This workbook for children was prepared especially to accompany the level 1 Micronesian Mathematics Program Teacher's Guide. It is to be used to check whether children have learned concepts taught by activities and activity cards. Work is provided for such concepts as color recognition, categorizing, counting, ordering, numeration, contrasting, shape and pattern recognition as well as other basic relationships such as "bigger or smaller than" or "the same size as." Most of the objects represented on the cards are appropriate for children living in a Polynesian culture, but recognizable by all children. This work was prepared under an ESEA Title III contract. (JP)
Write your name in the boxes. Color the picture.
"Produced by the Micronesian Mathematics Project, a project funded under Title III of the Elementary and Secondary Education Act, with funds granted by the U.S. Office of Education to the Trust Territory of the Pacific Islands, Department of Education. Opinions expressed herein are the author's (s'); no official endorsement by funding agencies should be inferred."
TO THE TEACHER:

This workbook for the children has been prepared especially to accompany the level I Micronesian Mathematics Program Teacher's Guide. The work cards are for use only with the structured games section.

For effective learning, please use the book in the following manner.

1. Do the activity cards from level I M.M.P. teacher guide first. Then do the appropriate work cards from the workbook. The workbook page is a way of checking or testing to see whether the children have learned the concept from the activity lesson.

2. Not every activity card in M.M.P. level one has a work card, since there might be 2 or 3 activity cards leading only to one concept. The children's workbook test concepts, not individual cards.

3. The children will probably not be able to read the instructions. You will have to read the instructions to them. Do not tell them the answers. You could get the children to write the English or vernacular directions on the cards for themselves.

4. At the back of the book there are some number skill pages. This section can be used at special times. You should check every page to see that the children write correctly. You might want to add more lessons of your own. These cards should be started about 2 weeks after the Structured games have begun.

5. Arrange for the children to take their workbooks home to show their parents what they are doing in mathematics.

6. If you find a page that cannot be taught because it has no meaning in your local language, teach the concept in English.
I hope that you and the children you teach will find this book worthwhile, useful and a lot fun.

Carolyn Gring
SETS OF LIKE KIND

To be used after completion of Cards 1, 2, 3

Draw rings around the things belonging to the same set.
These are triangles. Color the members of the same shape class.

These are large. Color the shapes in the same size class.

These are thin. Color the member of the same thickness class.

Color these green. Make these belong to the same color class.
COLOR RECOGNITION
To be used after completion of Cards 5 and 6

YELLOW

BLUE

RED

Color these yellow.
Color these blue.
Color these red.
BIG - LITTLE

To be used after completion of Card 7

Color the big things red. Color the little things blue.
MATCHING SHAPES

To be used after completion of Card 10

Draw lines to the shapes that are alike. Color one kind of shape one color.
COLOR NAMES

To be used after completion of Cards 11 to 13A

Color these things green.

Color these things brown.

Color these things black.
SQUARES

To be used after completion of Card 14

Trace around the squares only. Color them.
CIRCLE

To be used after completion of Card 15

Trace only the circles and color them.
TANGRAMS
Cut out these shapes.

To be used after completion of Card 16

Arrange them to make this diamond.
TRIANGLES

To be used after completion of Card 17

Trace only the triangles and color them.
TANGRAMS

Cut out these shapes.

Arrange them to make this ship—paste and color them.
MATCHING SHAPES
To be used after completion of Card 19
Color the circles green, squares blue, and triangles red.
Color the big triangles red and the little triangles blue.

Color the big squares red and the little squares blue.
SORTING BY THICKNESS

To be used after completion of Card 22-23

Color the thick things green and the thin things yellow.
LONG - SHORT

To be used after completion of Card 26

Color the long eel brown. Draw a fish on the short fish line.
LONGER - SHORTER

Color the short belt.

Trace and color the longer ribbon in each pair.

Draw a short fish. Color the long fish brown.
**TALL - SHORT**

To be used with Card 27

Draw these 2 children.

Here is a tall boy.

Here is a short girl.

Color the flag on the tall pole blue. Color the other flags red.
THE SAME AS

In each set, color the things that are the same, the same color.

To be used with Card 28
THE SAME AS

Make the second member in each set look the same as the first.

