

Thinking Kids'™

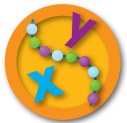
MATH

Kindergarten

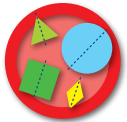
NCTM Strands Covered:



Number and Operations



Algebra



Geometry



Measurement



Data Analysis and Probability



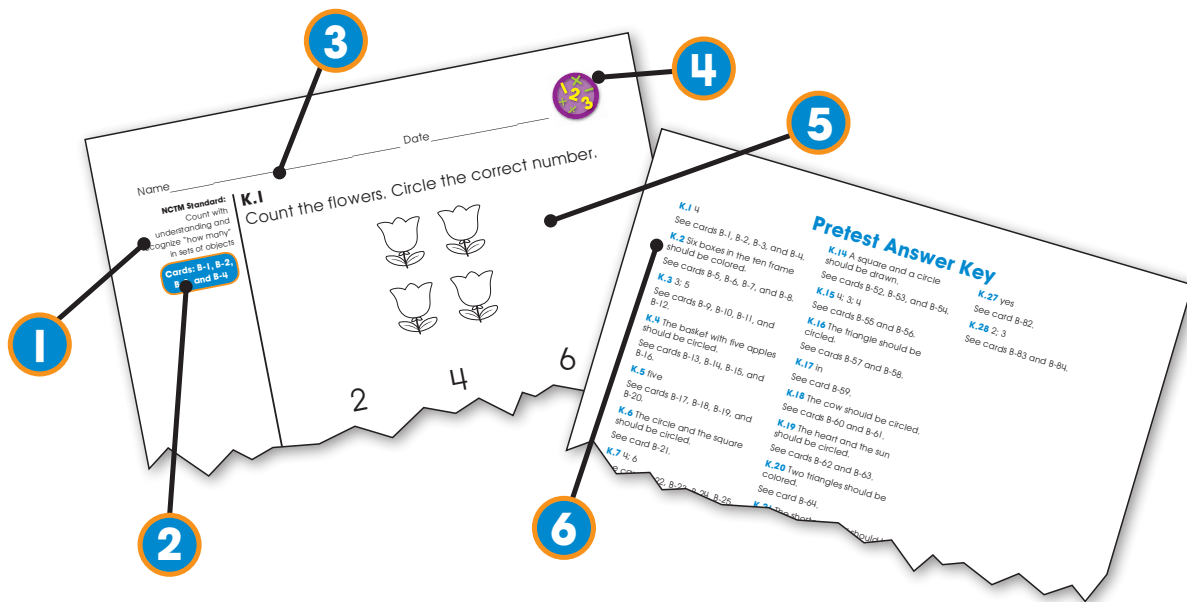
Pretest

How to Use This Assessment

This Pretest introduces your students to the concepts and objectives from the *Thinking Kids™ Math* Grade K boxed set. Before giving your students cards from the set, use this Pretest to determine if they have a sufficient foundation to begin this box or to determine what skills and concepts to reinforce.

Once you have scored the Pretest, use the **Cards** section (see number 2 below) to direct you to the appropriate cards in the *Thinking Kids™ Math* boxed set. After students have completed the cards for Grade K, have them complete the Posttest so that you can assess mastery and identify students who need reteaching and further practice.

Here are the specific features of this assessment:



- 1 NCTM standard that the activity addresses
- 2 Corresponding *Thinking Kids™ Math* card(s) (Use these cards for teaching, reinforcing, or remediating the standard.)
- 3 Grade level and problem number
- 4 Symbol for the NCTM strand covered in the activities (See page I for a key depicting each strand.)
- 5 Test item that relates to the standard and assesses students' readiness levels
- 6 Activity answers and corresponding cards to use to assess the standard

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Name _____ Date _____

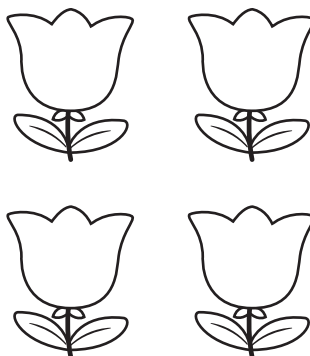
NCTM Standard:

Count with understanding and recognize "how many" in sets of objects

Cards: B-1, B-2, B-3, and B-4

K.1

Count the flowers. Circle the correct number.



