonable number of items (say, five or ten) for each objective. Separate tests designed for "in-depth" measurement of each objective would also be developed. These tests would be administered to individuals who failed to meet the criteria for corresponding sections of the screening test.

This solution would be difficult to implement. The level of testing sophistication required of the test administrators is not widely available in the region, and the development of the tests would require a major research effort.

### SUMMARY OF RESULTS

1. Regional testing projects are entirely feasible provided adequate resources and training time are available.
2. For research training projects, INNOTECH would be well-advised to use a relatively small and experienced staff with a fairly flexible time schedule.
3. Project staff members who are to construct and administer tests must have more experience and training than can be realized in a three-month programme.
4. The use of untrained teachers as test administrators is unsound. When language in an area precludes the use of INNOTECH staff for test administration, adequate time for on-site training of local test administrators must be scheduled.
5. Instructions and scripts for test administrators must be subjected to a series of tryouts and revisions before being used in the field.
6. Paper and pencil tests can be given satisfactorily to children in the first year of primary school. (Note that separate answer sheets were not used in this study.)
7. If item formats do not remain constant throughout a test, time should be given before each new format to instruct children through additional samples and practice.
8. Tryout and revision of procedures in each geographical area should precede data collection.
9. The distinction between diagnostic and predictive testing must be clearly drawn. The distinction must begin with a thorough examination and critique of objectives, and it must be followed by the development of test items designed to measure each objective.

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## APPENDIX A

PRIMARY SCHOOL READINESS TEST  
PART I : READING

Section A : Instructional Objectives

I. Visual Discrimination

Item 1

When shown a picture with a definite shape the child is able to identify a picture of similar shape and size from a set of three pictures.

Item 2

When shown a picture with a definite shape, the child is able to identify a picture of similar shape but of different size from a set of three pictures.

Item 3 - 4

When shown a set of pictures, one different in shape from the others, the child is able to identify the picture that is different from the rest.

Item 5

When shown a letter, the child is able to identify a similar letter from a set of three letters with similar size and shape.

Item 6

When shown a letter, the child is able to identify a similar letter of different size from a set of three letters.

Item 7

When shown a group of 4 letters, one different from the others, the child is able to identify the letter that is different from the rest.

Item 8

When shown a word, the child is able to identify a similar word of the same shape and size from a set of three words.

Item 9

When shown a word, the child is able to identify a similar word of the same shape but of a different size.

Item 10

When shown a group of 4 words, the child is able to identify the word that is different in size from the rest.

II. Auditory

Item 11 - 12

When two sounds of letters of the alphabet are pronounced by the teacher, the child is able to discriminate whether they are the same or different.

Item 13 - 16

When two words are pronounced by the teacher, the child is able to discriminate whether they are the same or different.

III. Vocabulary

Item 17 - 20

When the teacher names an object the child is able to identify the picture of the object from a group of three pictures.

Item 21 - 25

When shown three pictures the child is able to identify the picture that indicates the action mentioned by the teacher.

IV. Spatial Discrimination

Item 26 - 29

When the teacher reads a spatial direction, the child is able to identify which of the two pictures represents it.

V. Story Sequence

Item 30 - 33

When shown three sequence pictures, the child is able to identify which comes first, next and last.

VI. Reasoning

Item 34 - 35

When shown three pictures, the child is able to identify which of the three helps a plant to grow.

Item 36 - 37

When shown four pictures of sets of boys/girls, the child is able to indicate which set he wishes to have when he grows up.

VII. Recognition

Item 38 - 39

When a letter of the alphabet is said by the teacher, the child is able to identify it from a set of three letters.

Item 40 - 43

When a phrase/sentence is said by the teacher, the child is able to identify it from a set of three phrases/sentences.

PRIMARY SCHOOL READINESS TEST  
PART I : READING

Section B : Instructions for Tester

General Directions

The test may be administered by the class teacher assisted by the INNOTECH staff. The language used will be that of the medium of instruction of the class.

Due to time factor the test may be administered to the whole class at the same time. Certain parts of the directions that follow are indented, enclosed in quotation marks and preceded by the word 'SAY'. These directions are to be read to the pupils. Be sure to read slowly and pronounce each word distinctly.

Each pupil will be supplied with a Test Booklet and a marker. Please ensure that each child has a pencil and eraser. The pupils will be required to answer in the Test Booklet.

The teacher should fill in the identifying data on the cover of the Test Booklet prior to distributing the booklets to the pupils.

Steps should be taken to make the pupils feel at ease before the test. The test should be treated as a game. Explain to the pupils that they are not to talk during the game and they are each to do it on their own. The pupils are also to understand that they are to listen carefully to what the teacher says.

Specific Directions

I. Purpose:

1. To determine the level of reading and mathematics development of early level I.
2. It may be used to diagnose tests in existing classrooms to find out how much the child has learned after a period of instruction.
3. It may be used as a research tool for future development projects.
4. It may be used as a tool to evaluate teaching techniques in innovative ways.

NOTE: In view of the above aims, it is important that the teacher does not prompt or give clues to the pupils and care should be done that children do not copy from each other.

II. Administration of Test:

1. The tester should demonstrate the direction to pupils, i.e., be sure that she shows step by step what the pupils should do.
2. The instruction manual should be held at the back of the test booklet.
3. Pupils should be told to put down their pencils on the table or desk when they finish answering each question.
4. Make sure to have your marker at hand.
5. Please read the General Directions and the Specific Directions carefully.
6. Please collect the Test Booklets and the markers at the end of the test.
7. Please conduct the test in such a way that it will not be too slow or too fast. The test should normally be finished in 40 minutes for Part I (Reading Readiness) and 30 minutes for Part II (Mathematics Readiness).

Specific Directions for Testing

Part I

SAY: "THIS IS A BOOKLET. EVERYONE OF YOU HAS BEEN GIVEN THIS BOOKLET. TODAY YOU ARE GOING TO DO SOMETHING ON YOUR BOOKLET. LISTEN VERY WELL TO WHAT I SAY AND THEN DO WHAT I TELL YOU TO DO." (Pause).

"PUT UP YOUR BOOKLET, (Pupils do so). PUT THEM DOWN. PUT UP YOUR PENCILS. (Pupils do so). PUT THEM DOWN. (Pupils do so). PUT UP YOUR MARKERS. (Pupils follow). PUT THEM DOWN."

"NOW WE ARE READY TO BEGIN. TURN OVER THE FIRST PAGE OF YOUR BOOKLET LIKE THIS.

Show to the class the Test Booklet turned to page 1. Be sure that each pupil has turned to the right page.

SAY: "PUT YOUR MARKER UNDER THE FIRST ROW OF PICTURES."

Hold up your booklet and show the objects in the first row. This is the example. Have it drawn on the board before test starts.

SAY: "NOW, EVERYBODY LOOK HERE. THE DRAWINGS ON THE BOARD ARE THE SAME AS THOSE YOU HAVE IN YOUR BOOKLET."

Point to the drawing on the left.

SAY: "LOOK AT THIS PICTURE. (Pause). NOW LOOK AT THE OTHER PICTURES OF GIRLS (Indicate). FIND THE GIRL THAT LOOKS THE SAME AS THIS ONE. (the one you are pointing to) WHICH ONE IS IT? (Call a pupil). NOW, PUT A CHECK ON IT. (Pupil puts a check on the picture of the girl). EVERYBODY, DO THE SAME ON YOUR BOOKLET."

Be sure that each pupil does the right thing.

(1) SAY: "MOVE YOUR MARKER TO THE NEXT ROW OF PICTURES."

Hold up your booklet and show the objects for Item 1. Check if each pupil's marker is in the right place.

SAY: "PUT YOUR FINGER ON THE FIRST PICTURE. (Pause). LOOK AT THE OTHER PICTURES. PUT A CHECK ON THE PICTURE THAT IS THE SAME AS THE ONE YOU ARE POINTING TO."

Wait until each pupil has marked a ✓ on one object.

- (2) SAY: "MOVE YOUR MARKER TO THE NEXT ROW OF PICTURES."

Hold up your booklet and show the objects for Item 2. Check if each pupil's marker is in the right place.

SAY: "PUT YOUR FINGER ON THE FIRST PICTURE. (Pause). LOOK AT THE OTHER PICTURES. PUT A ✓ ON THE PICTURE THAT LOOKS LIKE THE ONE YOU ARE POINTING TO."

Wait until each pupil has marked a ✓ on one object.

- (3) SAY: "MOVE YOUR MARKER TO THE NEXT ROW OF PICTURES."

Hold up your booklet and show the objects for Item 3. Check if each pupil is pointing to the right place.

SAY: "LOOK AT THE RABBITS. (Point to the rabbits in the row). FIND THE RABBIT THAT IS DIFFERENT FROM THE OTHERS. PUT A ✓ ON THAT RABBIT."

Wait until each pupil has marked a ✓ on the rabbit.

- (4) SAY: "TAKE YOUR MARKER AWAY FROM THE PAGE SO THAT YOU CAN SEE THE LAST ROW OF PICTURES."

Hold up your booklet and show the objects for Item 4. Check if each pupil is pointing to the right place.

SAY: "LOOK AT THE PICTURES. FIND THE ONE THAT IS DIFFERENT FROM THE OTHERS. PUT A ✓ ON THAT PICTURE."

Wait until each pupil has marked a ✓ on the object.

SAY: "TURN YOUR BOOKLET TO PAGE 2.

Hold the booklet turned to page 2, check if each pupil is on the right page.

- (5) SAY: "PUT YOUR MARKER BELOW THE FIRST ROW OF LETTERS."

Hold up your booklet with your marker below the first row of letters. Check that each pupil has his marker in the right place.

SAY: "PUT YOUR FINGER ON THE FIRST LETTER. LOOK AT THE OTHER LETTERS. PUT A CHECK ON THE LETTER THAT IS THE SAME AS THE ONE YOU ARE POINTING TO."

Wait until each pupil has marked a ✓ on a letter.

- (6) SAY: "MOVE YOUR MARKER ON THE NEXT ROW OF LETTERS."

Hold up your booklet with your marker below Item 6. Check that each pupil has his marker in the right place.

SAY: "PUT YOUR FINGER ON THE FIRST LETTER. LOOK AT THE OTHER LETTERS. PUT A CHECK ON THE LETTER THAT LOOKS THE SAME AS THE ONE YOU ARE POINTING TO."

Wait until each pupil has marked a ✓ on one letter.

- (7) SAY: "MOVE YOUR MARKER TO THE NEXT ROW OF LETTERS."

Hold up your booklet with your marker below Item 7. Check if each pupil has his marker in the right place.

SAY: "LOOK AT THE LETTER. PUT A CHECK ON THE LETTER THAT IS DIFFERENT."

Wait until each pupil has marked a ✓ on one letter.

- (8) SAY: "MOVE YOUR MARKER TO THE NEXT ROW."

Hold up your booklet with your marker below Item 8. Check if each pupil has his marker in the right place.

SAY: "PUT YOUR FINGER ON THE FIRST WORD. (Pause). LOOK AT THE OTHER WORDS. (Pause). PUT A CHECK ON THE WORD THAT IS THE SAME AS THE ONE YOU ARE POINTING TO."

Wait until each pupil has marked a ✓ on one word.

- (9) SAY: "MOVE YOUR MARKER TO THE NEXT ROW OF WORDS."

Hold up your booklet with your marker below Item 9. Check if each pupil has his marker in the right place.

SAY: "PUT YOUR FINGER ON THE FIRST WORD. LOOK AT THE OTHER WORDS. PUT A CHECK ON THE WORD THAT LOOKS THE SAME AS THE ONE YOU ARE POINTING TO."

Wait until each pupil has marked a ✓ on one word.