- Cats
- Fish
- Mice
- Dogs
THE SAME AS

To be used with Card 30

Color the two objects that are alike in each set.
DIFFERENCES

To be used after completion of Card 34

Paste a piece of paper over the drawing that is different. Color the others.
ORDERING BY LENGTH

To be used after completion of Card 35

Color each of the ribbons so that the one below is shorter than the one just above it. The start ribbon is colored.

Color the longest stick brown. Color the shortest stick green.
LONGER - SHORTER

In each set, color the longer things red. Color the shorter things blue.

Draw a pencil shorter than the short pencil.
Draw in the missing flowers so that the flowers will be shown in order of size.

Draw a larger butterfly.
RING THE SET OF BOYS. COLOR THE MEMBERS OF THE SET OF BOYS. MARK X ON THE NOT MEMBERS.
SORTING COMPLEMENTS to be used with Card 42

Color the circles red. Color the not-circles blue.
MEMBERS and NOT MEMBERS  To be used after completion of Card 43

Ring the set of pigs. Next ring the set of small pigs.

Color all the pigs brown. Write X on all the not-pigs.
SETS BY ATTRIBUTE OF NUMBERS

Join all the sets that are equivalent with a line. Color equivalent sets the same color.
**NUMBER 1 & NUMERAL 1**

Color the sets with one member.

Draw one person.

Trace and write the numeral one.
NUMBER 2 & NUMERAL 2 to be used with Card No. 47

Color the sets with two members.

Trace and write the numeral two.

Draw the correct number of triangle in each square.
Color the sets with three members

Trace and write the number 3

Draw the correct number of circles in each square.

1 one
2 two
3 three
NUMBER 4 & NUMERAL 4

To be used with Card 49

**four 4**

Draw 4 balls

Trace and write

Draw 4 bottles

Trace and write
NUMBER OF SETS

To be used with Card 50

Ring the numeral which tells the number of members in each set.

How many things in each square? Write the numeral below.
ONE-CHOICE SORTING

To be used after completion of Card 52

Draw arrows from the set of objects along the road. Obey the road signs.
ONE-CHOICE SORTING

To be used after completion of Card 53
Color the children's clothing to show that they obeyed the sign.

B = blue clothing
SETS BY NOMINATION

To be used after completion of Card 54

Place set braces \{\} around each set. Name the set. Color all members of a set same color.

1. The set of the dog, the pig and the cat.
2. The set of the tree and the bird.
3. The set of the rope, the ball and the flower.

Color the members of this set.
Say the members of the set.
STARTING SET, SET, SUBSET

This is the starting set.

Color all members of the starting set. Write X on the members of the set of balls. Draw a line under the members of the subset of small balls.
EMPTY SET

To be used after completion of Card 59

Write X on each empty set. Color the not empty sets.

Set of drinks

Set of food

Set of flowers

Set of crayons
To be used after completion of Card 60

From the starting set draw the sets named below. Write X on the empty set.

1. Starting set:

   - The set of banana and coconut.
   - Set of the tree and the bird.
   - Set of the leaf, shell and flower.

2. Starting set:

   - The set of triangles.
   - The set of squares.
   - The set of circles.
A LONG TIME, A SHORT TIME

Here is a way to go to Guam that would take a long time.

Bill wants to go to school. Draw a red line to show him how to get there in a short time.

Draw a picture to show how to travel to Guam in a short time.

Draw a blue line to show him a way that will take a long time.
Draw a cat far away from the house.
Draw a girl far away from the tree.

Draw a pig near the tree.
Draw a man near the house.
COVERS MORE THAN, LESS THAN, AS MUCH AS  Card 65

Color the ones that cover more, red. Color the ones that cover less, green. Color the ones that cover as much as, orange.
INSIDE - OUTSIDE

Color the pigs inside the pen black.

Color the fishes outside the net red.
SYMMETRY

To be used after completion of Card 68

Complete each drawing so that the two halves look the same.
REFLECTIONS

To be used after completion of Card 69

Color the pictures which show the way things would look in a mirror.
Write X on the pictures which do not show the way things would look in a mirror.
Place your hands on top of these hands. Which is the left hand? Which is the right hand? Draw a ring on the right hand. Draw a watch on the left wrist.

Color the left zori red. Color the right zori blue.
MATCHING SIZES

In each set, color the things that are the same size, the same color.

To be used with Card 71
Here is a long needlefish. Draw another fish as long as this one.

Here is a long belt. Draw another belt as long as this one.
TANGRAMS

Color these shape. Cut them out.