2

4

6

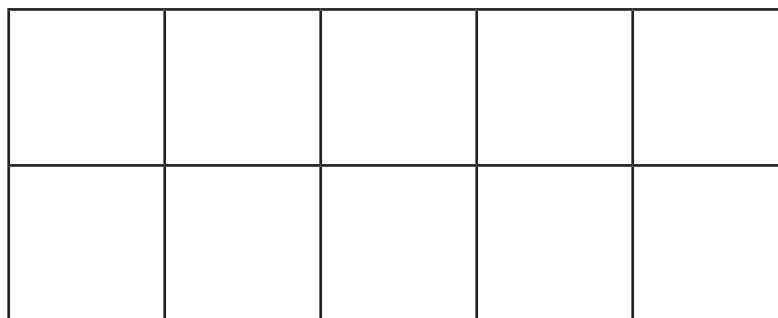
NCTM Standard:

Use multiple models to develop initial understandings of place value and the base-ten number system

Cards: B-5, B-6, B-7, and B-8

K.2

Color 6 boxes in the ten frame.





Name _____ Date _____

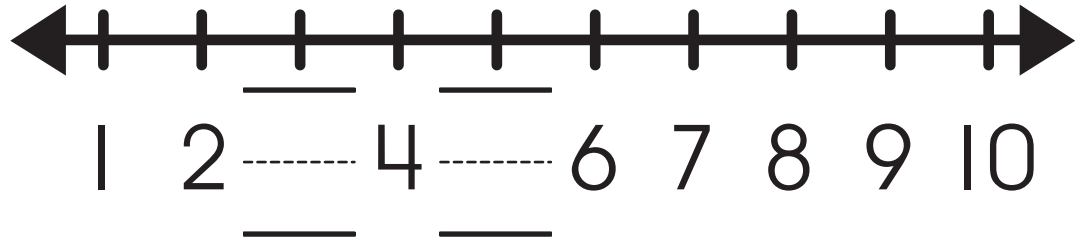
NCTM Standard:

Develop understanding of the relative position and magnitude of whole numbers and of ordinal and cardinal numbers and their connections

Cards: B-9, B-10, B-11, and B-12

K.3

Write the missing numbers.



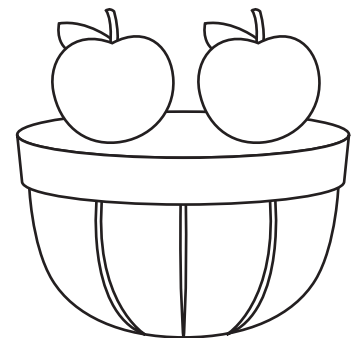
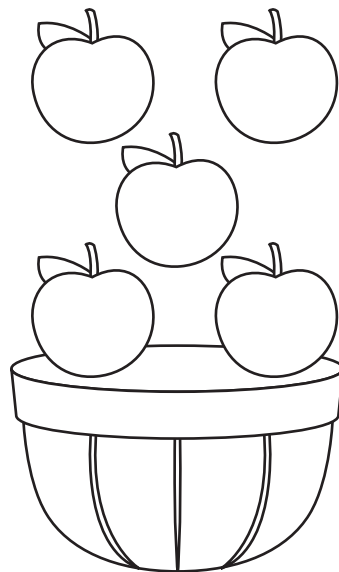
NCTM Standard:

Develop a sense of whole numbers and represent and use them in flexible ways, including relating, composing, and decomposing numbers

Cards: B-13, B-14, B-15, and B-16

K.4

Count the apples in each basket. Circle the basket that has more apples.





Name _____ Date _____

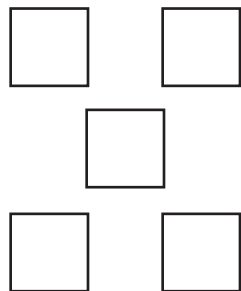
NCTM Standard:

Connect number words and numerals to the quantities they represent, using various physical models and representations

Cards: B-17, B-18, B-19, and B-20

K.5

Count the blocks. Write the number word that tells how many.