- (10) SAY: "LOOK AT THE LAST ROW OF WORDS. PUT A CHECK ON THE WORD THAT IS DIFFERENT."

Wait until each pupil has marked a ✓ on one word.

SAY: "TURN YOUR BOOKLETS TO THE NEXT PAGE."

Hold up the booklet turned to page 3.

- (11) SAY: "PUT YOUR MARKER UNDER THE FIRST EMPTY BOX."

Point to the empty box for all pupils to see in Item 11.

SAY: "LISTEN CAREFULLY. I WILL SAY TWO SOUNDS. IF THE SOUNDS ARE THE SAME, PUT A ✓ IN THE EMPTY BOX. IF THE SOUNDS ARE NOT THE SAME, PUT A X IN THE EMPTY BOX. LISTEN CAREFULLY: (give the sounds slowly and clearly). b, b (Pause) b, b."

Wait until each pupil has put a mark in the empty box.

- (12) SAY: "MOVE YOUR MARKER TO THE NEXT EMPTY BOX."

Point to the empty box in Item 12 for all pupils to see.

SAY: "I WILL SAY TWO SOUNDS AGAIN. PUT A ✓ IN THE EMPTY BOX IF THE SOUNDS ARE THE SAME. PUT A X IF THEY ARE NOT THE SAME. NOW, LISTEN CAREFULLY: a, a (Pause) a, a."

Wait until each pupil has put a mark in the empty box.

- (13) SAY: "MOVE YOUR MARKER TO THE NEXT EMPTY BOX."

Point to the empty box in Item 13 for all pupils to see.

SAY: "I WILL SAY TWO SOUNDS AGAIN. PUT A ✓ IN THE EMPTY BOX IF THE SOUNDS ARE THE SAME. PUT A X IF THEY ARE NOT THE SAME. LISTEN CAREFULLY: sit - bit (Pause) sit - bit."

Wait until each pupil has put a mark in the empty box.

(14) SAY: "MOVE YOUR MARKER TO THE NEXT EMPTY BOX."

Point to the empty box in Item 14 for all pupils to see.

SAY: "I WILL SAY TWO SOUNDS AGAIN. PUT A ✓ IN THE EMPTY BOX IF THE SOUNDS ARE THE SAME. PUT A X IF THEY ARE NOT THE SAME. LISTEN CAREFULLY: run - run (Pause) run - run."

Wait until each pupil has put a mark in the empty box.

(15) SAY: "MOVE YOUR MARKER TO THE NEXT EMPTY BOX."

Point to the empty box in Item 15 for all pupils to see.

SAY: "I WILL SAY TWO SOUNDS AGAIN. PUT A ✓ IN THE EMPTY BOX IF THE SOUNDS ARE THE SAME. PUT A X IF THEY ARE NOT THE SAME. LISTEN CAREFULLY: just - jazz (Pause) just - jazz."

Wait until each pupil has put a mark in the empty box.

(16) SAY: "MOVE YOUR MARKER TO THE NEXT EMPTY BOX."

Point to the empty box in Item 16 for all pupils to see.

SAY: "I WILL SAY TWO SOUNDS AGAIN. PUT A ✓ IN THE EMPTY BOX IF THE SOUNDS ARE THE SAME. PUT A X IF THEY ARE NOT THE SAME. LISTEN CAREFULLY: cut - cat (Pause) cut - cat."

SAY: "TURN YOUR BOOKLET TO THE NEXT PAGE."

Hold up the booklet turned to page 17.

SAY: "PUT YOUR MARKER UNDER THE FIRST ROW OF PICTURES."

Hold up the booklet and show the pictures in the first row.  
This is the example.

SAY: "LOOK AT THE THREE PICTURES. FIND THE PICTURE OF A CHAIR. PUT A ✓ ON IT. (Pause). HAS EVERYBODY PUT A ✓ ON THE CHAIR?"

Check if each pupil marked a ✓ on the chair.

- (17) SAY: "VERY GOOD. (Pause). NOW MOVE YOUR MARKER TO THE NEXT ROW OF PICTURES."

Hold up the booklet and show the pictures in Item 17.

SAY: "FIND THE PICTURE OF A BENCH. PUT A ✓ ON IT."

Wait until each pupil has marked a ✓ on the picture.

- (18) SAY: "MOVE YOUR MARKER TO THE NEXT ROW OF PICTURES."

Hold up the booklet and show the pictures in Item 18.

SAY: "FIND THE PICTURE OF A BOTTLE. PUT A ✓ ON IT."

Wait until each pupil has marked a ✓ on the picture.

- (19) SAY: "MOVE YOUR MARKER TO THE NEXT ROW OF PICTURES."

Hold up your booklet and show the pictures in Item 19.

SAY: "FIND THE PICTURE OF A FLOWER POT. PUT A ✓ ON IT."

Wait until each pupil has marked a ✓ on the picture.

- (20) SAY: "PUT YOUR MARKER AWAY."

Hold up your booklet and show the pictures on Item 20.

SAY: "FIND THE PICTURE OF A WINDOW. PUT A ✓ ON IT."

Wait until each pupil has marked a ✓ on the picture.

- (21) SAY: "TURN YOUR BOOKLET TO THE NEXT PAGE."

Hold up the booklet turned to page 5.

SAY: "PUT YOUR MARKER UNDER THE FIRST ROW OF PICTURES."

Hold up the booklet showing the pictures in the first row.

SAY: "LOOK AT THE THREE BOYS IN THE PICTURES. EACH BOY IS DOING SOMETHING. FIND THE BOY WHO IS WALKING. PUT A ✓ ON IT."

Wait until each pupil has marked a ✓ on the picture.

(22) SAY: "MOVE YOUR MARKER TO THE NEXT ROW OF PICTURES."

Hold up the booklet and show the pictures in Item 22.

SAY: "LOOK AT THE THREE PICTURES. FIND THE PICTURE OF A BOY WHO IS SWIMMING. PUT A ✓ ON IT."

Wait until each pupil has marked a ✓ on the picture.

(23) SAY: "MOVE YOUR MARKER TO THE NEXT ROW OF PICTURES."

Hold up your booklet showing the pictures in Item 23.

SAY: "LOOK AT THE THREE PICTURES. FIND THE PICTURE OF A GIRL WRITING. PUT A ✓ ON IT."

Wait until each pupil has marked a ✓ on the picture.

(24) SAY: "MOVE YOUR MARKER TO THE NEXT ROW OF PICTURES."

Hold up the booklet showing the pictures in Item 24.

SAY: "FIND THE PICTURE OF A BOY SLEEPING. PUT A CHECK ON IT."

Wait until each pupil has marked a ✓ on the picture.

(25) SAY: "PUT YOUR MARKER AWAY."

Hold up the booklet showing the last row of pictures in Item 25.

SAY: "LOOK AT THE PICTURES IN THE LAST ROW. FIND THE PICTURE OF A BOY JUMPING. PUT A ✓ ON IT."

(26) SAY: "TURN YOUR BOOKLET TO THE NEXT PAGE."

Hold up the booklet turned to page 6.

SAY: "PUT YOUR MARKER UNDER THE FIRST ROW OF PICTURES."

Check if each pupil has the marker on the right place.

SAY: "LOOK FOR THE BOX WITH A BALL INSIDE. PUT A ✓ ON IT."

Wait until each pupil has marked a ✓ on it.

(27) SAY: "MOVE YOUR MARKER TO THE NEXT ROW OF PICTURES."

Hold up your booklet showing the pictures in Item 27.

SAY: "LOOK AT THE PICTURES. FIND THE PICTURE OF A CUP UNDER THE TABLE. PUT A ✓ ON IT."

Wait until each pupil has marked a ✓ on it.

(28) SAY: "MOVE YOUR MARKER TO THE NEXT ROW OF PICTURES."

Hold up your booklet and show the pictures in Item 28.

SAY: "LOOK AT THE PLANTS IN THE TWO PICTURES. CAN YOU SEE THE BUTTERFLIES FLYING NEAR THEM? (yes). FIND THE PLANT WITH A BUTTERFLY FLYING ABOVE IT. PUT A ✓ ON THAT PICTURE."

Wait until each pupil has marked a ✓ on the picture.

(29) SAY: "TAKE YOUR MARKER AWAY."

Hold up your booklet showing the pictures in Item 29.

SAY: "FIND THE PICTURE OF A GIRL WITH HER LEFT HAND UP. PUT A ✓ ON THAT PICTURE."

Wait until each pupil has marked a ✓ on the picture.

(30) SAY: "TURN YOUR BOOKLET TO THE NEXT PAGE."

Hold up the booklet turned to page 7.

SAY: "PUT YOUR MARKER UNDER THE FIRST ROW OF PICTURES."

Hold up the booklet and show the pictures in Item 30.

SAY: "LOOK AT THE PICTURES CAREFULLY. THEY TELL A STORY BUT THEY ARE ALL MIXED UP. PUT A ✓ ON THE PICTURE THAT SHOWS THE BEGINNING OF THE STORY."

Wait until each pupil has marked a ✓ on the picture.

(31) SAY: "MOVE YOUR MARKER TO THE NEXT ROW OF PICTURES."

Hold up the booklet and show the pictures in Item 31.

SAY: "LOOK AT THE PICTURES CAREFULLY. THEY TELL A STORY BUT THEY ARE ALL MIXED UP. PUT A ✓ ON THE PICTURE THAT SHOWS THE END OF THE STORY."

Wait until each pupil has marked a ✓ on the picture.

(32) SAY: "MOVE YOUR MARKER TO THE NEXT ROW OF PICTURES."

Hold up the booklet and show the pictures in Item 32.

SAY: "LOOK AT THE PICTURES. THEY TELL A STORY BUT THEY ARE ALL MIXED UP. PUT A ✓ ON THE PICTURE THAT COMES LAST IN THE STORY."

Wait until each pupil has marked a ✓ on the picture.

(33) SAY: "TAKE YOUR MARKERS AWAY."

Hold up your booklet and show the pictures in Item 33.

SAY: "LOOK AT THE PICTURES. THEY TELL A STORY BUT THEY ARE ALL MIXED UP. IF YOU ARRANGE THEM ACCORDING TO THE STORY, WHICH WILL BE THE SECOND PICTURE? PUT A ✓ ON THAT PICTURE."

(34) SAY: "TURN YOUR BOOKLET TO THE NEXT PAGE."

Hold up the booklet turned to page 8.

SAY: "PUT YOUR MARKER UNDER THE FIRST ROW OF PICTURES."

Hold up the booklet and show the pictures in Item 34.

SAY: "LOOK AT THE PICTURES. FIND THE ONE THAT SHOWS SOMETHING THAT HELPS A PLANT GROW. PUT A ✓ ON THAT PICTURE."

Wait until each pupil has marked a ✓ on the picture.

(35) SAY: "MOVE YOUR MARKER TO THE NEXT ROW OF PICTURES."

Hold up your booklet and show the pictures in Item 35.

SAY: "LOOK AT THE PICTURES. FIND THE ONE THAT SHOWS WHERE RAIN COMES FROM. PUT A ✓ ON THAT PICTURE."

Wait until each pupil has marked a ✓ on the picture.

(36) SAY: "MOVE YOUR MARKER TO THE NEXT ROW OF PICTURES."

Hold up your booklet and show the pictures in Item 36.

