TCAP/CRA

2014

1

Phase II
Tens and Ones Task
Anchor Set

Tens and Ones Task

Drawings like these can be used to show tens and ones:

A Rod of Ten   A One

a.   Show each number below by drawing rods of ten and ones.

First Number

64

Second Number

46

Tens and Ones Task

b. Alex has 64 pencils. Chris has 46 pencils. Use words and what you know about tens and ones to explain who has more pencils.

c. In the box, write >, =, or < to make a true statement.

64 ☐ **46**

Scoring Guide

The CCSS for Mathematical Content (2 points)

1.NBT.B.2   Represents two-digit numbers as tens and ones in part a. Student may do this by representing any combination of tens and ones as long as the total represented is accurate.

    (1 Point)

1.NBT.B.3   Compares with the greater or less than sign two two-digit numbers to determine which is greater in part c.

    (1 Point)

The CCSS for Mathematical Practice (1 point)

MP3   Constructs an argument to support comparison of quantities. Student may:
- state that 64 has more tens; it has 6 tens and 46 has only 4 tens, and therefore 64 is greater than 46; or
- state that 46 has less tens; it has 4 tens and 64 has 6 tens, and therefore 46 is less than 64.

(1 Point)
(MP3: Construct viable arguments and critique the reasoning of others.)

TOTAL POINTS: 3

The CCSS for Mathematical Content Addressed In This Task

Understand place value.
1.NBT.B.2   Understand that the two digits of a two-digit number represent amounts of tens and ones.
1.NBT.B.3   Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.

The CCSS for Mathematical Practice*
1.   Make sense of problems and persevere in solving them. 2.   Reason abstractly and quantitatively. 3.   Construct viable arguments and critique the reasoning of others. 4.   Model with mathematics. 5.   Use appropriate tools strategically. 6.   Attend to precision. 7.   Look for and make use of structure. 8.   Look for and express regularity in repeated reasoning.
* Gray type indicates Mathematical Practices not addressed in this assessment.

A-1a

Tens and Ones Task

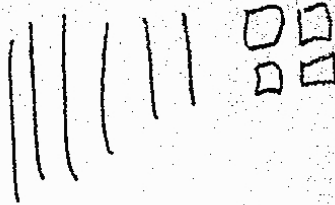Drawings like these can be used to show tens and ones:

A Rod of Ten   **A One**

a.   Show each number below by drawing rods of ten and ones.

First Number

Second Number

64

46

Tens and Ones Task

b.   Alex has 64 pencils. Chris has 46 pencils. Use words and what you
     know about tens and ones to explain who has more pencils.

Alex has more cause
6 tens is more than
4 tens. 6 tens is 60
4 tens is 40.

c.   In the box, write >, =, or < to make a true statement.

64   $\boxed{>}$ 46

Anchor 1   Litho 00551200153

Total Content Points: 2   (1.NBT.B.2, 1.NBT.B.3)

Total Practice Points: 1   (MP3)

In Part A, by drawing a combination of six rods of ten and four ones for the first number (64) and four rods of ten and six ones for the second number (46), the student represents two-digit numbers as tens and ones (1.NBT.B.2). In Part B, the student constructs an argument to support the comparison of quantities by comparing the tens in each number and showing Alex has more ("Alex has more cause 6 tens is more than 4 tens. 6 tens is 60 4 tens is 40") (MP3). The student correctly compares 64 and 46 with the greater than sign in Part C (1.NBT.B.3).

Total Awarded Points: 3 out of 3

Tens and Ones Task

Drawings like these can be used to show tens and ones:

A Rod of Ten   **A One**

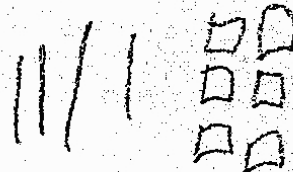a.   Show each number below by drawing rods of ten and ones.

First Number
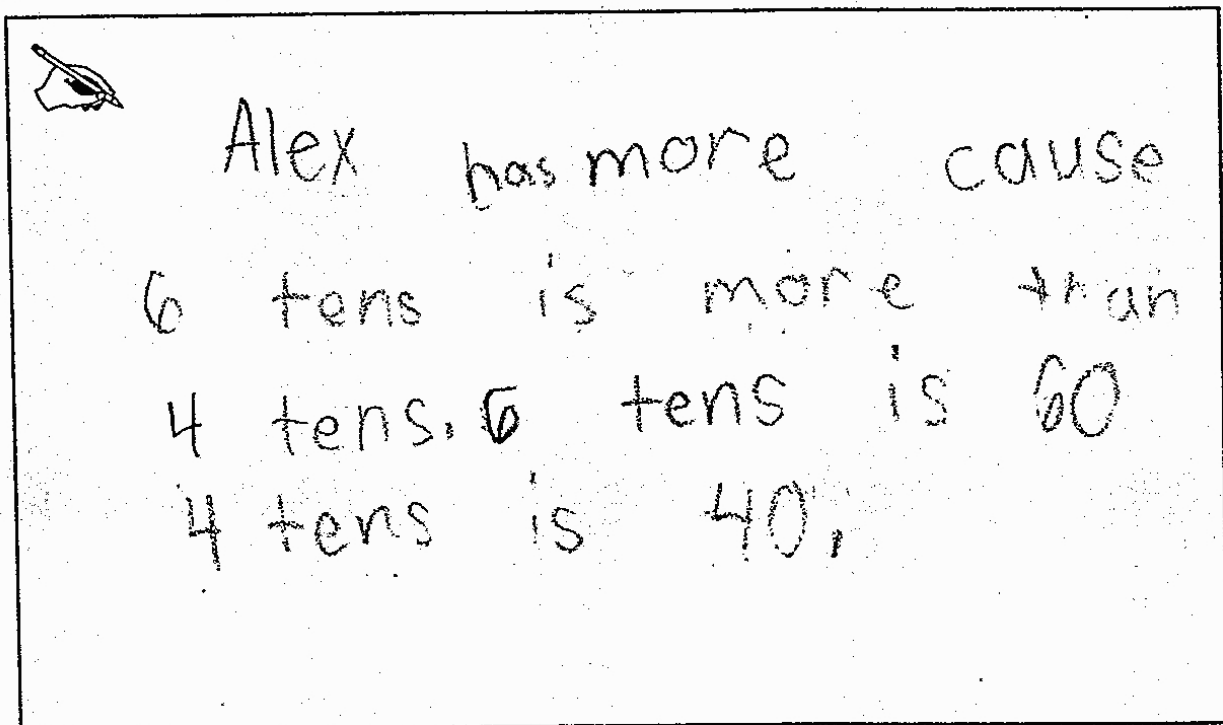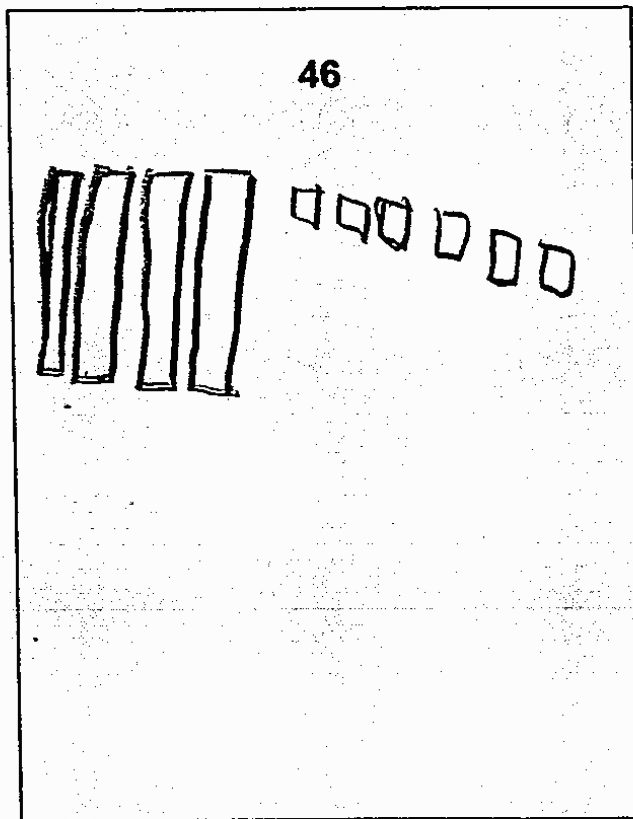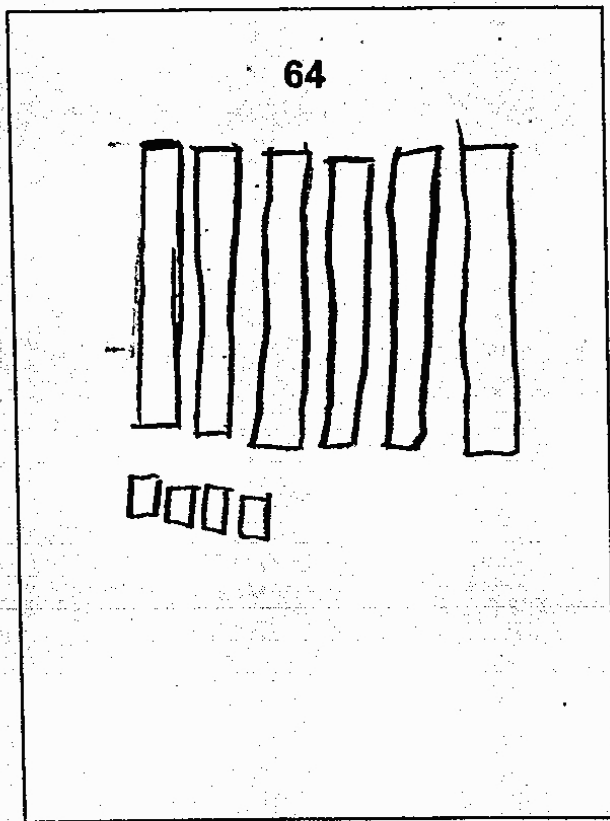
64