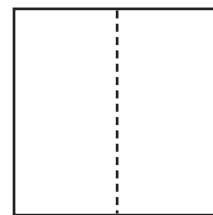
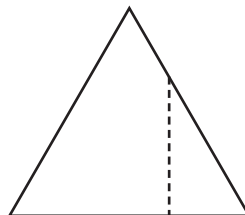
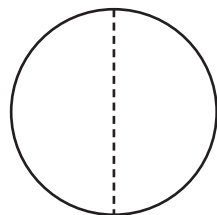
NCTM Standard:

Understand and represent commonly used fractions, such as $\frac{1}{4}$, $\frac{1}{3}$, and $\frac{1}{2}$

Card: B-21

K.6

Circle the shapes that show equal parts.





Name _____ Date _____



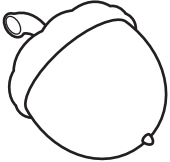
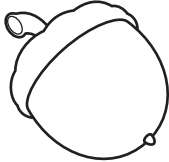
NCTM Standard:

Understand various meanings of addition and subtraction of whole numbers and the relationship between the two operations

Cards: B-22, B-23, B-24, B-25, B-26, and B-27

K.7

Count the acorns. Answer the questions.

| | | | | |
|---|---|--|--|--|
|  |  | | | |
|  |  | | | |

How many boxes have acorns? _____

How many boxes are empty? _____

NCTM Standard:

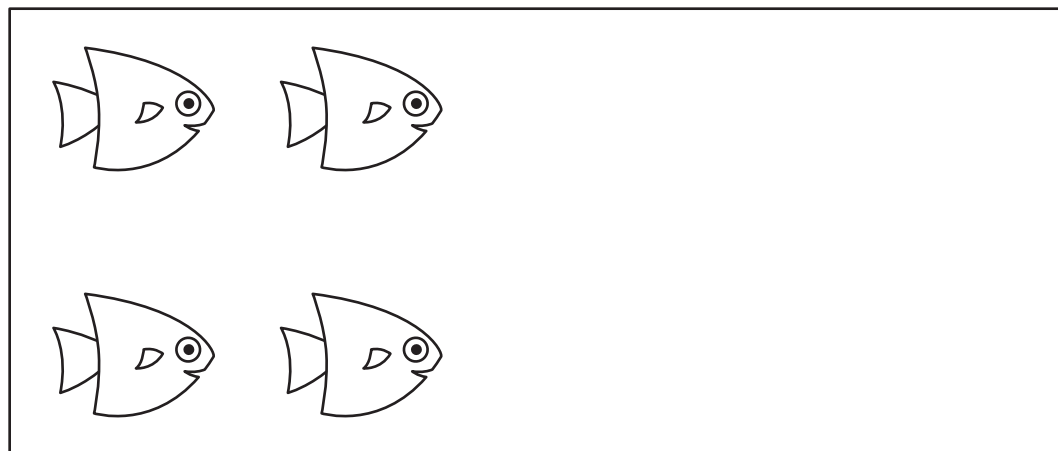
Understand the effects of adding and subtracting whole numbers

Cards: B-28, B-29, B-30, and B-31

K.8

Draw the missing fish. Count the fish.

$$4 + 2 = 6$$





Name _____ Date _____

NCTM Standard:

Understand situations that entail multiplication and division, such as equal groupings of objects and sharing equally

Cards: B-32, B-33, B-34, B-35, B-36, B-37, and B-38

K.9

Jack and Amy shared 4 crackers. They each got the same amount. How many crackers did each child get?

Draw the crackers that each child will eat.



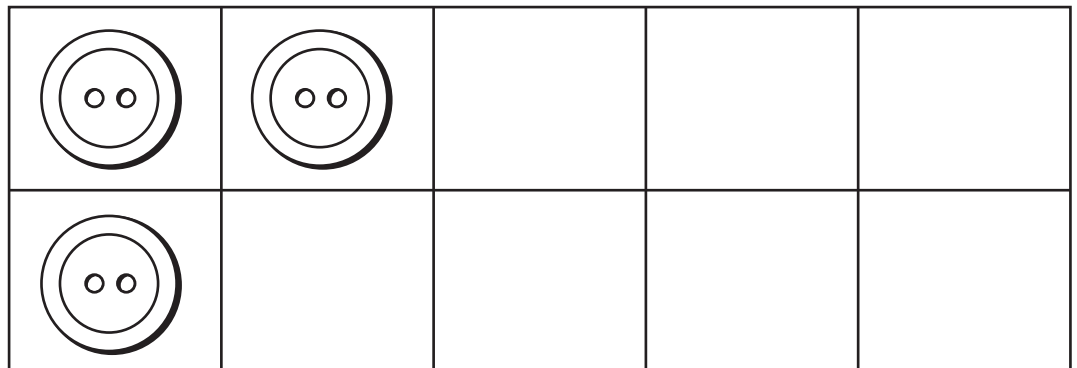
NCTM Standard:

Develop and use strategies for whole-number computations, with a focus on addition and subtraction

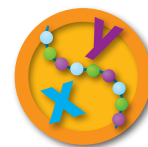
Cards: B-32, B-33, B-34, B-35, B-36, B-37, B-39, B-40, B-41, B-42, and B-43

K.10

Write how many buttons you need to add to make 10.



$$3 + \underline{\hspace{2cm}} = 10$$



Name _____ Date _____

NCTM Standard:

Recognize, describe, and extend patterns such as sequences of sounds and shapes or simple numeric patterns and translate from one representation to another

Cards: B-44, B-45, B-46, and B-47

K.11

Draw the shape that comes next.



NCTM Standard:

Analyze how both repeating and growing patterns are generated

Card: B-47

K.12

Draw what comes next.



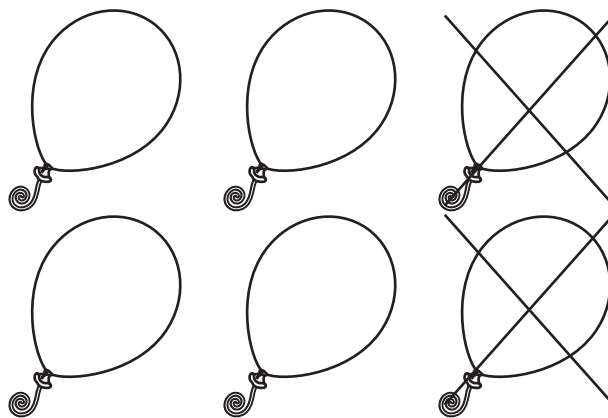
NCTM Standard:

Model situations that involve the addition and subtraction of whole numbers, using objects, pictures, and symbols

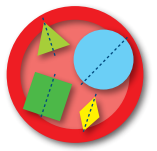
Cards: B-48, B-49, B-50, and B-51

K.13

Write the number sentence for the picture.



_____ - _____ = _____



Name _____ Date _____

NCTM Standard:

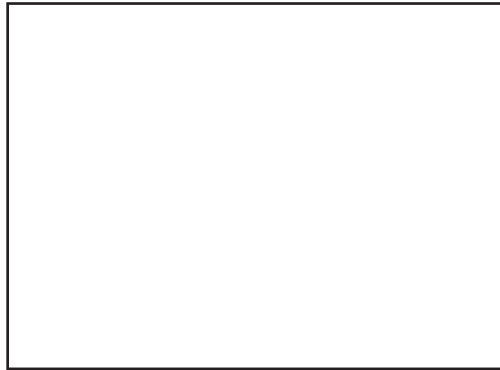
Recognize, name, build, draw, compare, and sort two- and three-dimensional shapes

Cards: B-52, B-53, and B-54

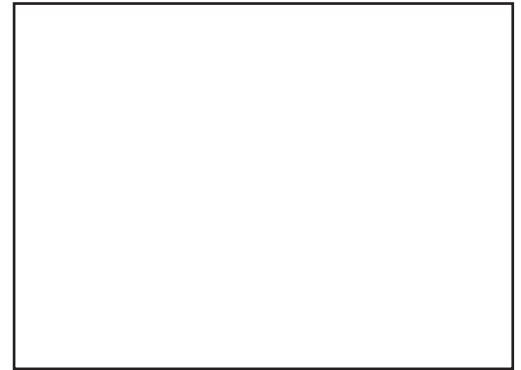
K.14

Draw each shape.

Draw a square.



Draw a circle.



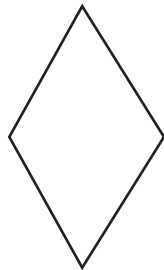
NCTM Standard:

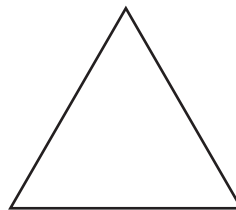
Describe attributes and parts of two- and three-dimensional shapes

Cards: B-55 and B-56

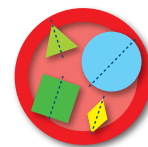
K.15

Write the number of sides each shape has.