SAY: "LOOK AT THE BOYS IN EACH SET OF PICTURES. (Teacher points out the increasing number of boys in each set). IN THE FIRST SET, THERE IS NO BOY; IN THE SECOND SET THERE IS ONE BOY, ETC. IN SOME FAMILIES THERE ARE A FEW BOYS, AND IN OTHERS THERE ARE MANY. WHEN YOU GROW UP, HOW MANY BOYS DO YOU WANT TO HAVE IN YOUR FAMILY. FIND THAT OUT IN THE SETS OF PICTURES. PUT A ✓ ON THAT PICTURE. (Give enough time for pupils to choose). IF YOU WANT TO HAVE MORE THAN 4 BOYS IN YOUR FAMILY, WRITE THE NUMBER OF BOYS YOU WANT TO HAVE IN YOUR FAMILY." (Indicate the end of the row where children will write the number.

Wait until each pupil has made a choice.

(37) SAY: "TAKE YOUR MARKERS AWAY. LOOK AT THE LAST ROW OF PICTURES."

Hold up your booklet and show the pictures in Item 37.

Repeat the instructions given in Item 36. This time use the word girls in place of the word boys.

Wait until each pupil has made a choice.

SAY: "TURN YOUR BOOKLET TO THE NEXT PAGE."

Hold up your booklet turned to page 9.

SAY: "PUT YOUR MARKER UNDER THE FIRST ROW OF LETTERS."

Hold up the booklet and show the letters in the example. Have it drawn on the board before test starts.

SAY: "NOW, EVERYBODY LOOK HERE. THE LETTERS ON THE BOARD ARE THE SAME AS THOSE YOU HAVE IN YOUR BOOKLET. FIND LETTER 'a' AND PUT A ✓ ON IT."

Call a pupil and let him do it on the board. Let pupils do the same on their booklets.

Wait until everybody has marked a ✓ on the example.

(38) SAY: "MOVE YOUR MARKER TO THE NEXT ROW OF LETTERS."

Hold up your booklet and show the letters in Item 38.

SAY: "FIND LETTER d. PUT A ✓ ON IT."

Wait until each pupil has marked a ✓ on a letter.

(39) SAY: "MOVE YOUR MARKER TO THE NEXT ROW OF LETTERS."

Hold up your booklet and show the letters in Item 39.

SAY: "FIND LETTER g. PUT A ✓ ON IT."

Wait until each pupil has marked a ✓ on a letter.

(40) SAY: "MOVE YOUR MARKER TO THE NEXT ROW."

Hold up your booklet and show the phrases in Item 40.

SAY: "NOW, LISTEN TO WHAT I WILL SAY. (Pause). PUT A ✓ ON 'THIS IS'."

Wait until each pupil has marked a ✓ on a phrase.

(41) SAY: "TAKE YOUR MARKER AWAY. LOOK AT THE LAST ROW."

Hold up your booklet and show the phrases in Item 41.

SAY: "LISTEN CAREFULLY TO WHAT I WILL SAY. (Pause). PUT A ✓ ON 'BIG BOY'."

Wait until each pupil has marked a ✓ on a phrase.

SAY: "TURN YOUR BOOKLET TO THE LAST PAGE."

Hold up your booklet turned to the last page. (page 10)

(42) SAY: "PUT YOUR MARKER ON THE LONG LINE."

Hold up your booklet and show the dividing line so that the pupils can see clearly the phrases written in the 3 boxes.

SAY: "LISTEN TO WHAT I WILL SAY. (Pause). PUT A ✓ ON 'one long pencil'."

Wait until each pupil has marked a ✓ on a phrase.

(43) SAY: "TAKE YOUR MARKERS AWAY. LOOK AT THE SENTENCES IN THE LAST THREE BOXES."

Hold up your booklet and show the sentences in the 3 boxes.

SAY: "NOW, LISTEN VERY CAREFULLY TO WHAT I WILL SAY. (Pause). PUT A ✓ ON 'I saw him'."

Wait until each pupil has marked a ✓ on a sentence.

COLLECT ALL MATERIALS

SEAMEO

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PROJECT PROGRESS

Readiness Test  
FOR PRIMARY ONE

Part I

PUPIL'S NAME: \_\_\_\_\_

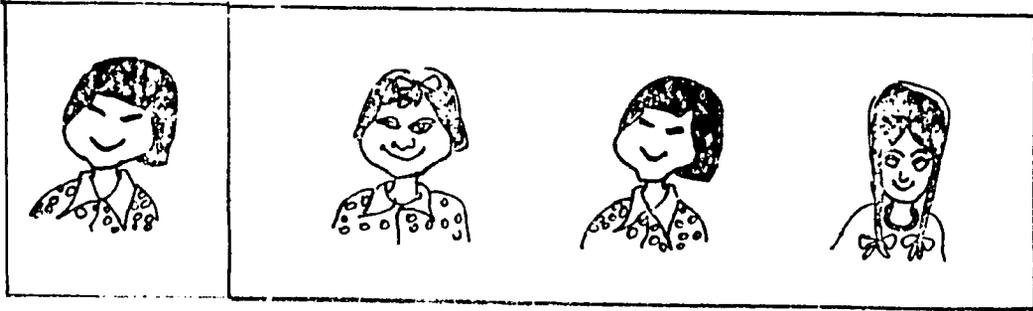
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COUNTRY: \_\_\_\_\_

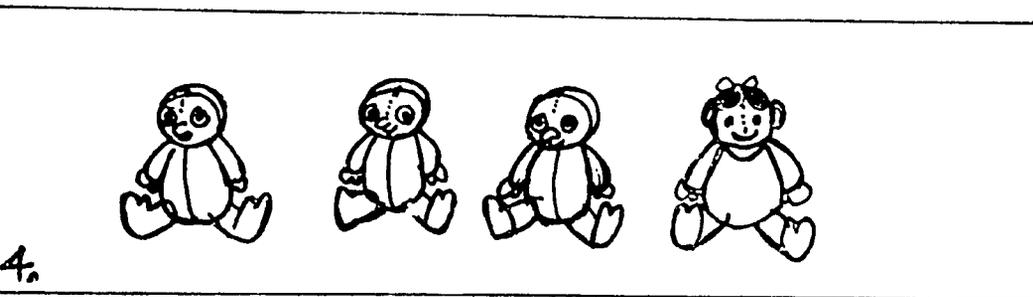
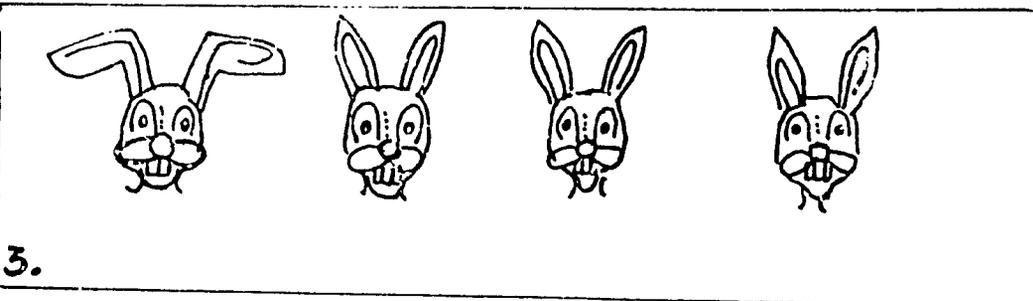
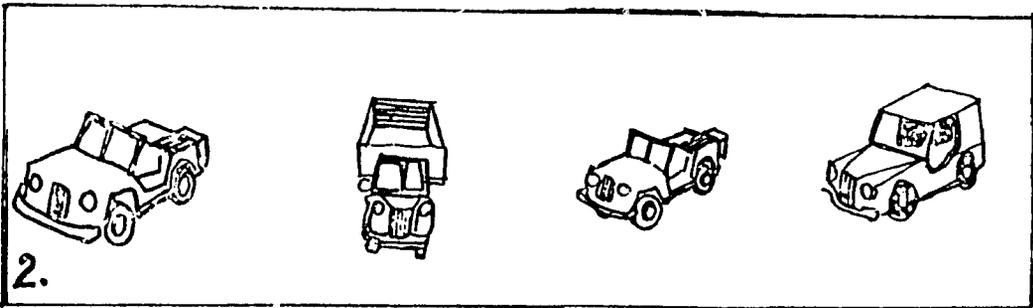
AGE: \_\_\_\_\_

SEX: \_\_\_\_\_

Example.



Begin Here



5.	d	b	d	p
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6.	E	E	F	L
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7.	S	Z	S	S
----	---	---	---	---

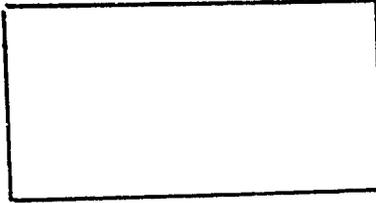
8.	boy	yob	byo	boy
----	-----	-----	-----	-----

9.	HAT	HAT	BAT	CAT
----	-----	-----	-----	-----

10.	BALL	BALL	ball	BALL
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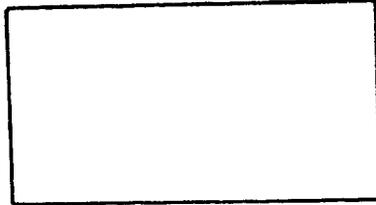
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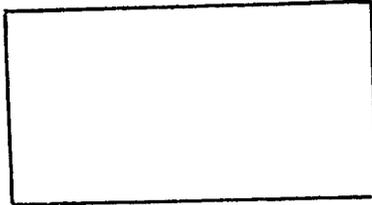
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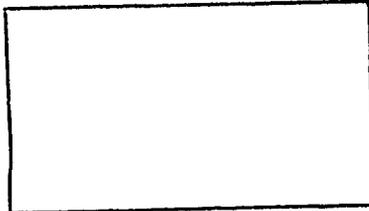
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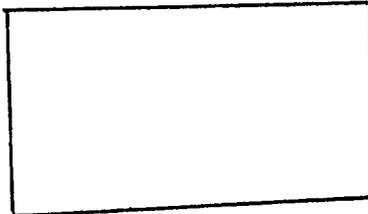
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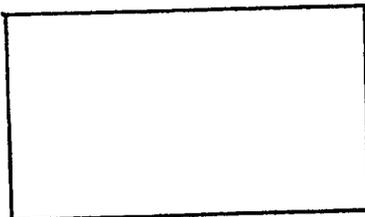
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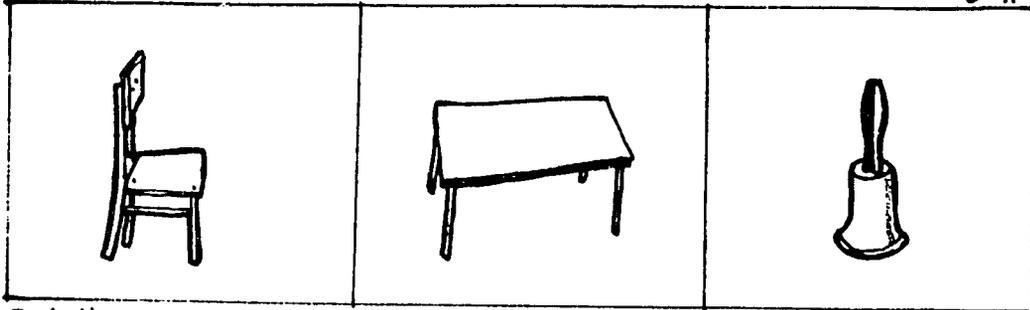
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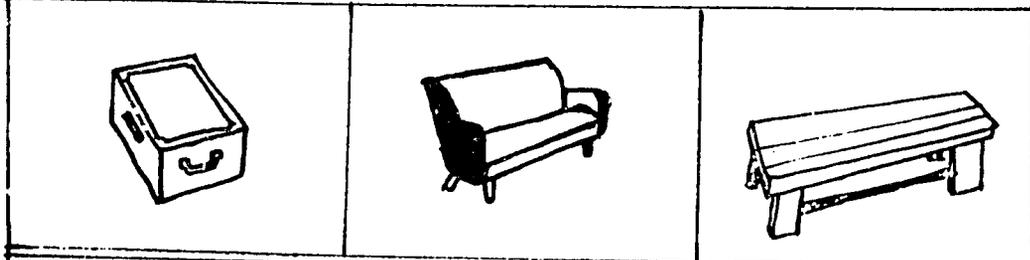


Example.

