



Fun Math

Teacher's Manual B





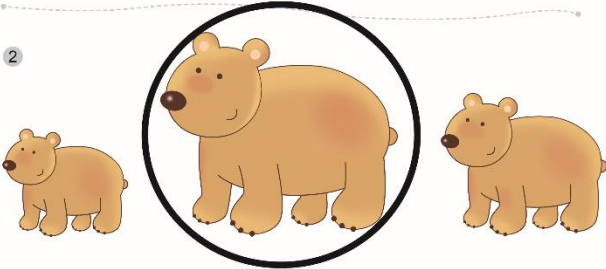
Which is the biggest? Please circle it.

วงกลมภาพที่ใหญ่ที่สุด

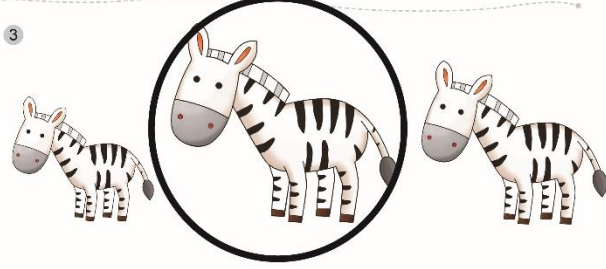
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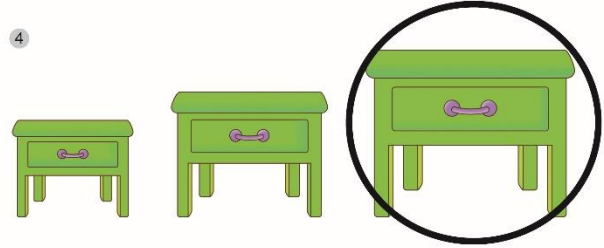
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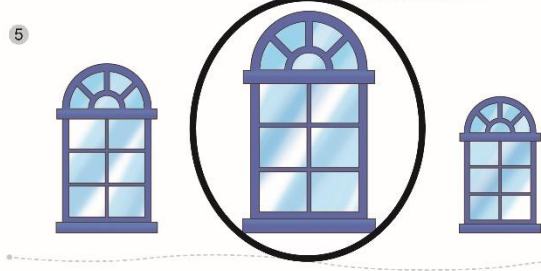
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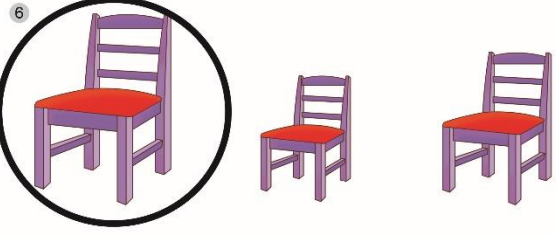
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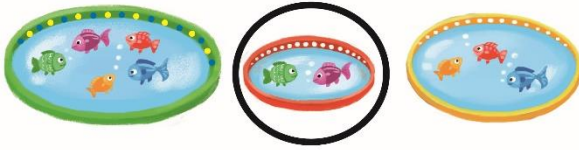
Class		Teacher	
Unit	B1-1	Topics	Comparison of Three Objects
Manipulatives: None			
Learning Activities			
1. Draw two circles of different sizes. Review the concept of big and small by observing these two circles.			
2. Draw a third circle. Guide students to compare the three circles and find the biggest one.			
3. Draw three triangles on the whiteboard. Guide students to compare the sizes of the triangles. Ask students to find the biggest triangle.			
4. Practice more with shapes of different sizes (e.g., squares, rectangles). Ask a student to come up and find the biggest object. Teacher can also prepare some shape cards of different sizes, or real objects, for students to observe and compare.			
Student Book Activities			
Guide students to complete the practice using the crayons.			
Extended Activities			
Good shots:			
1. Prepare three boxes. Cut out a square in each box. The sizes of the cut-out squares are small, medium, and big.			
2. Cut out some shapes from cardboard. The shapes should correspond to the sizes of the square holes.			
3. Show students the cardboard shapes. Ask students to put the biggest shape into the biggest box.			
4. Repeat step 3. Have students practice comparing the sizes of the shapes.			



Which is the smallest? Please circle it.