Paste them together to make this truck.
Draw a flagpole and flag as tall as the tree.

Draw a girl that is not as tall as Maria.
Draw a boy as tall as Maria.
AS HEAVY AS, NOT AS HEAVY AS  To be used after completing Cards 76 & 77

Ring the object that belongs in each balance pan.

As heavy as

Not as heavy as

As heavy as

As heavy as
REFLECTIONS
To be used after completion of Card 78

Draw the reflection of the boat in the water. Color the boat and its reflection.
OUTSIDE

Trace the boundaries.

To be used with Card 79

Draw some flowers inside the boundaries.
Draw some trees outside the boundaries.
Trace the boundary. Write X on the boundary.

Draw some chicken inside the boundary.
Draw some pigs outside the boundary.
SORTING SHAPES

To be used with Card 81

Draw birds in the squares, houses in the circles and pigs in the triangles. Color them.
WRITING NUMERAL ONE - 1

Trace the numeral one. Follow the arrows.

Trace the numeral one. Follow the arrows.

Write the numeral one. Begin at the dot.

Write the numeral one.

Write the numeral one.
WRITING ONE

Trace the word one. Start at the dots.

one one one

Trace the word one.

one one one

Write the word one.

Write the word one.

Ring the word one

One ore one

1 one

Draw one house.

Write the numeral one in each square.

I
two birds

Trace the numeral two. Follow the arrows.

Write the numeral two. Begin at the dot.

Write the numeral two.

Write the numeral two.

Draw two things that you can see in the sky.

2

2
WRITING TWO

2 two

Trace the word two. Start at the dots.

two two two two

Trace the word two.

two two two two

Write the word two.

Write the word two.

Ring the word two.

two two two two
WRITING NUMERAL THREE - 3

3

three turtles

Draw 3 things that live in the sea.

3

Trace the numeral three. Follow the arrows.

3 3 3 3 3 3

Trace the numeral three. Follow the arrows.

3 3 3 3 3 3

Write the numeral three. Begin at the dot.

Write the numeral three.

Write the numeral three.

Write the numeral three.
WRITING THREE

Trace the word three. Start at the dots.

three three three

Trace the word three.

three three three

Write the word three.

three three three

Write the word three.

three three three

Ring the word three.

three tree thee

3 three

Draw three birds.

Write the numeral three.

3

3
Writing Numeral Four - 4

Trace the numeral four. Follow the arrows.

Trace the numeral four. Follow the arrows.

Write the numeral four. Begin at the dot.

Write the numeral four.

Write the numeral four.
WRITING FOUR

Draw four flowers.
Write the numeral four.

four

Trace the word four. Start at the dots.

four four four four

Trace the word four.

four four four four

Write the word four.

Write the word four.

Ring the word four.

fuor four four four
**WRITING NUMERAL FIVE - 5**

**Trace the numeral five. Follow the arrows.**

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  5 5 5 5 5 5
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**Trace the numeral five. Follow the arrows.**

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  5 5 5 5 5 5
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**Write the numeral five. Begin at the dot.**

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**Write the numeral five.**

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**Write the numeral five.**

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**Draw 5 things that grow on trees.**

- five leaves

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**Write the numeral five.**
WRITING FIVE

Trace the word five. Start at the dots.

five five five

Trace the word five.

five five five

Write the word five.

five five five

Write the word five.

five five five

Ring the word five.

four five five five

Write the numeral five.

5

Draw five leaves.

Write the numeral five.

5 5 5 5 5
Trace the numeral six. Follow the arrows.

Trace the numeral six. Follow the arrows.

Trace the numeral six. Follow the arrows.

Write the numeral six. Begin at the dots.

Write the numeral six.

Write the numeral six.

Write the numeral six.
WRITING SIX

6 six

Draw six squares.
Write the numeral six.

Trace the word six. Start at the dots.

Trace the word six.

Write the word six.

Write the word six.

Ring the word six.

SOX SAX SIX
Trace the numeral seven. Follow the arrows.

7 7 7 7 7 7

Trace the numeral seven. Follow the arrows.

7 7 7 7 7 7

Write the numeral seven. Begin at the dot.

Draw 7 things that you can find at home.

Write the numeral seven.

Write the numeral seven.
WRITING SEVEN

Trace the word seven. Start at the dots.

seven seven seven

Trace the word seven.

seven seven seven

Write the word seven.

seven seven seven

Write the word seven.

seven seven seven

Ring the word seven.

seven seven seven seven seven seven seven

7 seven

Draw seven stars.