Second Number

46

Tens and Ones Task

b. Alex has 64 pencils. Chris has 46 pencils. Use words and what you know about tens and ones to explain who has more pencils.

Alex has more because 64 is gerater than 46.

tens → biger 64   46 ← tens

c. In the box, write >, =, or < to make a true statement.

64 $\boxed{>}$ 46

Anchor 2   Litho 00501200159

Total Content Points: 2   (1.NBT.B.2, 1.NBT.B.3)

Total Practice Points: 1   (MP3)

In Part A, by drawing a combination of six rods of ten and four ones for the first number (64) and four rods of ten and six ones for the second number (46), the student represents two-digit numbers as tens and ones (1.NBT.B.2). In Part B, by stating that Alex has more ("because 64 is gerater than 46"), and by showing arrows pointing to the tens places in 64 and 46 and indicating the 6 as "biger," the student constructs an argument to support the comparison of quantities (MP3). The student correctly compares 64 and 46 with the greater than sign in Part C (1.NBT.B.3).
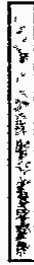
Total Awarded Points: 3 out of 3

A-3a

Tens and Ones Task

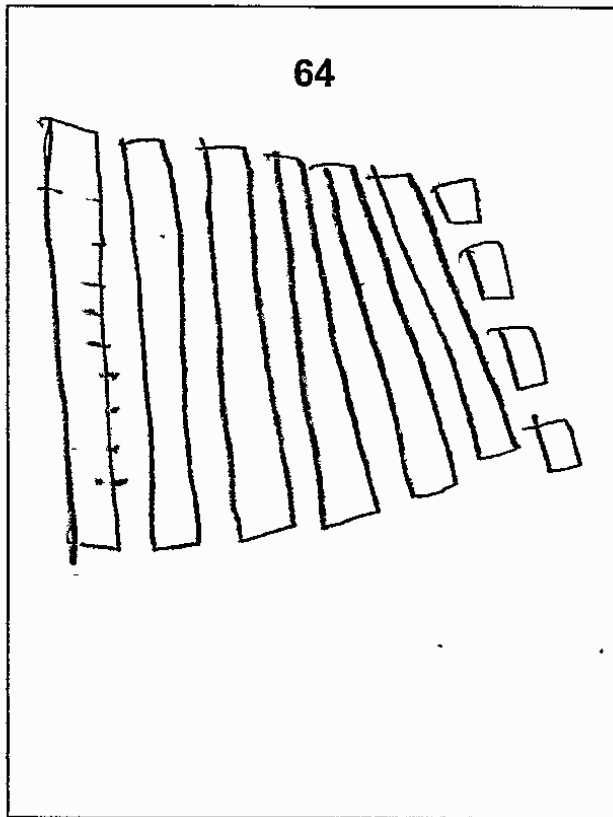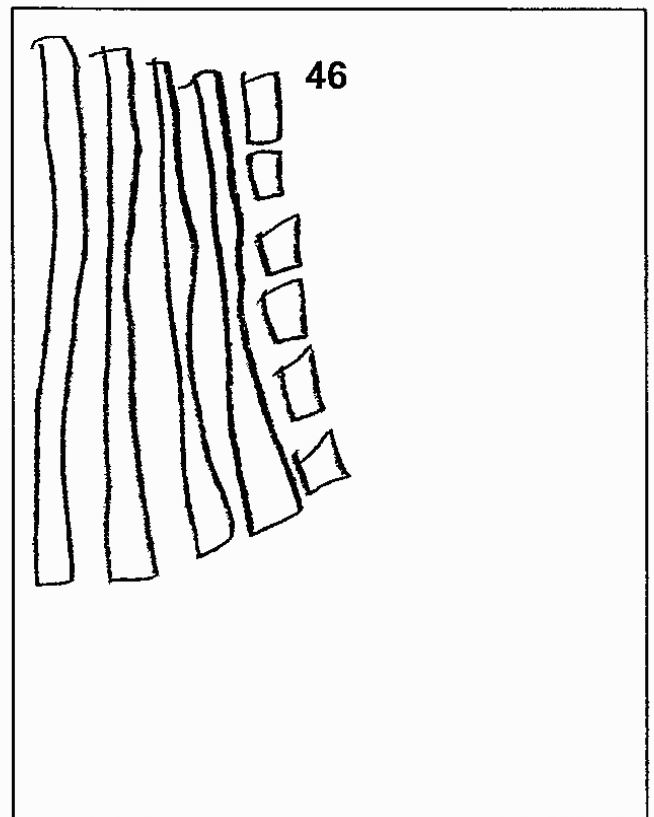Drawings like these can be used to show tens and ones:

A Rod of Ten   **A One**

a.   Show each number below by drawing rods of ten and ones.
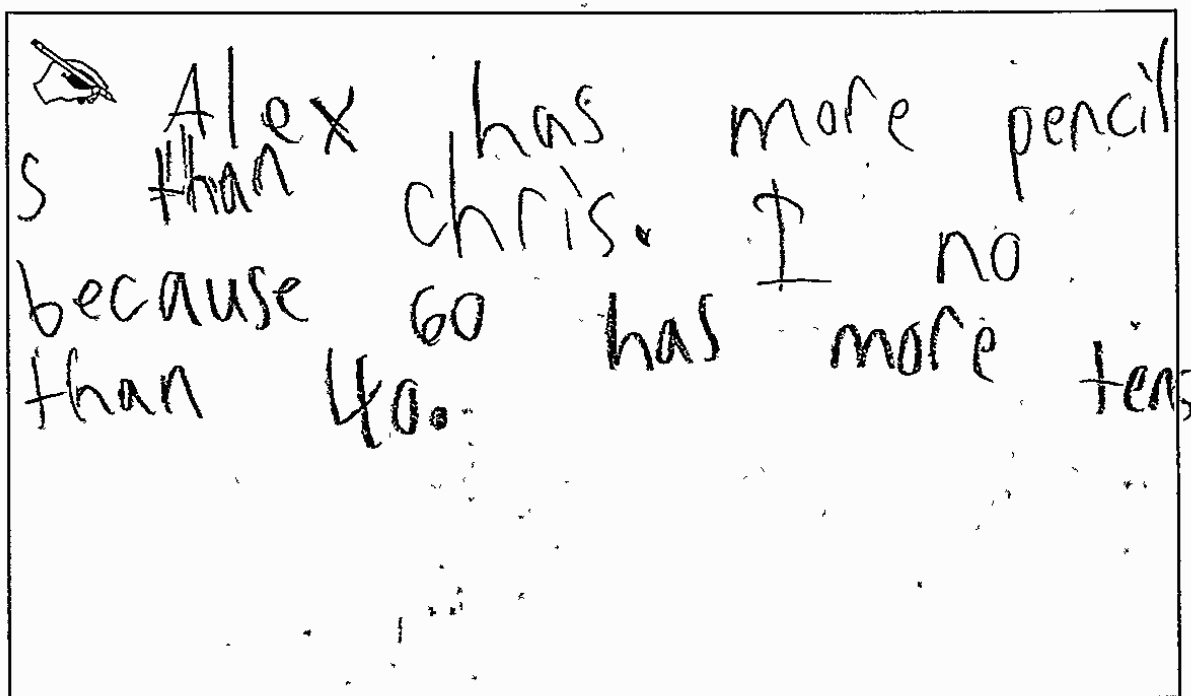
First Number

64

Second Number

46

Tens and Ones Task

b.   Alex has 64 pencils. Chris has 46 pencils. Use words and what you know about tens and ones to explain who has more pencils.

Alex has more pencils than chris. I no because 60 than 40. has more tens

c.   In the box, write >, =, or < to make a true statement.

64 [>] 46

Anchor 3   Litho 00111200100

Total Content Points: 2   (1.NBT.B.2, 1.NBT.B.3)

Total Practice Points: 1   (MP3)

In Part A, by drawing a combination of six rods of ten and four ones for the first number (64) and four rods of ten and six ones for the second number (46), the student represents two-digit numbers as tens and ones (1.NBT.B.2). In Part B, the student constructs an argument to support the comparison of quantities by comparing the tens in each number and showing Alex has more ("I no because 60 has more tens than 40") (MP3). The student correctly compares 64 and 46 with the greater than sign in Part C (1.NBT.B.3).

Total Awarded Points: 3 out of 3

A-4a

Tens and Ones Task

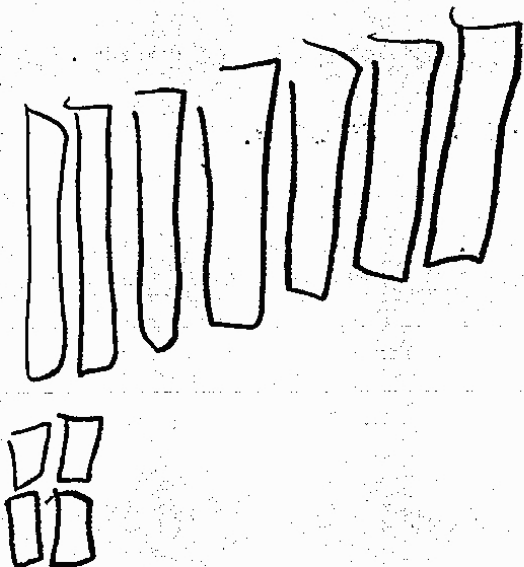Drawings like these can be used to show tens and ones:

A Rod of Ten   **A One**

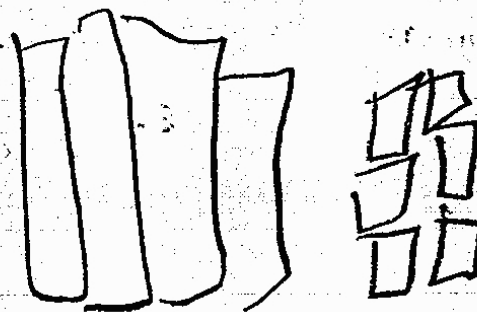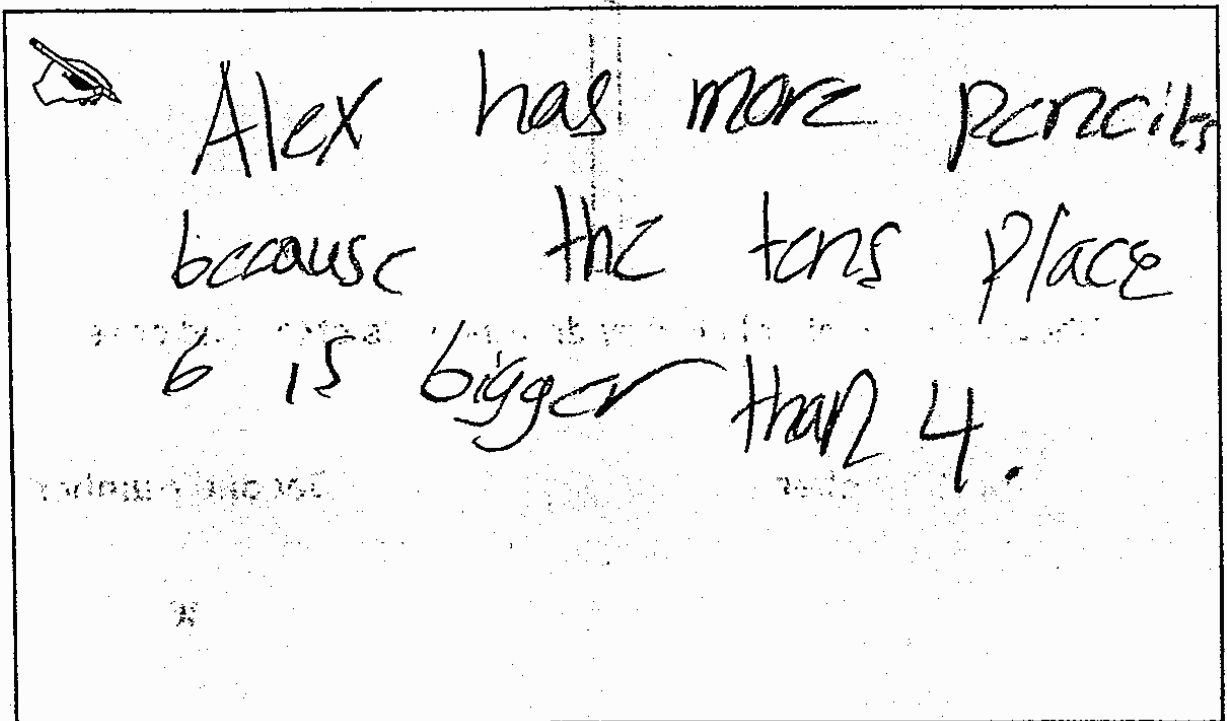a.   Show each number below by drawing rods of ten and ones.

First Number

64

Second Number

46

A-4b

Tens and Ones Task

b. Alex has 64 pencils. Chris has 46 pencils. Use words and what you know about tens and ones to explain who has more pencils.

> Alex has more pencils because the tens place 6 is bigger than 4.

c. In the box, write >, =, or < to make a true statement.

64 $\boxed{>}$ 46

Anchor 4   Litho 00481200153

Total Content Points: 1   (1.NBT.B.3)

Total Practice Points: 1   (MP3)

In Part A, the student correctly represents the second two-digit number (46) as tens and ones by drawing a combination of four rods of ten and six ones, but incorrectly represents the first two-digit number (64) by drawing seven rods of ten and four ones (74) (no credit for 1.NBT.B.2). In Part B, the student constructs an argument to support the position that Alex has more, stating, "because the tens place 6 is bigger than 4," and thus compares the tens place in each number to show Alex has more (MP3). The student correctly compares 64 and 46 with the greater than sign in Part C (1.NBT.B.3).

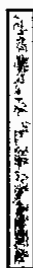Total Awarded Points: 2 out of 3

Tens and Ones Task

Drawings like these can be used to show tens and ones:
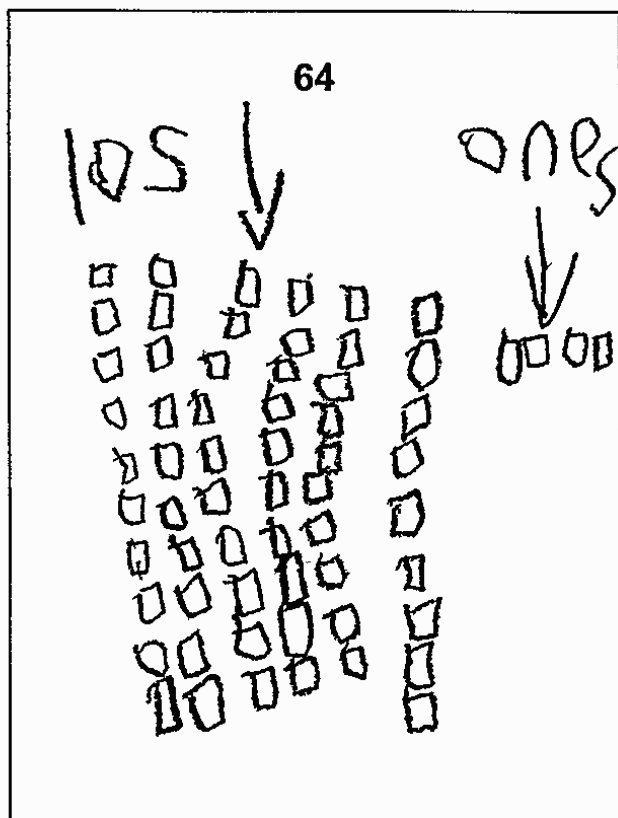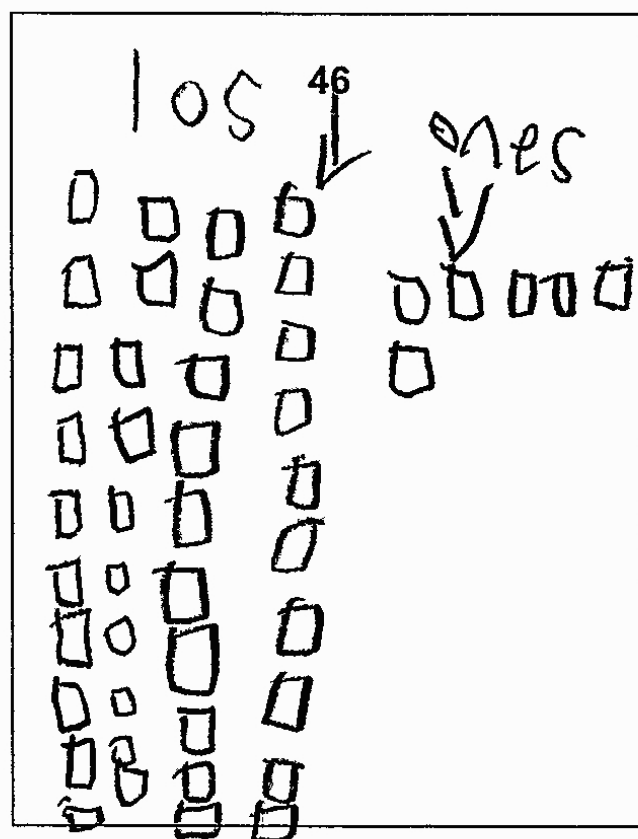
A Rod of Ten   A One

a.   Show each number below by drawing rods of ten and ones.

First Number

Second Number

Tens and Ones Task

b.   Alex has 64 pencils. Chris has 46 pencils. Use words and what you know about tens and ones to explain who has more pencils.

if 64 has lo bes more then 46 and 46 2 more ones 64 is more.

c.   In the box, write >, =, or < to make a true statement.