Page 4.



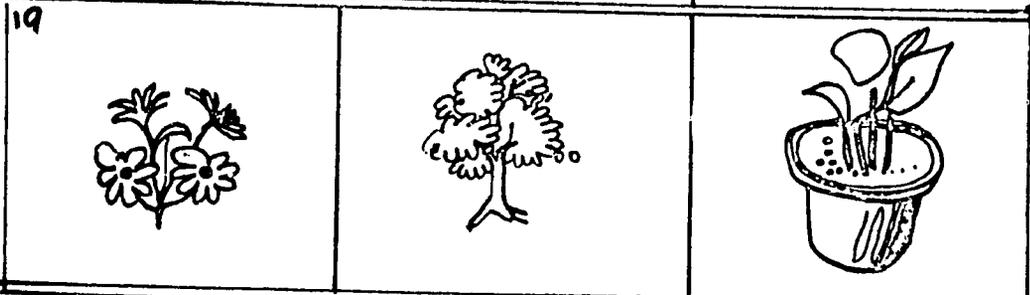
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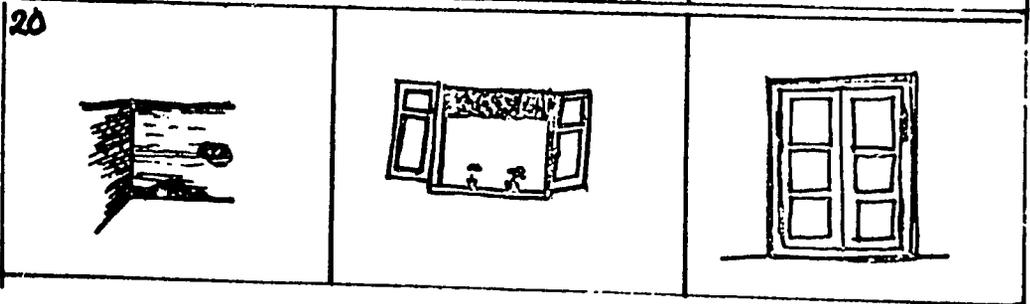
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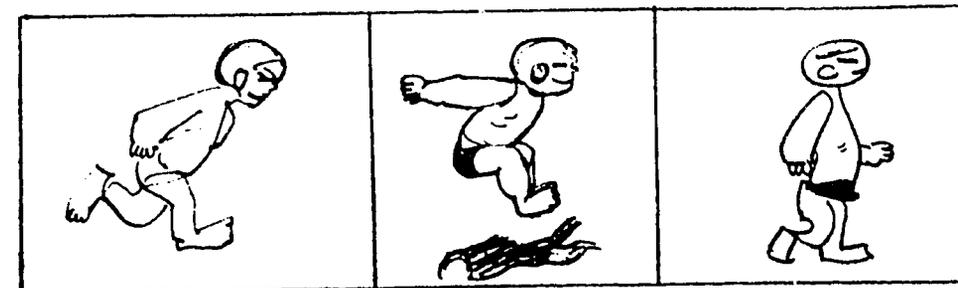
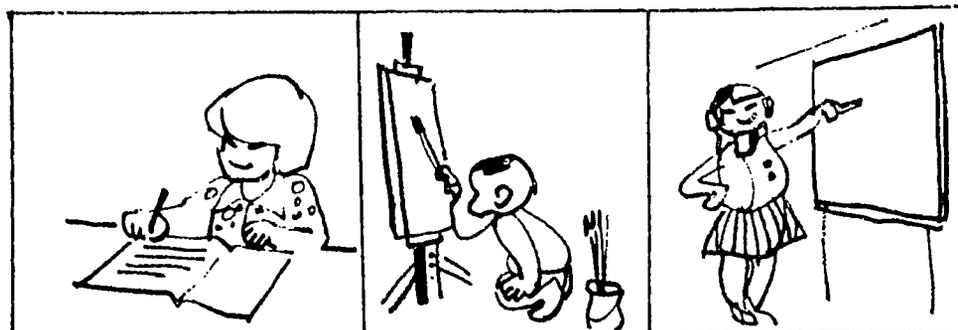
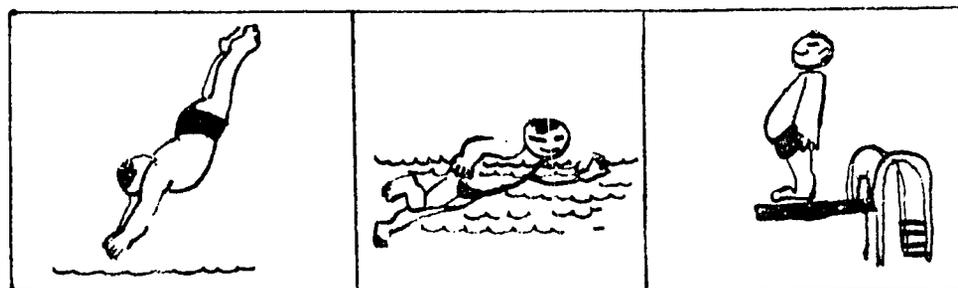
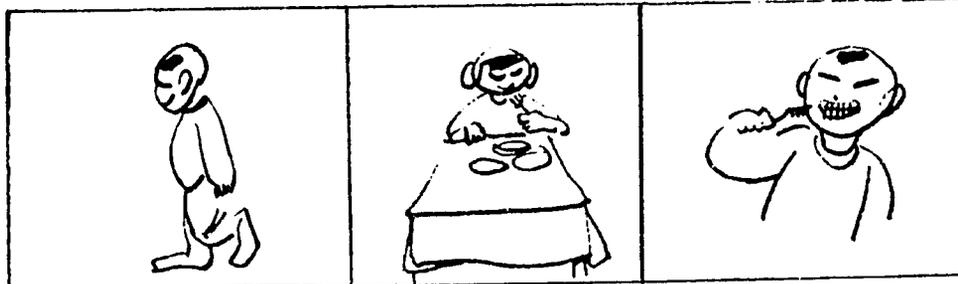


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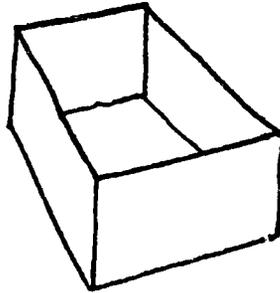
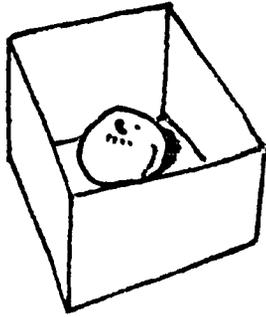


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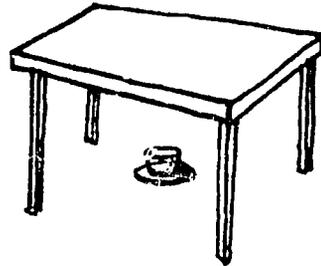
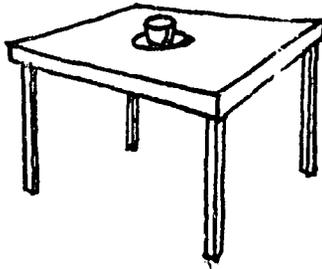




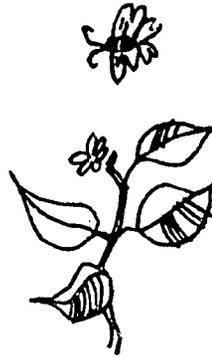
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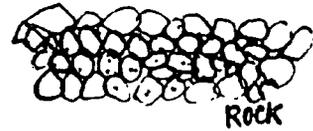
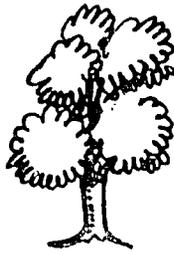
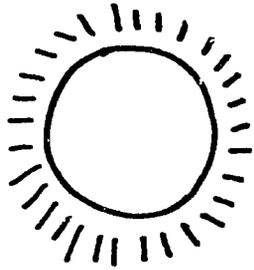
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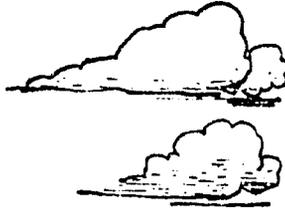
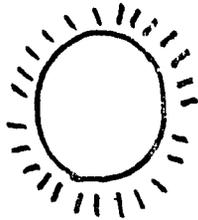






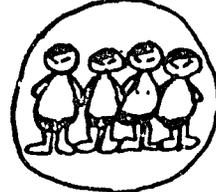
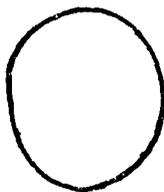
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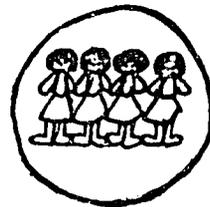
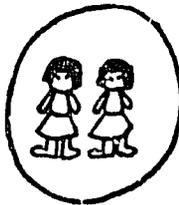
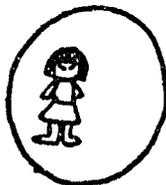
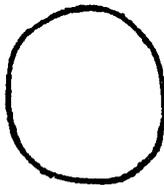
35.

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36.

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37.

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Example.

a b c

Begin Here

38.

b d h

39.

g p q

40.

it is

this is

is it

41.

little girl

baby sister

big boy

in the garden
the big house
one long pencil

42.

---

I saw him.
I was here.
I saw them.

43.

PRIMARY SCHOOL READINESS TEST  
PART II : MATHEMATICS

Section A : Instructional Objectives

I. Shapes

Item 1 - 2

When shown a shape, the child is able to identify a similar shape from a group of other shapes.

Item 3 - 4

When shown a set of shapes the child is able to identify the shape different from the rest.

II. Relativity

Item 5

Given a set of shapes of three different sizes, the child is able to identify the biggest one.

Item 6

Given a set of shapes of three different sizes, the child is able to identify the smallest one.

Item 7

Given objects of three different lengths, the child is able to identify the longest one.

Item 8

Given objects of three different lengths, the child is able to identify the shortest one.

III. Number Concepts

Item 9 - 10

Given a number of objects, not more than five in a set, the child is able to identify the set that has the same number of objects.

Item 11

Given three sets of numbers, not more than five in a set, the child is able to identify the set that has the most objects.

Item 12

Given three sets of numbers, not more than five in a set, the child is able to identify the set that has the least objects.

Item 13 - 16

Given three sets of objects, not more than ten in a set, the child is able to identify the set having the same number of objects as called by the teacher.

IV. Number Recognition

Item 17 - 18

Given five numerals between 1 - 10 the child is able to identify the number called out by the teacher.

Item 19 - 20

When shown an object, the child is able to identify a similar object of a different size.

Item 21 - 22

When shown a numeral between 1 - 10 the child is able to identify the set of objects having the same value as the numeral.

Item 23 - 24

When shown a set of objects, the child is able to identify the numeral equivalent to the number of objects in the set.

V. Sequence

Item 25 - 27

When shown symbols or objects arranged in sequence, with one or two parts missing, the child is able to complete the pattern.

PRIMARY SCHOOL READINESS TEST  
PART II : MATHEMATICS

Section B : Instructions for Testers

The test may be administered by the class teacher assisted by the INNOTECH staff. The language used will be that of the medium of instruction of the class.