Name _____ Date _____

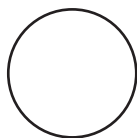
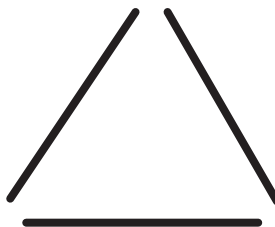
NCTM Standard:

Investigate and predict the results of putting together and taking apart two- and three-dimensional shapes

Cards: B-57 and B-58

K.16

Circle the shape that can be made if the lines are put together.



NCTM Standard:

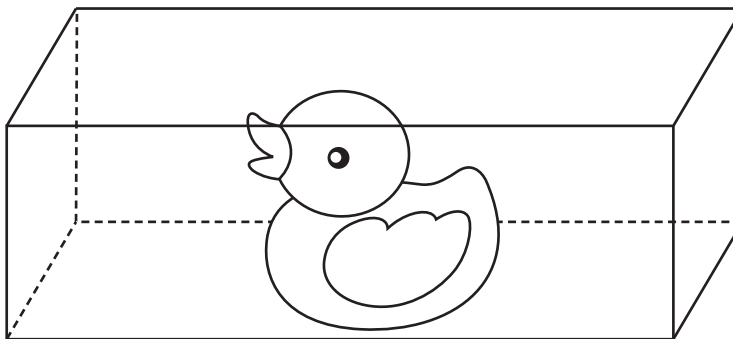
Describe, name, and interpret relative positions in space and apply ideas about relative position

Card: B-59

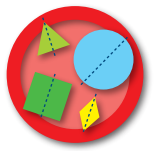
K.17

Circle the answer to the question.

Is the duck **in** or **out** of the box?



in out



Name _____ Date _____

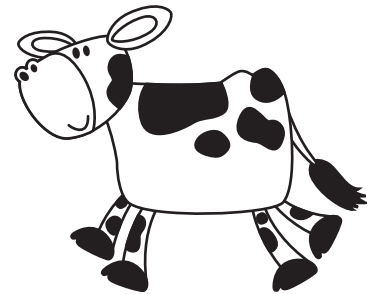
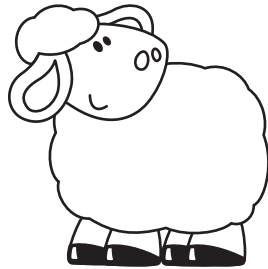
NCTM Standard:

Describe, name, and interpret direction and distance in navigating space and apply ideas about direction and distance

Cards: B-60 and B-61

K.18

Circle the animal that is on the right.



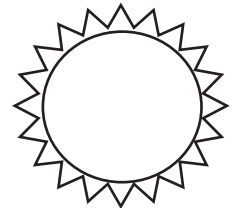
NCTM Standard:

Recognize and create shapes that have symmetry

Cards: B-62 and B-63

K.19

Circle the objects that have symmetry.



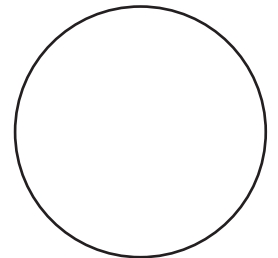
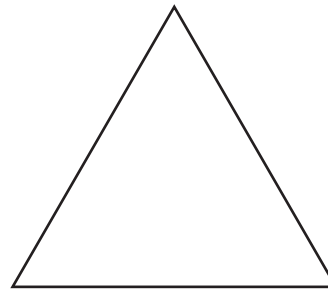
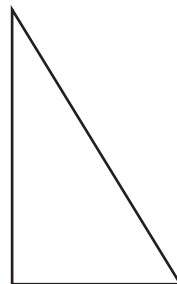
NCTM Standard:

Recognize and represent shapes from different perspectives

Card: B-64

K.20

Color the triangles.





Name _____ Date _____

NCTM Standard:

Recognize the attributes of length, volume, weight, area, and time

Cards: B-65, B-66, B-67, B-68, B-69, and B-70

K.21

Circle the answer to the question.

Which pencil is shorter?