64 $\boxed{>}$ 46

Anchor 5   Litho 00391200100

Total Content Points: 2   (1.NBT.B.2, 1.NBT.B.3)

Total Practice Points: 0

In Part A, although the student represents two-digit numbers by drawing individual "ones," for the first number these are grouped into 6 separate columns of 10 and labeled as "10s," which along with the four ones gives a correct representation for 64. For the second number, the "ones" are grouped into 4 columns of 10, which along with the six ones gives a correct representation for 46 (1.NBT.B.2). In Part B, the student does not construct a viable argument to support the position that "64 is more," not comparing the tens in each number or indicating in some way that 60 has more tens than 40 (no credit for MP3). The student correctly compares 64 and 46 with the greater than sign in Part C (1.NBT.B.3).

Total Awarded Points: 2 out of 3

Tens and Ones Task

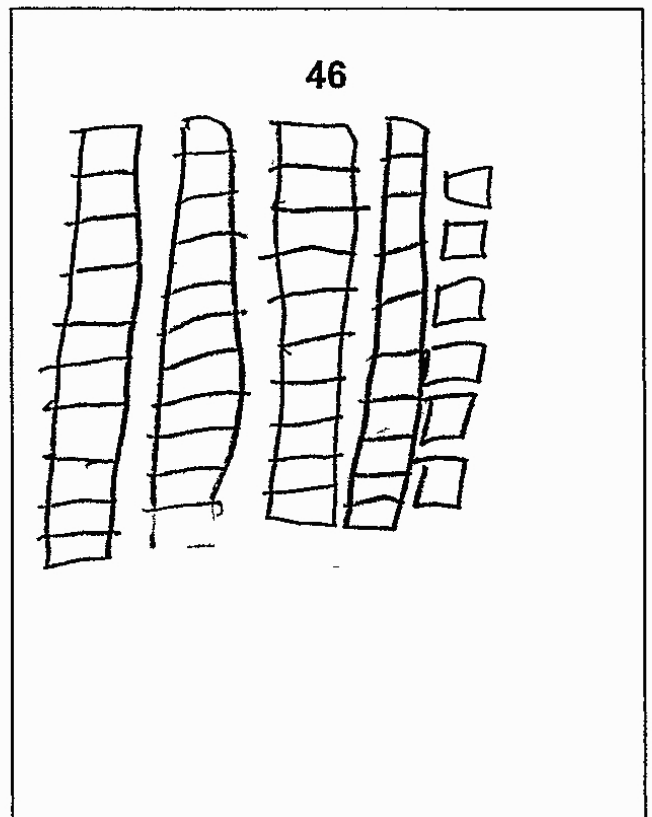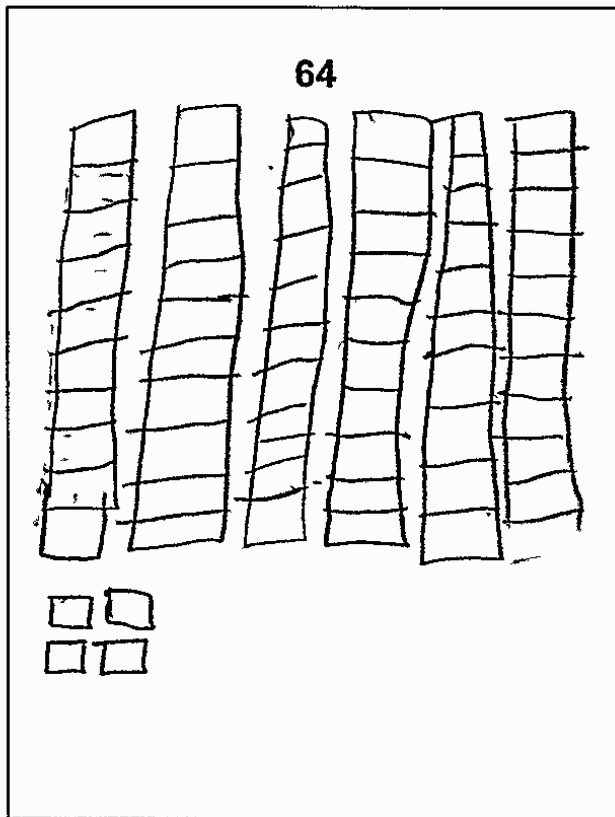Drawings like these can be used to show tens and ones:

A Rod of Ten   **A One**

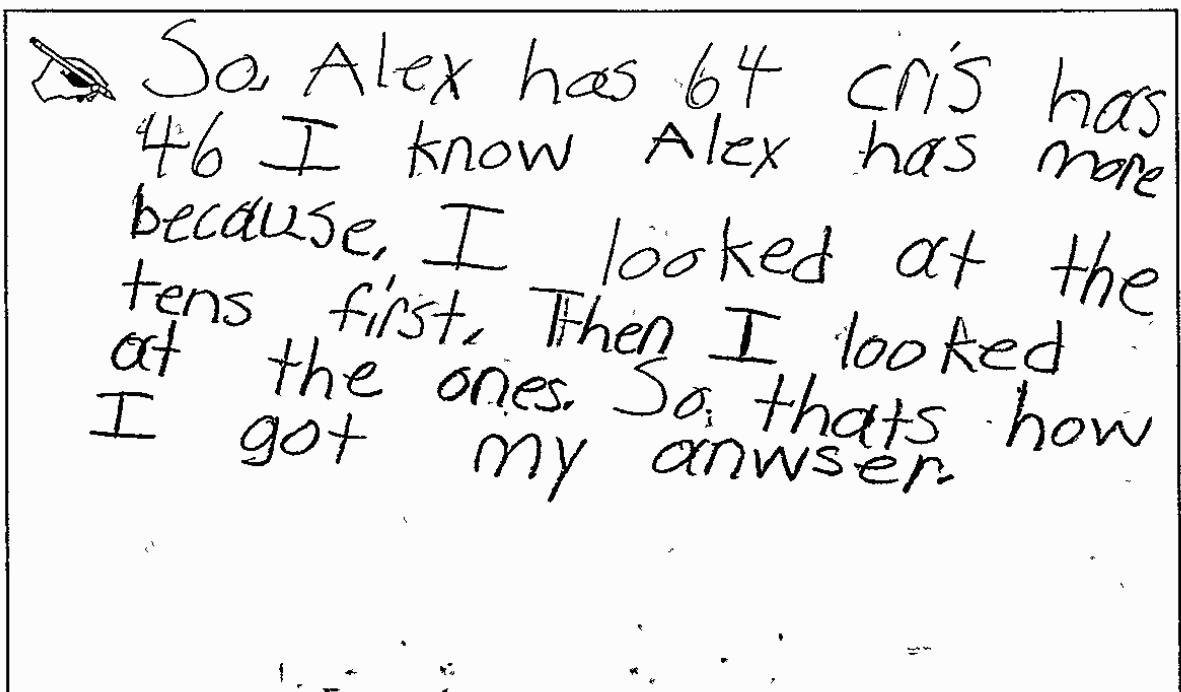a.   Show each number below by drawing rods of ten and ones.