วงกลมภาพที่เล็กที่สุด

1



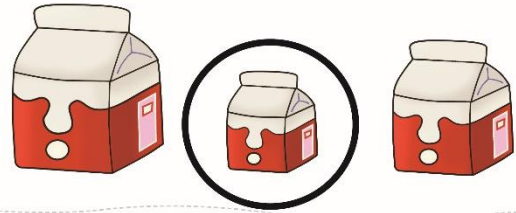
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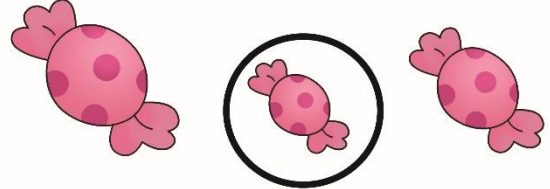
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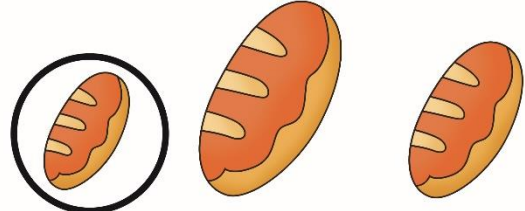
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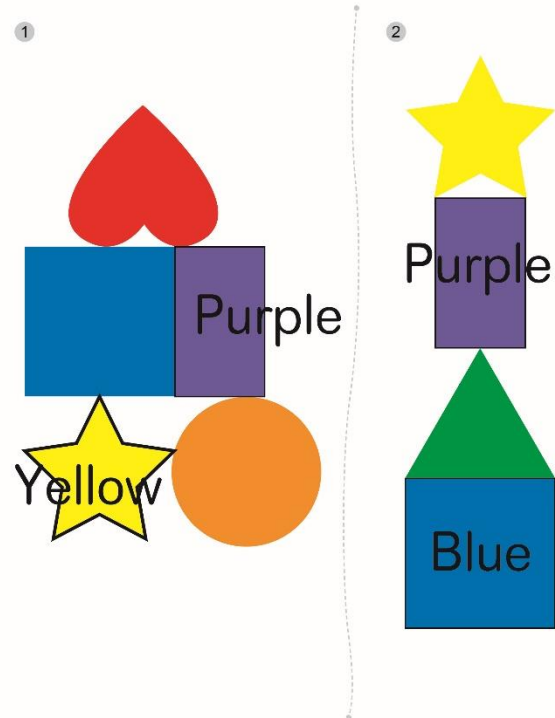
4

Class		Teacher	
Unit	B1-2	Topics	Comparison of Three Objects
Manipulatives: None			
Learning Activities 1. Draw three ponds of different sizes on the whiteboard. 2. Guide students to compare the sizes of the ponds and find the smallest and the biggest pond. 3. Draw three circles of different sizes on the whiteboard. Guide students to find the smallest circle and compare the three circles. 4. Show students show real objects of different sizes (e.g., books or bowls). Ask students to come up and find the biggest object. Teacher can also prepare some pictures of different sizes for students to observe and compare.			
Student Book Activities Guide students to complete the practice using the crayons.			
Extended Activities			
Yummy pancake: 1. Prepare some clay, and cut the clay into chunks. Have each student pick one chunk of clay. 2. Show students how to make a pancake from clay. 3. Ask three students to come up to the front with their pancakes. Compare the sizes of the three pancakes. 4. Continue practicing with other students' pancakes. Each student has a turn to show and compare his/her pancake with the others.			

The flower beds come in different shapes. Stamp in the ☐ of rectangle ones.
ในสวนมีกระถางต้นไม้หลายรูปทรง ในหนึ่งๆ ประทับตราในช่อง ☐ ที่เป็นรูปสี่เหลี่ยมผืนผ้า

Match the foam shapes with the uncolored shapes. Then color the shapes with the same color of the foam shapes.