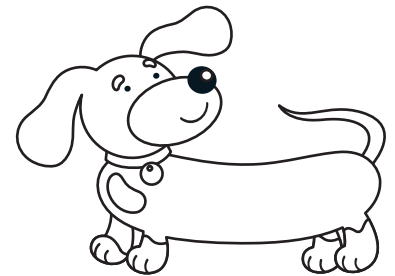
NCTM Standard:

Compare and order objects according to these attributes

Cards: B-65, B-66, B-67, B-68, B-69, and B-70

K.22

Number the objects from **1** to **3** to order them from shortest to longest.





Name _____ Date _____

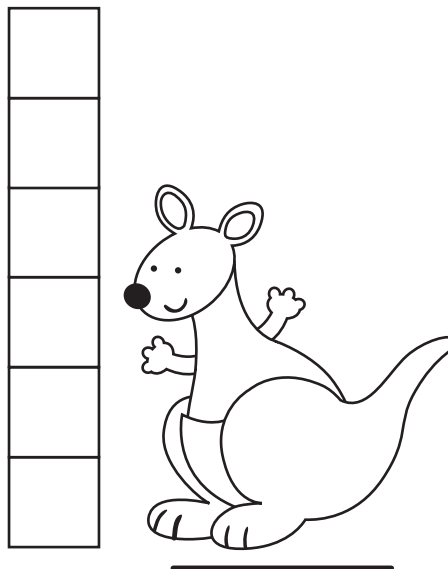
NCTM Standard:

Understand how to measure using nonstandard and standard units

Cards: B-69, B-71, B-72, B-73, B-74, B-75, B-76, and B-77

K.23

Count how many squares tall the kangaroo is. Write the number.



The kangaroo is _____ squares tall.

NCTM Standard:

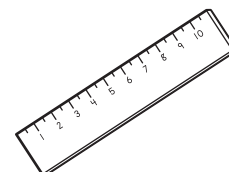
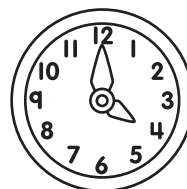
Select an appropriate unit and tool for the attribute being measured

Cards: B-74, B-75, B-76, and B-77

K.24

Circle the answer to the question.

Which tool would you use to measure the length of your desk?





Name _____ Date _____

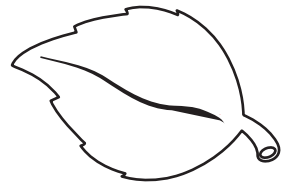
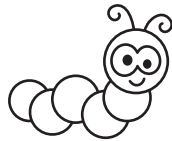
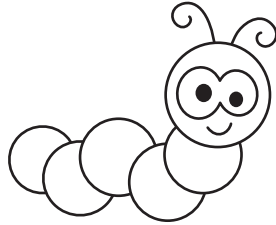
NCTM Standard:

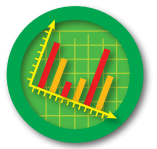
Develop common referents for measures to make comparisons and estimates

Card: B-78

K.25

Find the leaves and caterpillars that are the same length. Draw lines to connect the pairs.





Name _____ Date _____

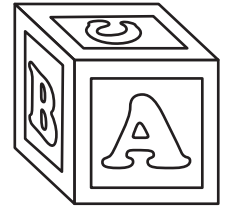
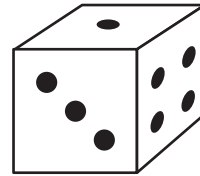
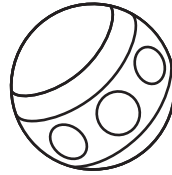
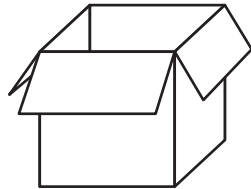
NCTM Standard:

Sort and classify objects according to their attributes and organize data about the objects

Cards: B-79, B-80, and B-81

K.26

Circle the object that does not belong.



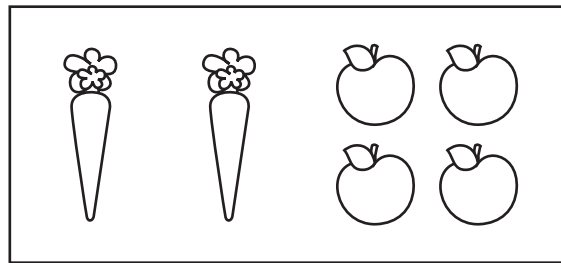
NCTM Standard:

Represent data using concrete objects, pictures, and graphs

Card: B-82

K.27

Write **yes** or **no** to answer the question.



| | | | | |
|--|--|--|--|--|
| | | | | |
| | | | | |

Does the graph show the correct number of carrots?