First Number

Second Number

Tens and Ones Task

b. Alex has 64 pencils. Chris has 46 pencils. Use words and what you
    know about tens and ones to explain who has more pencils.

So Alex has 64 cris has 46 I know Alex has more because, I looked at the tens first. Then I looked at the ones. So, thats how I got my anwser.

c. In the box, write > = or < to make a true statement.

64 ⟩ 46

Anchor 6   Litho 00051200100

Total Content Points: 2   (1.NBT.B.2, 1.NBT.B.3)

Total Practice Points: 0

In Part A, by drawing a combination of six rods of ten and four ones for the first number (64) and four rods of ten and six ones for the second number (46), the student represents two-digit numbers as tens and ones (1.NBT.B.2). In Part B, the student states that Alex has more pencils, but does not construct a viable argument to support this position. Instead, the student states only that "I looked at the tens first. Then I looked at the ones," without comparing the tens in each number to show that 60 has more tens than 40, or in some other way further explaining the significance of the tens (no credit for MP3). The student correctly compares 64 and 46 with the greater than sign in Part C (1.NBT.B.3).

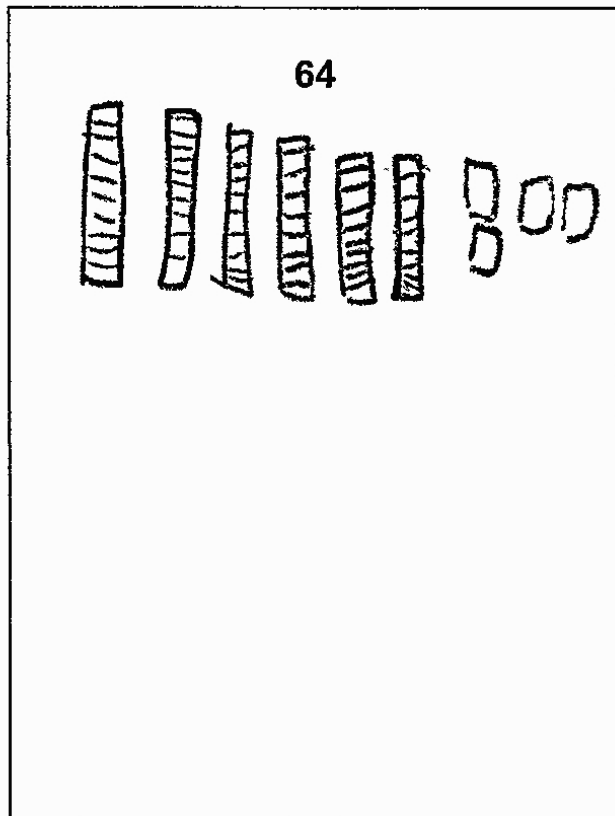Total Awarded Points: 2 out of 3

Tens and Ones Task

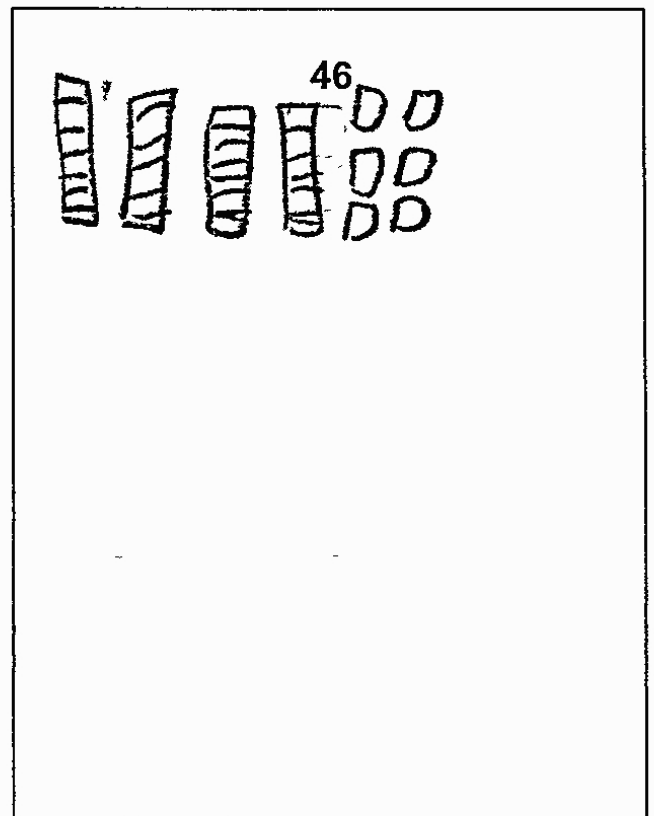Drawings like these can be used to show tens and ones:

A Rod of Ten   **A One**

a.   Show each number below by drawing rods of ten and ones.
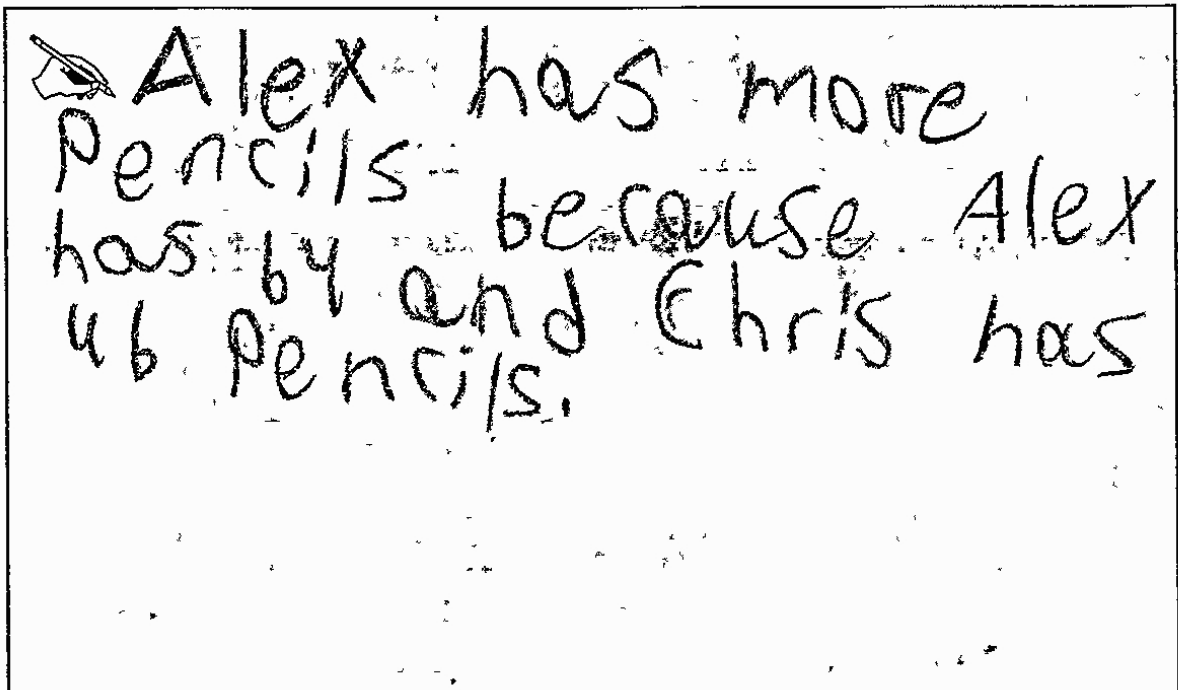
First Number   **Second Number**

Tens and Ones Task

b. Alex has 64 pencils. Chris has 46 pencils. Use words and what you
know about tens and ones to explain who has more pencils.