Due to time factor the test may be administered to the whole class at the same time. Certain parts of the directions that follow are indented, enclosed in quotation marks and preceded by the word 'SAY'. These directions are to be read to the pupils. Be sure to read slowly and pronounce each word distinctly.

Each pupil will be supplied with a Test Booklet and a marker. Please ensure that each child has a pencil and eraser. The pupils will be required to answer in the Test Booklet.

The teacher should fill in the identifying data on the cover of the Test Booklet prior to distributing the booklets to the pupils.

Steps should be taken to make the pupils feel at ease before the test. The test should be treated as a game. Explain to the pupils that they are not to talk during the game and they are each to do it on their own. The pupils are also to understand that they are to listen carefully to what the teacher says.

Specific Directions for Testing

SAY: "This is a booklet. Everyone of you has been given this booklet. Today you are going to do something on your booklet. Listen very well to what I say and then do what I tell you to do."  
(Pause).

"Put up your booklet, (Pupils do so). Put them down. Put up your pencils. (Pupils do so). Put them down. (Pupils do so). Put up your markers. (Pupils follow). Put them down."

"Now we are ready to begin. Turn over the first page of your booklet like this. You should see a picture of a ball at the top of the page. Do you see the ball?"

Show to the class the Test Booklet turned to page 1. Be sure that each pupil has turned to the right page.

SAY: "Put your marker under the first row of pictures."

Hold up your booklet and show the objects in the first row. This is the example. Have it drawn on the board before test starts.

SAY: "Now, everybody look here. The drawings on the board are the same as those you have in your booklet."

Point to the drawing on the left.

SAY: "Look at this picture. (Pause). Now look at the other pictures. (Indicate). Find the picture that looks the same as this one. (the one you are pointing to) Which picture is it? (Call a pupil). Now, put a check on it. (Pupil puts a check on the leaf). Everybody, do the same on your booklet."

Be sure that each pupil does the right thing.

(1) SAY: "Move your marker to the next row of pictures."

Hold up your booklet and show the objects for Item 1. Check if each pupil's marker is in the right place.

SAY: "Put your finger on the first picture. (Pause). Look at the other pictures. Put a check on the picture that is the same as the one you are pointing to."

Wait until each pupil has marked a ✓ on one object.

- (2) SAY: "Move your marker to the next row of pictures."

Hold up your booklet and show the objects for Item 2. Check if each pupil's marker is in the right place.

SAY: "Put your finger on the first picture. (Pause). Look at the other pictures. Put a ✓ on the picture that is the same as the one you are pointing to."

Wait until each pupil has marked a ✓ on one object.

- (3) SAY: "Move your marker to the next row of pictures."

Hold up your booklet and show the objects for Item 3. Check if each pupil is pointing to the right place.

SAY: "Look at the flowers. (Point to the flowers in the row). Find the flower that is different from the others. Put a ✓ on that flower."

Wait until each pupil has marked a ✓ on the flower.

- (4) SAY: "Take your marker away from the page so that you can see the last row of pictures."

Hold up your booklet and show the objects for Item 4. Check if each pupil is pointing to the right place.

SAY: "Look at the pictures. Find the one that is different from the others. Put a ✓ on that picture."

Wait until each pupil has marked a ✓ on the object.

- (5) SAY: "Turn the page of your booklet, you should see a picture of a train. Can you see the train?"

Hold up your booklet turned to page 2. Check to see that each pupil is on the right page.

SAY: "Put your marker under the first row of pictures."

Hold up your booklet and show the objects for Item 5. Check if each pupil's marker is in the right place.

SAY: "Look at the cats. Find the biggest cat. Put a check on that cat."

Wait until each pupil has marked a ✓ on the object.

- (6) SAY: "Move your marker to the next row of pictures."

Hold up your booklet and show the objects for Item 6. Check if each pupil's marker is in the right place.

SAY: "Look at the dogs. Find the smallest dog. Put a ✓ on that dog."

Wait until each pupil has marked a ✓ on the object.

- (7) SAY: "Move your marker to the next row of pictures."

Hold up your booklet and show the objects for Item 7. Check if each pupil's marker is in the right place.

SAY: "Look at the pencils. Find the longest pencil. Put a ✓ on that pencil."

Wait until each pupil has marked a ✓ on the object.

- (8) SAY: "Take your marker away from the page so that you can see the last row of pictures."

Hold up your booklet and show the objects for Item 8. Check if each pupil's marker is on the right place.

SAY: "Look at the trains. Find the shortest train. Put a ✓ on that train."

Wait until each pupil has marked a ✓ on the object.

SAY: "Turn the page of your booklet, you should see a picture of a house. Can you see the house?"

Hold up your booklet turned to page 3. Check to see that each pupil is on the right page.

- (9) SAY: "Put your marker under the first row of pictures."

Hold up your booklet and show the objects for Item 9. Check if each pupil's marker is in the right place.

SAY: "Put your finger on the first set of pictures. Look at the other sets. Which set has the same number of pictures? Put a ✓ on that set."

Wait until each pupil has marked a ✓ on the set.

(10) SAY: "Move your marker to the next row of pictures."

Hold up your booklet and show the objects for Item 10. Check if each pupil's marker is in the right place.

SAY: "Put your finger on the first set of pictures. Look at the sets of pictures. Put a ✓ on the set that has the same number."

Wait until each pupil has marked a ✓ on the set.

(11) SAY: "Move your marker to the next row of objects."

Hold up your booklet and show the pictures for Item 11. Check if each pupil's marker is in the right place.

SAY: "Look at the sets of pictures. Find the set that has the most number of pictures. Put a ✓ on that set.

Wait until each pupil has marked a ✓ on the set.

(12) SAY: "Take your markers away from the page so that you can see the last row of pictures.

Hold up your booklet and show the objects for Item 12.

SAY: "Look at the sets of pictures. Find the set that has the least number of flowers. Put a ✓ on that set."

Wait until each pupil has marked a ✓ on the object.

(13) SAY: "Turn the page of your booklet. You should see a picture of a hen at the top of the page. Do you see the hen?"

Hold up your booklet turned to page 4. Check to see that each pupil is on the right page.

SAY: "Put your marker under the first row of pictures."

Hold up the booklet and show the pictures for Item 13. Check if each pupil's marker is in the right place.

SAY: "Look at the sets of airplanes. Find the set that has three airplanes. Put a ✓ on that set."

Wait until each pupil has marked a ✓ on the object.

(14) SAY: "Move your marker to the next row of pictures."

Hold up your booklet with the marker under the objects for Item 14. Check if each pupil's marker is in the right place.

SAY: "Look at the sets of dolls. Find the set that has 5 dolls. Put a  $\checkmark$  on that set."

Wait until each pupil has marked a  $\checkmark$  on the set.

(15) SAY: "Move your marker to the next row of pictures."

Hold up your booklet with the marker under the objects for Item 15. Check if each pupil's marker is in the right place.

SAY: "Look at the sets of balloons. Find the set that has 7 balloons. Put a  $\checkmark$  on that set."

Wait until each pupil has marked a  $\checkmark$  on a set.

(16) SAY: "Take your marker away from the page so that you can see the last row of pictures."

Hold up your booklet and show the objects for Item 16.

SAY: "Look at the sets of pineapples. Find the set that has 10 pineapples. Put a  $\checkmark$  on that set."

Wait until each pupil has marked a  $\checkmark$  on the set.

(17) SAY: "Turn the page of your booklet. You should see a tiger at the top of the page. Do you see the tiger?"

Check if each pupil has turned to page 5.

SAY: "Put your marker under the first row of numbers."

Hold up your booklet with the marker under the objects for Item 17. Check if each pupil's marker is in the right place.

SAY: "Look at the numbers. Put a  $\checkmark$  on number 2."

Wait until each pupil has marked a  $\checkmark$  on the number.

- (18) SAY: "Move your marker to the next row of numbers."

Hold up your booklet with the marker under the objects to Item 18. Check if each pupil's marker is in the right place.

SAY: "Look at the numbers. Put a  $\checkmark$  on number 7."

Wait until each pupil has marked a  $\checkmark$  on the number.

- (19) SAY: "Move your marker to the next row of pictures."

Hold up your booklet with the marker under the objects for Item 19. Check if each pupil's marker is in the right place.

SAY: "Put your finger to the first picture on the left. Look at the other pictures. Put a  $\checkmark$  on the picture that is the same as the one you are pointing to."

Wait until each pupil has marked a  $\checkmark$  on the picture.

- (20) SAY: "Take your marker away from the page so that you can see the last row of pictures."

Hold up your booklet and show the pictures for Item 20.

SAY: "Put your finger to the first picture on the left. Look at the pictures. Put a  $\checkmark$  on the picture that is the same as the one you are pointing to."

Wait until each pupil has marked a  $\checkmark$  on the picture.

- (21) SAY: "Turn the page of the booklet. You should see a picture of a chair at the top of the page."

Check if each pupil's booklet is turned to page 6.

SAY: "Put the marker under the first row of objects."

Hold up your booklet with the marker under the pictures for Item 21. Check if each pupil's marker is in the right place.

SAY: "Look at the number on the left. (Point to the number). Then find the set of bananas that tells something about this number. Put a  $\checkmark$  on that set."

Wait until each pupil has marked a  $\checkmark$  on the set of bananas.

(22) SAY: "Move your marker to the next row of pictures."

Hold up your booklet with the marker under the pictures for Item 22. Check if each pupil's marker is in the right place.

SAY: "Look at the three sets of combs. Point to the number at the left. Put a  $\checkmark$  on the set of combs that has the same number."

Wait until each pupil has marked a  $\checkmark$  on the set of combs.

(23) SAY: "Move your marker to the next row of numbers."

Hold up your booklet with the marker under the numbers for Item 23. Check if each pupil's marker is in the right place.

SAY: "Point to the set of shoes. Find the number that tells something about it. Put a  $\checkmark$  on that number."

Wait until each pupil has marked a  $\checkmark$  on the number.

(24) SAY: "Take your marker away so that you can see the last row of numbers."

Hold up the booklet and show the last row of numbers.

SAY: "Point to the set of rings. Find the number that tells something about it. Put a check on that number."

Wait until each pupil has marked a  $\checkmark$  on the number.

SAY: "Turn the page of the booklet. You should see a rabbit at the top of the page. Do you see the rabbit?"

Check if each pupil's booklet is turned to page 7.

SAY: "Put your marker under the first row of drawings."

Check if each pupil's marker is in the right place.

Draw the same example on the blackboard.

SAY: "Everybody, look at the drawing on the blackboard. This is the same as the drawing in the first row of your booklet."

Check if the pupils are comparing the drawing in the booklet with the drawing on the blackboard.

SAY: "Look at the drawing in each box. (Show the drawings on the blackboard). Can you see the box that has no drawing? (Call a pupil. Let the pupil point to the empty box.) You are going to draw something in the empty box."

"Now look at the drawings again." (Point at each drawing on the blackboard).

"One of these pictures should go into the empty box. Do you know now what to draw in this empty box?" (Call a pupil to do it.)

"Everybody, do the same thing on your booklet."

Be sure that each pupil makes the correct mark in the empty box.

SAY: "Move your marker to the next row."

Check if each pupil's marker is in the right place.

(25) SAY: "Look at the drawings in each box. Can you find the empty box? (Pause). One of these drawings, (show the drawings) should go in the empty box. Put the correct drawing in that box."

Wait until each pupil has made a mark in the box.

SAY: "Move your marker to the next row of drawings."

Check if each pupil's marker is in the right place.

(26) SAY: "Look at the drawings very carefully now. Find the empty box. (Point to the row of drawings). One of these drawings should go in the empty box. Put the correct drawing in that box."