Write the numeral seven.

7

7

7
WRITING NUMERAL EIGHT - 8

Trace the numeral eight. Follow the arrows.

Trace the numeral eight. Follow the arrows.

Write the numeral eight. Begin at the dot.

Write the numeral eight.

Write the numeral eight.

Draw 8 things that you have in school.

8 eight pigs
WRITING EIGHT

8 eight

Draw eight hats.

Write the numeral 8.

Trace the word eight. Start at the dot.

eight eight

Trace the word eight.

eight eight

Write the word eight.

Write the word eight.

Ring the word eight.

eight eight eight
WRITING NUMERAL NINE - 9

Draw 9 things you can find at the store.

Write the numeral nine.

Trace the numeral nine. Follow the arrows.

Write the numeral nine. Begin at the dot.

Write the numeral nine.
WRITING NINE

Trace the word nine. Start at the dots.

n i n e  n i n e  n i n e  n i n e

Trace the word nine.

n i n e  n i n e  n i n e  n i n e

Write the word nine.

Write the word nine.

Draw nine nails.

Write the numeral nine

9 nine

Ring the word nine.

n e n i  n i r e  n i n e  n i n e
WRITING TEN - 10

Trace ten. Follow the arrows.

Trace ten. Follow the arrows.

Trace ten. Follow the arrows.

Draw 10 things that you know the English word for.

Write ten. Begin at the dots.

Write ten.

Write ten.
WRITING TEN

10 ten

Draw ten triangles

Trace ten. Start at the dots.

\underline{ten\ ten\ ten\ ten}

Trace the word ten.

\underline{ten\ ten\ ten\ ten}

Write the word ten.

Write the word ten.

Ring the word ten.

\underline{tin\ ten\ ten\ ten}
WRITE THE NUMERAL ZERO

Trace the number zero. Follow the arrows.

Trace the numeral zero. Follow the arrows.

Write the numeral zero. Begin at the dot.

Write the numeral zero.

Write the numeral zero.
WRITING ZERO

0 zero

Draw a box with zero crayons.

Write 0 in each square.

Trace the word zero. Start at the dots.

zero zero zero zero

Trace the word zero.

zero zero zero zero

Write the word zero.

zero zero zero zero

Write the word zero.

Ring the word zero.

zero zero zero zero
NUMBER SEQUENCE - 0 to 5

Connect the dots in numerical order. Color the pictures.

Read these numbers:

0 1 2 3 4 5
# NUMBERS ZERO TO FIVE

Read the number words. Write the numerals next to the words. Make sets with that many members.

<table>
<thead>
<tr>
<th></th>
<th>zero</th>
<th>one</th>
<th>two</th>
</tr>
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<tbody>
<tr>
<td>three</td>
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<td>four</td>
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<td>five</td>
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</tbody>
</table>
NUMBERS ZERO TO FIVE

Draw a line from the numeral to the set.

Ring the correct word.

zero one
three two
five four
two one
three five
zero four
NUMBERS 5 to 10

5 6 7 8 9 10
<table>
<thead>
<tr>
<th>Numbers</th>
<th>Six to Ten</th>
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<tbody>
<tr>
<td>Read the number word. Write the correct numeral next to it. Make sets with that many members.</td>
<td></td>
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<tr>
<td>seven</td>
<td>six</td>
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<tr>
<td>nine</td>
<td>eight</td>
</tr>
<tr>
<td>ten</td>
<td></td>
</tr>
</tbody>
</table>
NUMBER SEQUENCE - 0 to 10

Read these numbers in order.

0 1 2 3 4 5
6 7 8 9 10
REVIEW NUMERALS 1 to 5

Write the correct numeral below the set. The first one has been started for you.

4

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The first row contains five bananas.

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The second row contains a fish.

---

The third row contains butterflies.

---

The fourth row contains three cans.

---

The fifth row contains sunflowers.

---

The sixth row contains baseballs.
NUMERALS 6 to 10
Write the correct numeral below the set.

- Pencils: 5
- Buttons: 7
- Bottles: 6
- Chickens: 6
- Matches: 7
- Candies: 6
<table>
<thead>
<tr>
<th>NUMERALS 1 to 9</th>
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<tbody>
<tr>
<td>1</td>
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