> Alex has more
Pencils because Alex
has 64 and Chris has
46 Pencils.

c. In the box; write >, =, or < to make a true statement.

64 [>] 46

Anchor 7   Litho 00381200100

Total Content Points: 2   (1.NBT.B.2, 1.NBT.B.3)

Total Practice Points: 0

In Part A, by drawing a combination of six rods of ten and four ones for the first number (64) and four rods of ten and six ones for the second number (46), the student represents two-digit numbers as tens and ones (1.NBT.B.2). In Part B, the student states that Alex has more pencils, but by stating only the given information ("because Alex has 64 and Chris has 46 pencils") without comparing the tens in each number, does not construct a viable argument to support this position (no credit for MP3). The student correctly compares 64 and 46 with the greater than sign in Part C (1.NBT.B.3).

Total Awarded Points: 2 out of 3

A-8a

Tens and Ones Task

Drawings like these can be used to show tens and ones:

A Rod of Ten   **A One**

a.   Show each number below by drawing rods of ten and ones.

First Number   **Second Number**
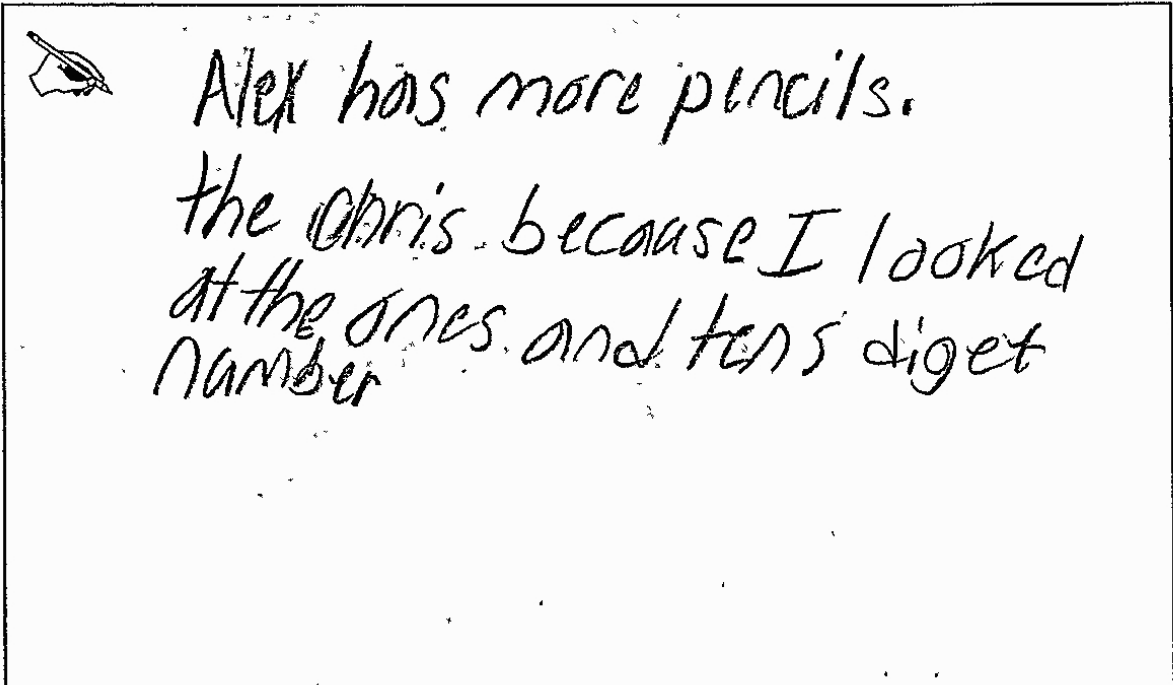
64

ones 4

46

ones 6

A-8b

Tens and Ones Task

b.   Alex has 64 pencils. Chris has 46 pencils. Use words and what you
     know about tens and ones to explain who has more pencils.

> Alex has more pencils.
> the Chris because I looked
> at the ones and tens diget
> namber

c.   In the box, write >, =, or < to make a true statement.

64 ☒ 46

Anchor 8   Litho 00221200100

Total Content Points: 1   (1.NBT.B.2)

Total Practice Points: 0

In Part A, by drawing a combination of six rods of ten and four ones for the first number (64) and four rods of ten and six ones for the second number (46), the student represents two-digit numbers as tens and ones (1.NBT.B.2). In Part B, the student states that Alex has more pencils, but does not construct a viable argument to support this position. The student states only that "I looked at the ones and tens diget number" without further comparing the number of tens in each number or in some way explaining the significance of the tens (no credit for MP3). The student incorrectly compares 64 and 46 with the less than sign in Part C (no credit for 1.NBT.B.3).