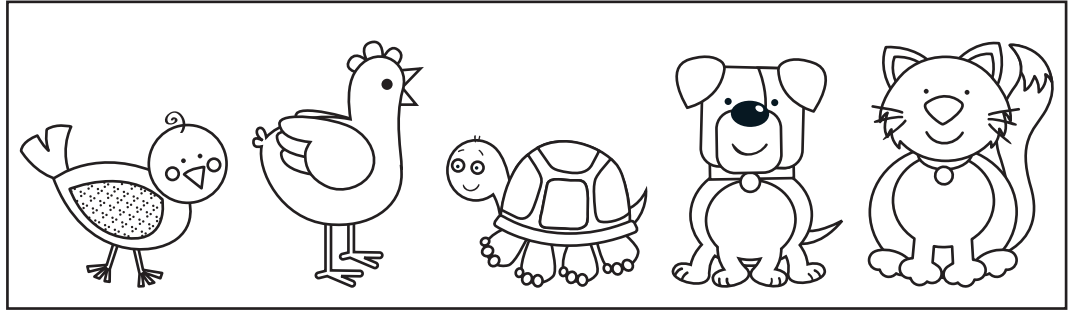


NCTM Standard:
Describe parts of
the data and the
set of data as a
whole to determine
what the data show

**Cards: B-83
and B-84**

K.28

Answer the questions.



How many animals have 2 legs? _____

How many animals have 4 legs? _____

Pretest Answer Key

K.1 4

See cards B-1, B-2, B-3, and B-4.

K.2 Six boxes in the ten frame should be colored.

See cards B-5, B-6, B-7, and B-8.

K.3 3; 5

See cards B-9, B-10, B-11, and B-12.

K.4 The basket with five apples should be circled.

See cards B-13, B-14, B-15, and B-16.

K.5 five

See cards B-17, B-18, B-19, and B-20.

K.6 The circle and the square should be circled.

See card B-21.

K.7 4; 6

See cards B-22, B-23, B-24, B-25, B-26, and B-27.

K.8 Two fish should be drawn.

See cards B-28, B-29, B-30, and B-31.

K.9 Two crackers should be drawn for Jack, and two crackers should be drawn for Amy.

See cards B-32, B-33, B-34, B-35, B-36, B-37, and B-38.

K.10 7

See cards B-32, B-33, B-34, B-35, B-36, B-37, B-39, B-40, B-41, B-42, and B-43.

K.11 A triangle should be drawn.

See cards B-44, B-45, B-46, and B-47.

K.12 Four circles should be drawn.

See card B-47.

K.13 $6 - 2 = 4$

See cards B-48, B-49, B-50, and B-51.

K.14 A square and a circle should be drawn.

See cards B-52, B-53, and B-54.

K.15 4; 3; 4

See cards B-55 and B-56.

K.16 The triangle should be circled.

See cards B-57 and B-58.

K.17 in

See card B-59.

K.18 The cow should be circled.

See cards B-60 and B-61.

K.19 The heart and the sun should be circled.

See cards B-62 and B-63.

K.20 Two triangles should be colored.

See card B-64.

K.21 The shorter pencil should be circled.

See cards B-65, B-66, B-67, B-68, B-69, and B-70.

K.22 2, 1, 3

See cards B-65, B-66, B-67, B-68, B-69, and B-70.

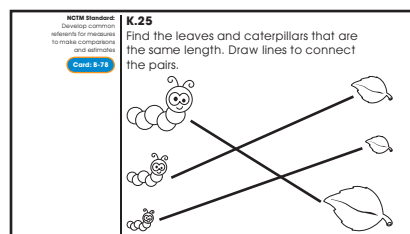
K.23 4 squares

See cards B-69, B-71, B-72, B-73, B-74, B-75, B-76, and B-77.

K.24 The ruler should be circled.

See cards B-74, B-75, B-76, and B-77.

K.25



See card B-78.

K.26 The ball should be circled.

See cards B-79, B-80, and B-81.

K.27 yes

See card B-82.

K.28 2; 3

See cards B-83 and B-84.