Wait until each pupil has made a mark in the box.

SAY: "Move the marker to the next row of drawings."

Check if each pupil's marker is in the right place.

- (27) SAY: "Look at the drawings very carefully again. (Point to the drawing). Find the two empty boxes. Two of these drawings should go in the two empty boxes. Put the correct drawing in each box."

Wait until each pupil has made the marks in the two boxes.

SAY: "Take your markers away so that you can see the last row of drawings."

Hold up the booklet and show the last row of drawings.

- (28) SAY: "Look at the drawing very, very, carefully now. (Point to the drawings). Find the two empty boxes. Two of these drawings should go in the two empty boxes. Put the correct drawing in each box."

Wait until each pupil has made the marks in the two boxes.

SAY: "You have finished the test."

Collect the testing materials.

SEAMEO  
innotech

PROJECT PROGRESS

Readiness  
TEST  
FOR PRIMARY ONE

- PART II -

Pupil's name: \_\_\_\_\_

Age: \_\_\_\_\_

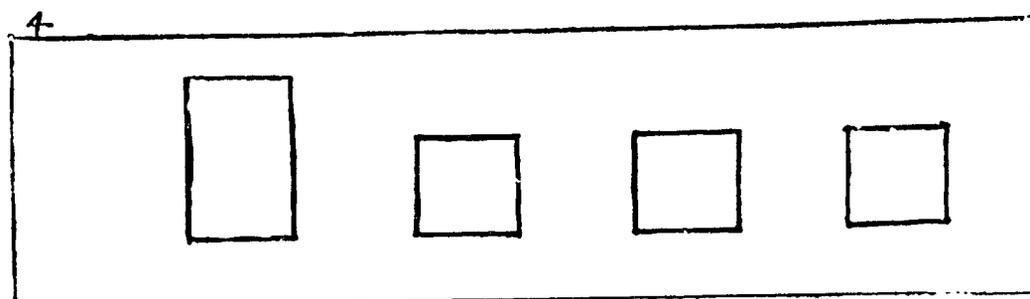
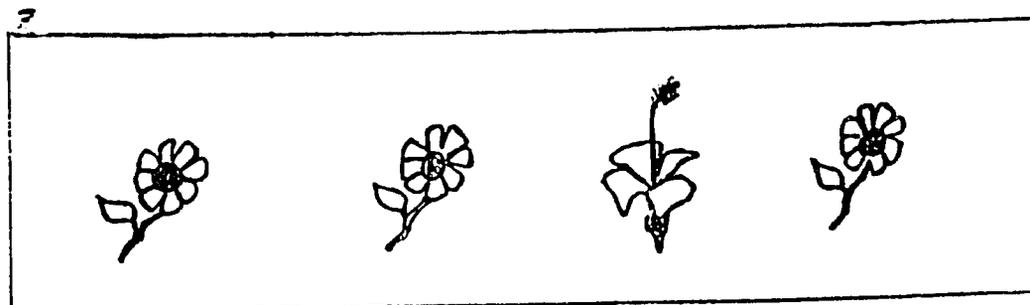
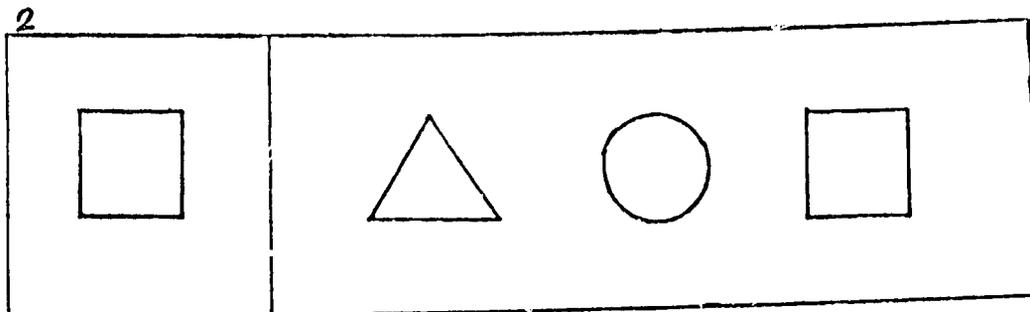
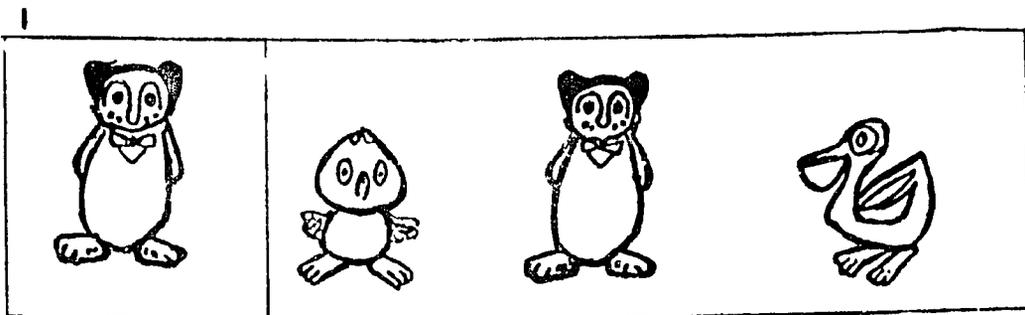
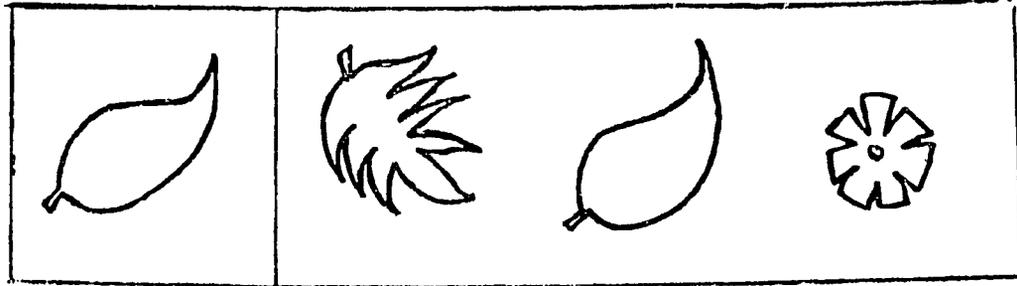
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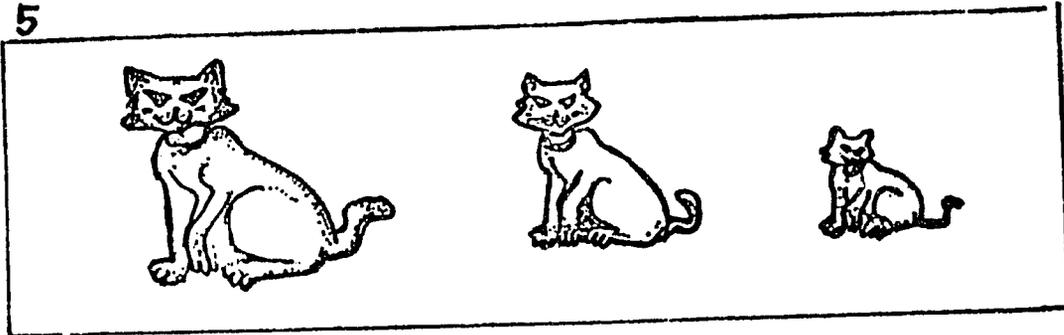


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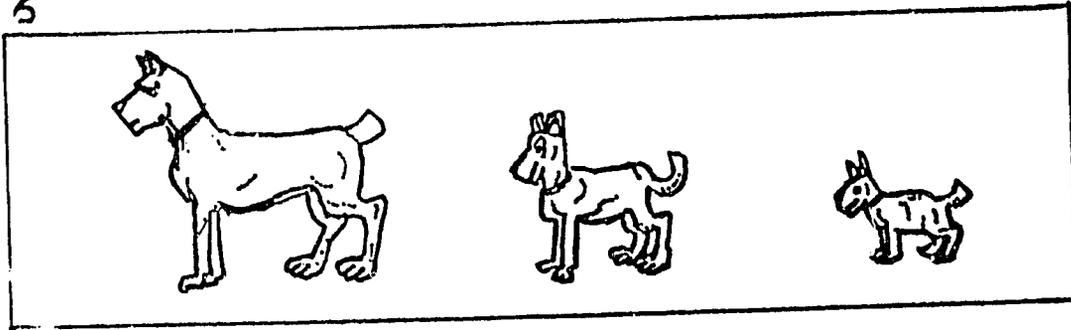