Total Awarded Points: 1 out of 3

A-9a

Tens and Ones Task
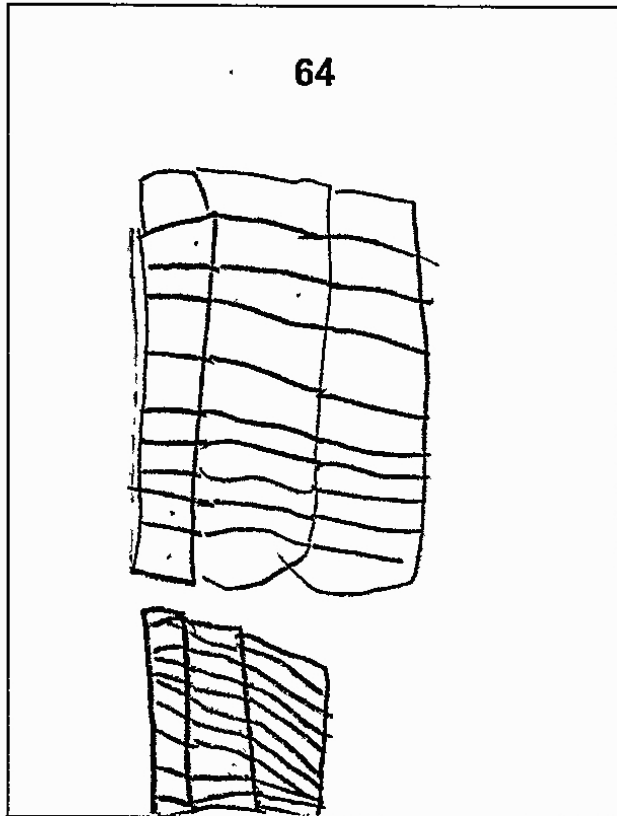
Drawings like these can be used to show tens and ones:
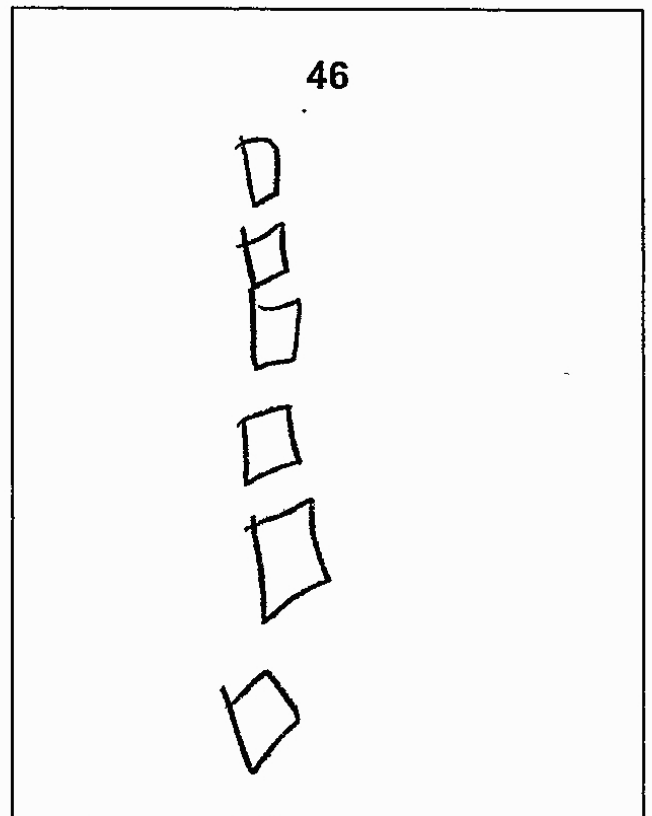
A Rod of Ten   A One

a.   Show each number below by drawing rods of ten and ones.

First Number

64

Second Number

46

Tens and Ones Task

b. Alex has 64 pencils. Chris has 46 pencils. Use words and what you
    know about tens and ones to explain who has more pencils.

Chri

If Alex has 64 pencils
and if Christmas 46 Than Alex gots more.

c. In the box, write >, =, or < to make a true statement.

    64   > 46

Anchor 9   Litho 00021200100

Total Content Points: 1   (1.NBT.B.3)

Total Practice Points: 0

In Part A, the student incorrectly represents two-digit numbers as tens and ones by drawing a combination of only six rods of ten (60) to show the first number (64) and only six ones (6) to show the second number (46) (no credit for 1.NBT.B.2). In Part B, the student states that Alex has more pencils, but by stating only the given information ("If Alex has 64 pencils and if Chris has 46 than Alex gots more"), does not construct a viable argument to support this position through comparing the tens in each number to show 60 has more tens than 40 (no credit for MP3). The student correctly compares 64 and 46 with the greater than sign in Part C (1.NBT.B.3).

Total Awarded Points: 1 out of 3

Tens and Ones Task

Drawings like these can be used to show tens and ones:

A Rod of Ten   **A One**

a.   Show each number below by drawing rods of ten and ones.
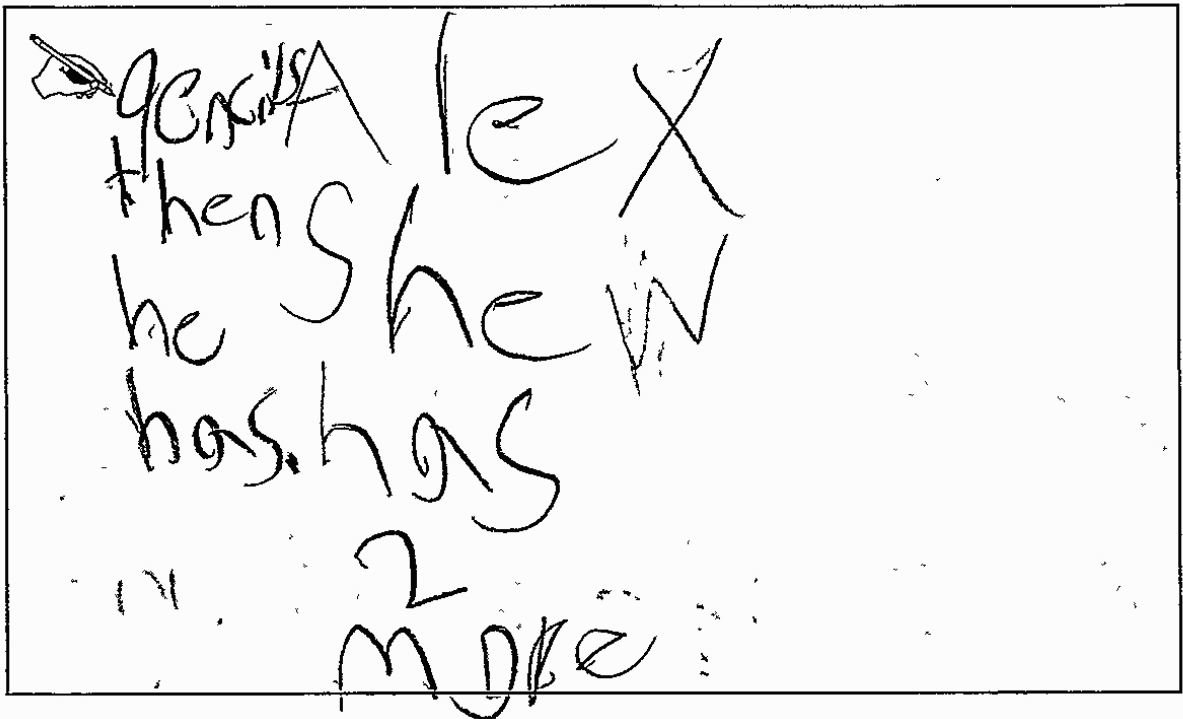
First Number   **Second Number**

64

Tens and Ones Task

b.   Alex has 64 pencils. Chris has 46 pencils. Use words and what you know about tens and ones to explain who has more pencils.

pencils Alex then he she has. has in 2 more

c.   In the box, write >, =, or < to make a true statement.

64 ☐ 46

Anchor 10   Litho 00171200100

Total Content Points: 0

Total Practice Points: 0

In Part A, by drawing only ones to show 64 and 46, the student does not correctly represent two-digit numbers as a combination of tens and ones (no credit for 1.NBT.B.2). In Part B, the student does not construct a viable argument to support the comparison of quantities, stating only that Alex "has 2 more" (no credit for MP3). The student does not compare 64 and 46 with the greater than or less than sign in Part C (no credit for 1.NBT.B.3).

Total Awarded Points: 0 out of 3