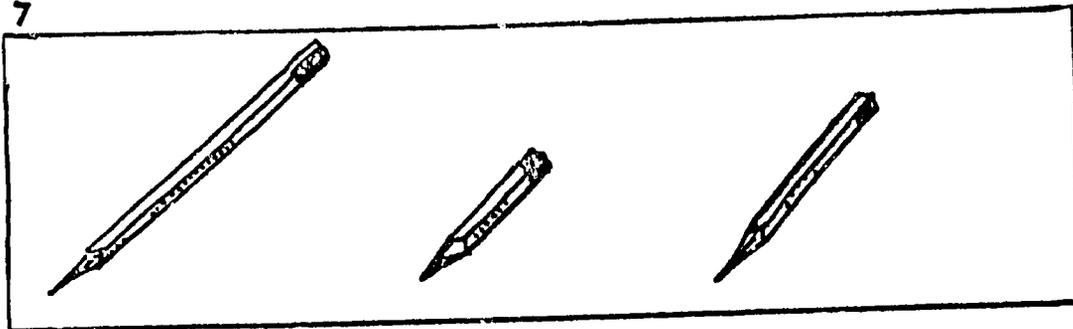
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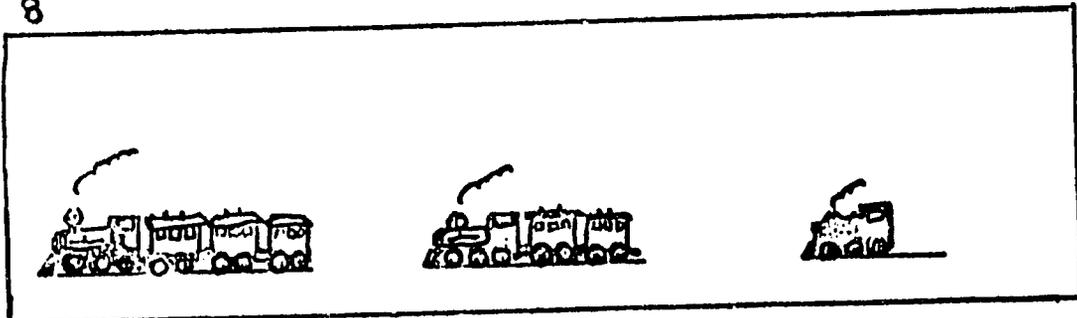
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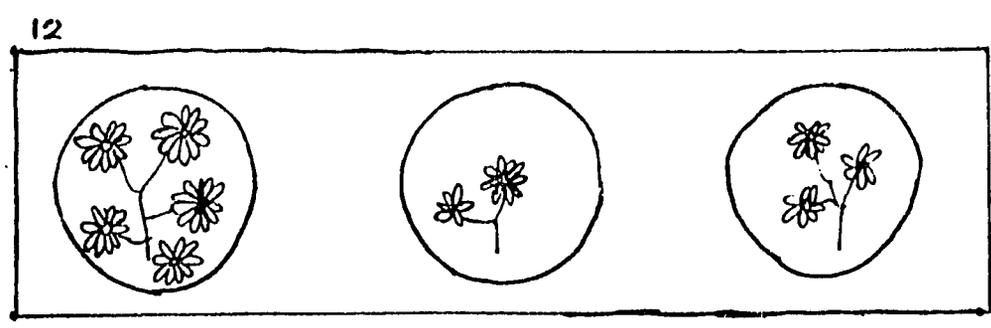
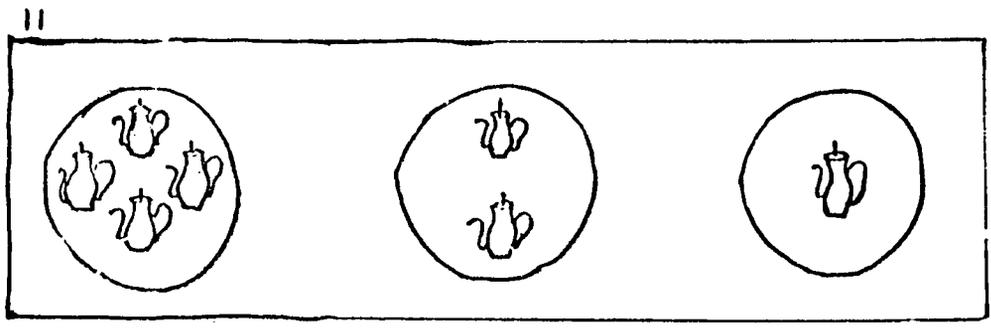
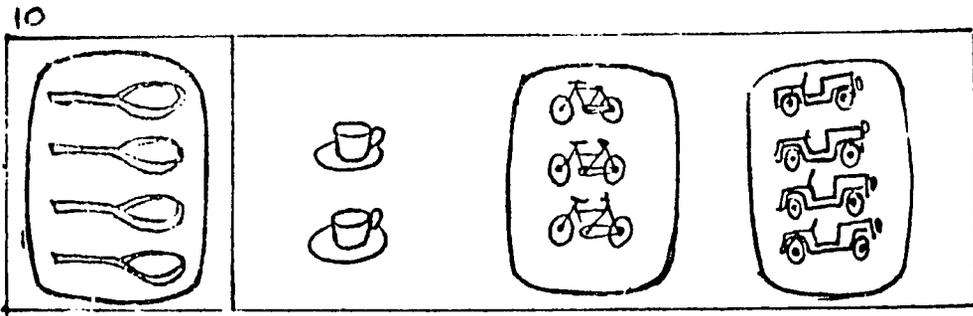
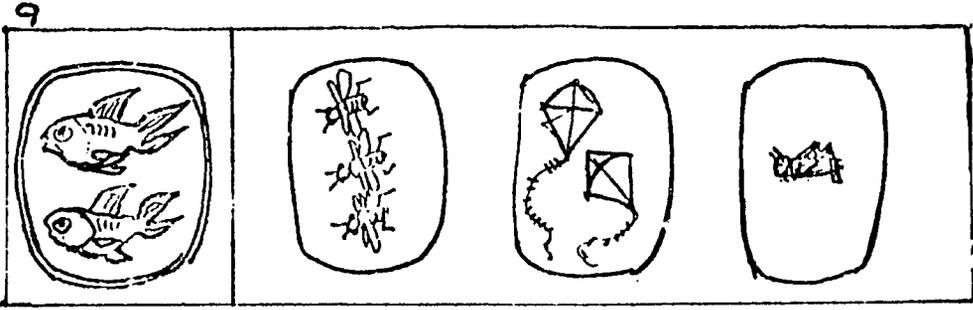


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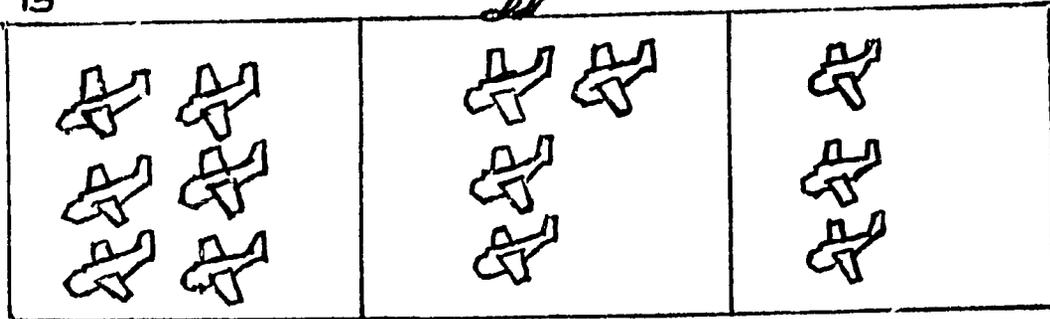
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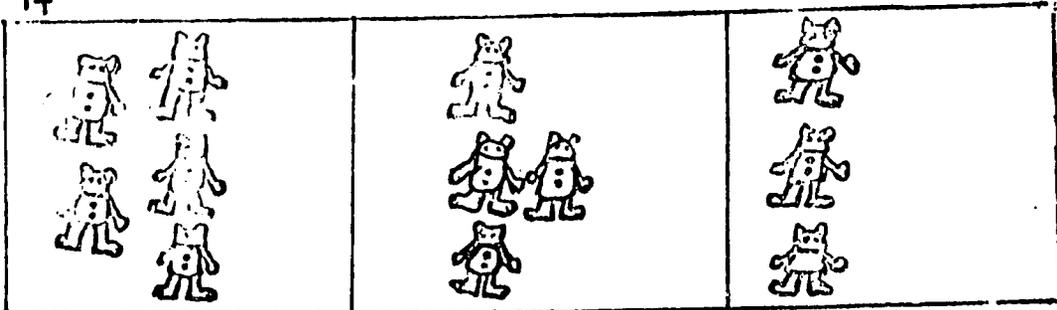




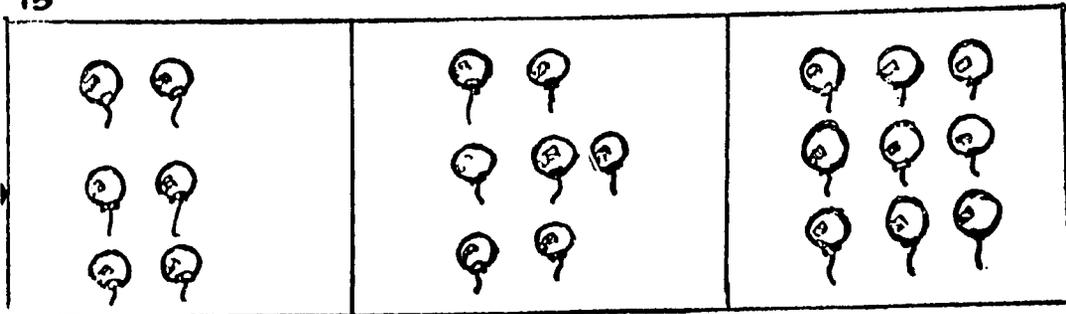
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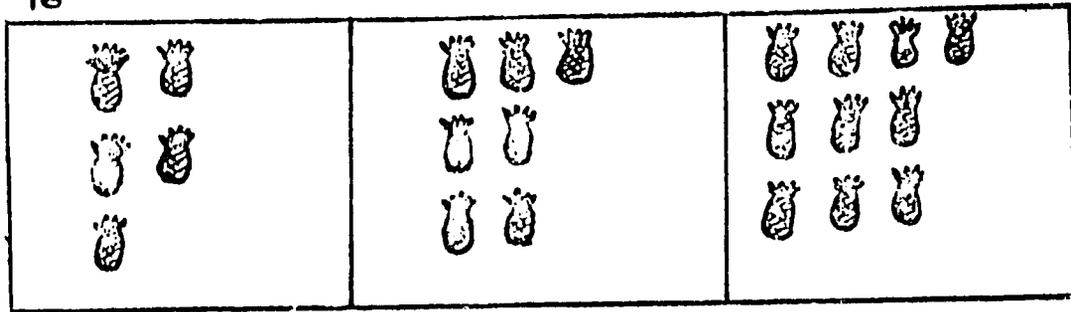
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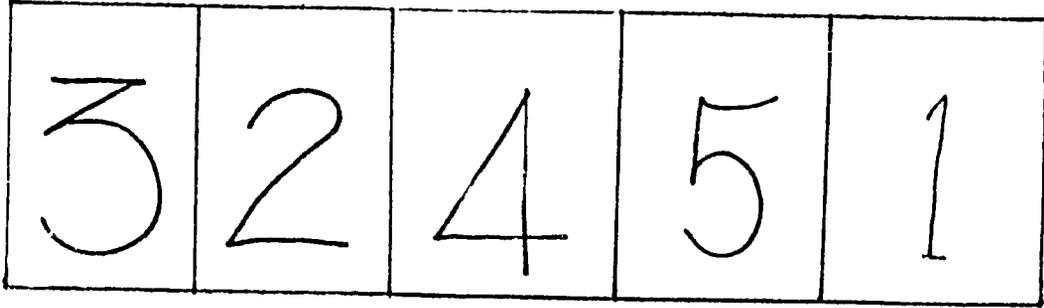


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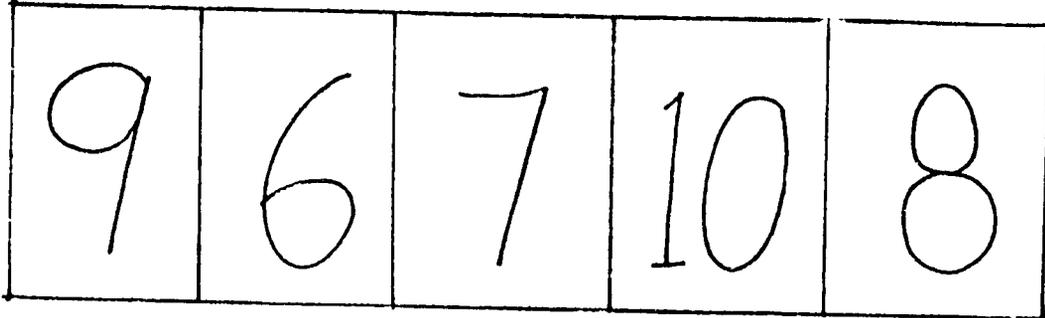




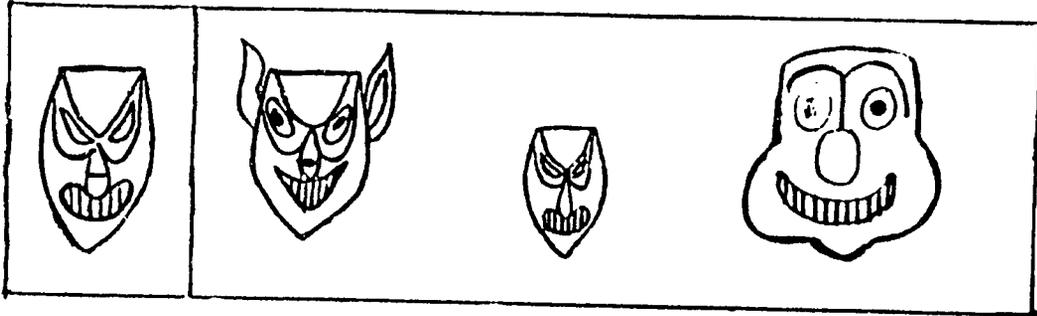
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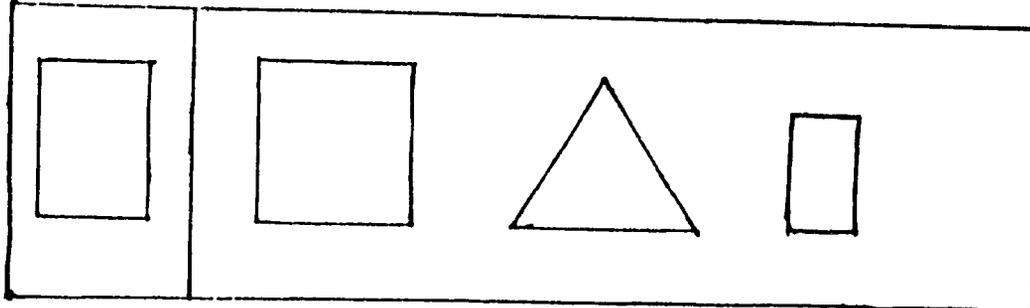
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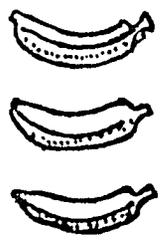
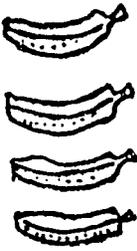
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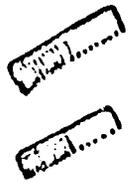
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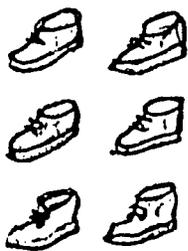
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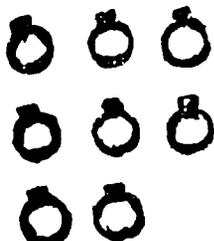
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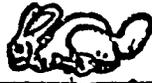
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	<b>2</b>	<b>6</b>	<b>7</b>
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	<b>5</b>	<b>7</b>	<b>8</b>
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Example



- 48a -

Page 7

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Begin Here

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26

✓	✓ ✓	✓	✓ ✓	✓	
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	+		+		

28

X	X	X	X		
	X	X			
		X			

## APPENDIX B

EXCERPTS FROM PROJECT STAFF REPORTS

1. "At this kindergarten the medium of instruction is Javanese. I realised that the teacher would not only have to understand the instruction manual already translated into Indonesian but also to interpret the contents impromptu to Javanese.

My guide helped by explaining the instruction manual to them (the teachers) in Indonesian. They carried out the test, one reading the instruction manual and the other giving an immediate interpretation while illustrating with the booklet.

This did not work. Firstly, I could not make sure whether the interpretation to Javanese was correct. If it had been done in Indonesian, I would have been able to follow because it is very close to Singapore Malay.

I decided to watch the children closely. At No. 11 page 3, I realised that all (or most of the children) marked the 'least' instead of the 'most'. Therefore, the two testers, one reading and one interpreting while demonstrating, were not synchronizing.

I politely pointed out that there had been a mistake. My guide who was a very young intelligent man saved the situation. He came up to me and asked if he could be the tester. I gave him permission to do so. It went on very smoothly. He did the interpretation impromptu and illustrated and demonstrated very well.

So far, I notice that the children respond to the test in the same way as the children we have tested in Johore Bahru and Singapore, i.e., when it is a good school the children on the whole do well. In a poor school, the frustration of repeating the instruction and making sure that the children understand what they would do, is experienced."

2. "When I was told that there were seventy-four in the class, I knew that conditions for testing were not conducive. At a quick glance I noticed that five children were sitting at one desk of about five feet long. They were so crammed -- sitting shoulder to shoulder.

I made a quick decision. I gave the booklets to only the pupils sitting at both end of each table. This therefore solved the problem of children looking into one another's booklet. The children in between acted as barriers. I know that I was taking the risk of distraction that might be caused by these children in between. However, the rural children were so polite that they looked on without making

any noise. They have had so few opportunities that just looking on and being given the chance to side-glance at the pictures in the booklets kept them absorbed.

The test was therefore carried out smoothly."

3. "The children in this school have had only 9 days of school. They have not been to any kindergarten. They cannot make a ✓ mark. We have to accept any mark they make."

4. "After the example was done and the teacher illustrated the ✓ mark on the board, I noticed that a number of children did not do anything at all. A few had some mark that looked like this ^ . I decided that a check mark was difficult for them so I asked the teacher through the interpreter to show X mark on the board. She continued the test and I noticed that all children except two were attempting to do the test. This change was effective."

5. "At item No. 6, I noticed that nearly all the children made a mark on the biggest dog. It should have been the smallest. I went up to the teacher and asked if she had asked for 'big' or 'small'. She understood me and replied that she asked for 'big'. I asked the interpreter to tell her to instruct the children to clean off their marks for Item 6.

This was done and the instructions were given again. This time it was right. The children marked the 'smallest'."

6. "Unlike Bangkok where the schools have just commenced, here we are testing children who have had schooling since September 1970. They are now going to close for their holidays, June 15th."

7. "The teacher started without checking whether they had pencils. I stopped here after the example. Children were supplied pencils by borrowing from those who were not taking the test."

8. "I had to take out the children sitting in the centre of every three in a row and one table. Thus 42 children were tested. The class had more than 50 children. They were too close to each other."

9. "For page 7, item No. 26 -- The teacher gave too many clues -- she said one, two, one, two, for the boxes. I pointed it out to her (not to do so), so that she would not do the same in the next two patterns.

I watched and listened carefully, I think this time she asked them to look at the boxes without describing the drawings in the boxes. Sometimes I wonder if such mistakes could have been overlooked previously by me or other members of the group -- anyway I have followed closely at all times. I hope the others have."

10. "The reading Test started at 3.30 p.m. This class was in a shed. Two other classes were also in this shed. Soon after we started the reading test the Math Test was carried out in the same shed in the class to the right of us. This created a slight distraction, but there was nothing we could do about it. We carried on with the test."

11. "In addition to this distraction the physical conditions were not conducive for tests. The children were seated three to a table of about 4 ft. There were longer tables, about 6 ft. and seven children were seated in a row. Altogether there were forty-two children.

The tester kept on reminding to do their own work and not to look at one another. This was the best that could be done. However, some children did look at another's work."

12. "Our tester is from the south, so his intonation is somewhat different from the children's. After page one, the form teacher took over. The children responded better."

13. "Quite a number of children had no pencils. The teacher borrowed pencils from the class next to this in the shed. I think for rural schools, we should bring a set of 40 pencils in addition to the markers and booklets. The pencils should have erasers on them."

14. "Notes. Tuesday

- a. On reflecting, the experiences in the countries so far visited have shown that it is better for the 3-month participants to go back to their respective countries to administer the tests. The language barrier will be solved.
- b. Schools to be visited must be briefed beforehand to get the class ready for a test i.e. children are placed in positions with no opportunities of looking at one another's work.
- c. Briefing teachers to conduct the test is not satisfactory. Some teachers catch on the idea very fast, some are so slow, some are so anxious that they give clues -- e.g. this afternoon reading test, for the section on sequence of story, he was telling them about the growth of the plant (I asked the teacher what he was saying) they tend to teach as they conduct the test."

15. "I supervised the Maths test. 11.15 a.m. - 11.45 a.m. The children were normally dismissed at 10.30 a.m. They had to be kept back so that we could conduct the test. I wondered if hunger and anxiety would affect their performance. On observing the children closely, they had done well. (Their academic year is from September. They have this advantage). The teacher who conducted the test did it well."

16. "We supervised and assisted in the Math Test for one Primary I class. The teacher-in-charge administered the test. In spite of the fact that we made it clear at the briefing prior to the test that the testing directions in the manual have to be followed very closely, she tried to administer the test in her own way, i.e., she put the testing manual aside and marked the supposed answers with small crosses (which she did in the 15-minute allowance for studying or going thru the test and testing manual) and started the test in Chinese, all seemingly full of clues as to what the correct responses would be. I had to interrupt her several times during the first 5 minutes to remind her (even to hand to her) of the testing manual. I felt that she was a bit irked by this although I honestly believe that I tried my best to be very polite about it."

17. "One of the participants was greatly bothered about it (i.e., the teachers' disregard for the testing manual) and told me that I have simply got to do something about the situation. This time, I told the teacher in a very determined and explicit manner that she must, by all means, stick to the testing directions. I convinced her by saying that it's not only the test that's being tried out for purposes of improvement/revision of the future, but also ditto with the testing manual. So, how can we find out whether the testing directions were simple and clear enough to the pupils unless we actually go through them? Even the testing directions must undergo assessment, I said. She agreed and said that she's sorry not to have understood that point well. Everything went smoothly after that. She read all the testing directions from the testing manual and she did not need much supervision and assistance anymore because we could see that she is very capable of handling her class."

18. "We supervised the Math test in a Primary I class. The teacher in charge couldn't speak Chinese, only Malay, so she decided to administer the test in English (this being the medium of instruction). We observed that many of the children couldn't understand her for the class was a mixture of Chinese and Malay. One child did all sorts of marking on his paper."

After conferring with the teacher in the middle of the test, we decided to get in another teacher, one who could speak Chinese, as there are more Chinese children in the class than other groups. The procedure up to the end of the test was: the teacher read the testing directions in English first, then she translated them into Malay which in turn was translated into Chinese by the helping teacher who was called in.

Result: the pacing of the test was much improved and there were no more problems."

19. "We again supervised the Math Test. The teacher who was supposed to give the test had a very soft voice and couldn't be heard by the whole class. I sensed that she was so nervous and had lost her voice. I called in the team leader from the next room (where he was supervising the reading test going on) and told him to exchange places with me. He had to administer the test for the first page of the test and when the teacher finally gained her voice (which was really soft) she was given the chance to continue giving the test. But then a steam roller, so noisy at that, started the leveling works on the grounds just outside the class being tested. So the team leader had to pitch in again and to repeat the testing directions that the teacher said first.

On the other hand, the teacher who administered the test in reading was very capable so we had no problem with that class."

20. "a. The children were crammed up into long benches. Although they were spaced out, nothing could be done to stop the children from looking at each other's booklet.

b. Too many teachers, officials and project members crammed into the classrooms. I think they were over anxious. The children were uneasy.

c. Not all children had good pencils. Some had none. (perhaps it would have been better if the project manager carried a box of 40 pencils for lending purposes)."

21. "a. Our accompanying officers briefed the teachers without looking at the manual themselves. As a result even the test administrators went on with the test without referring to the manual.

b. A slow child: it was discovered after some time that one boy just kept staring at the pictures, without answering. Obviously he missed the first instructions. I instructed the teacher to stop for a while and run the instruction once for him. He then caught up with the class. I advised the teacher to make sure that each child finished answering before moving to the next item."

22. "The children were asked to hold up their pencil with their elbow resting on the table each time they finished answering. This proved to be effective because then she didn't have to go round the class."

23. "During the test she committed a serious mistake of drawing the check this way. I corrected immediately but some of the children insisted on following their principal. She also scolded the children for checking the wrong answers."

24. "The problems in every country took a common pattern. Project-wise there were three broad areas:

a. Physical conditions - children were seated too close to one another and though we tried our best to minimise the possibility of children looking at one another's work it was not possible to eliminate this problem and I think it should be considered in collating our data.

b. Briefing teachers on arrival at the schools and then expecting them to administer the tests according to our requirements was not altogether satisfactory. This brought about anomalies in the administration of the tests - some teachers caught on the idea fast, some were very slow, some were very nervous, some felt that it was an imposition on them.

c. Language barrier reduced us to supervisors who could follow at best only the mechanical process of the administration but not the content of the instructions. Whether extra clues were given or not we were none the wiser. I discovered a few instances of extra clues in one or two cases more by intuition than knowledge. Also, I discovered that the wrong instructions were given for certain items by watching what the children were doing. In at least three cases, the teacher skipped to the next item in her instructions without realising that the instructions were not for the item in the booklet. I discovered this by watching the children closely. If the whole class put a check on the 'least' for the 'most' that showed that the wrong instructions were given."