ดูจากรูป นำรูปทรงต่างๆ ไปทดลองอุปกรณมาวางทาบ แล้วระบายสีตาม

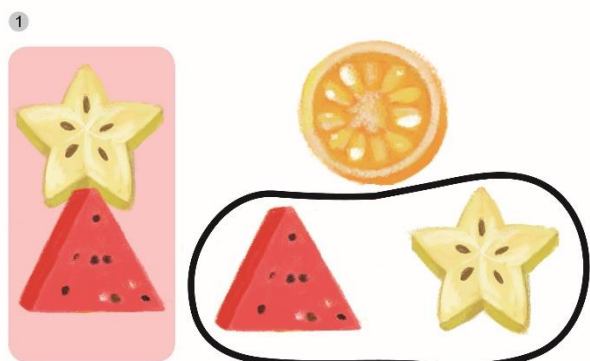


Class		Teacher	
Unit	B1-3	Topics	Different Shapes
Manipulatives: Foam shapes			
Learning Activities			
1. Prepare a poster of a garden. There are flower beds in the shapes of square, circle, and rectangle. 2. Show students the poster. Review the shapes (triangle, square, circle). Ask students to find the flower beds of these shapes. 3. Show students a rectangle card, and guide student to observe the features of the rectangle. 4. Ask students to find a rectangle flower bed in the poster. 5. Ask students to find rectangle objects in the classroom. 6. Have students take out their foam shapes. Teacher names a shape, and students find the corresponding foam shape. (e.g., find the triangle, find the rectangle.) Repeat the practice until students are familiar with the rectangle, and are able to recognize this shape.			
Student Book Activities			
Guide students to complete the practice using the manipulatives and crayons.			
Extended Activities			
Fishing game: 1. Make a fishing rod with a magnet as the hook. 2. Prepare some shape cards. Put a paper clip on each card. 3. Ask a student to catch an assigned shape card with the fishing rod. 4. Continue practicing until each student has a turn.			



Look at the picture on the left. What shapes do you see? Circle the matching shapes on the right.

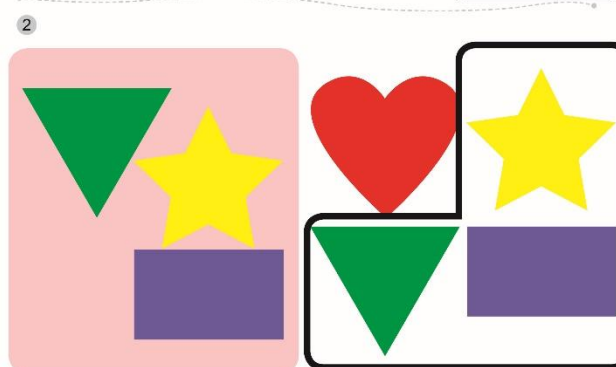
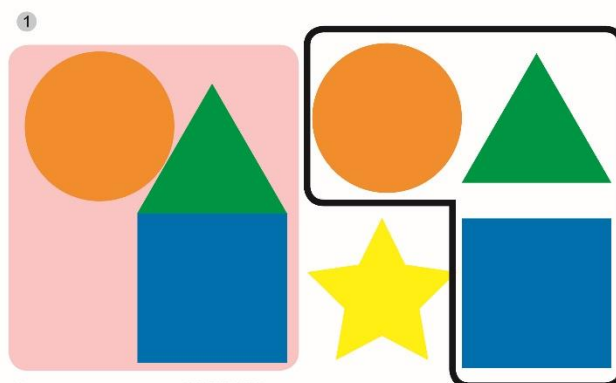
รูปตัวอย่างประกอบด้วยรูปทรงใดบ้าง วงกลมคำตอบที่ถูกต้อง



7

Look at the picture on the left. What shapes do you see? Match them with the foam shapes and circle the matching shapes on the right.

นำรูปทรงจากกล่องอุปกรณ์มาเทียบ รูปตัวอย่างประกอบด้วยรูปทรงใดบ้าง วงกลมคำตอบที่ถูกต้อง



8

Class		Teacher	
Unit	B1-4	Topics	Putting Shapes Together

Manipulatives: Foam shapes

Learning Activities

1. Show students a poster of fruit platters. Ask students to observe the fruit platters, and guide them to say out the names of the shapes.
2. Circle one of the fruit platters. For example, a combination of a circle and a triangle. Ask students to tell what shapes are in this fruit platter.
3. Take out shape cards that are corresponding to that fruit platter. Ask students to try to place the cards according to the platter.
4. Repeat step 2 and 3. Have students practice with combinations of different shapes.
5. Have students take out their foam shapes. Randomly assign two shapes, and guide students to create a figure with these two foam shapes.
6. Have students come up and show their figures. Students can learn the different combinations of shapes by looking at other students' figures.

Student Book Activities

Guide students to complete the practice using the manipulatives and crayons.

Extended Activities

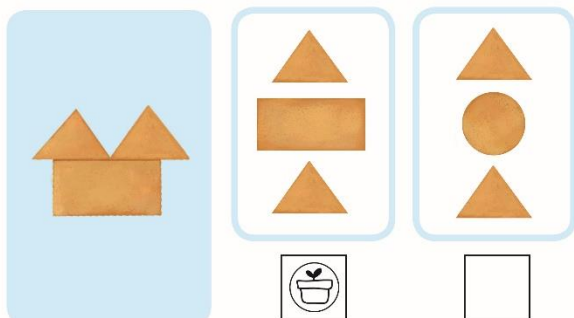
Paper collage:

1. Give each student a sheet of newspaper.
2. Show students a shape card. Instruct students to rip the newspaper into this shape.
3. Continue with different shapes.
4. Guide students to put the shapes together to create their own patterns.

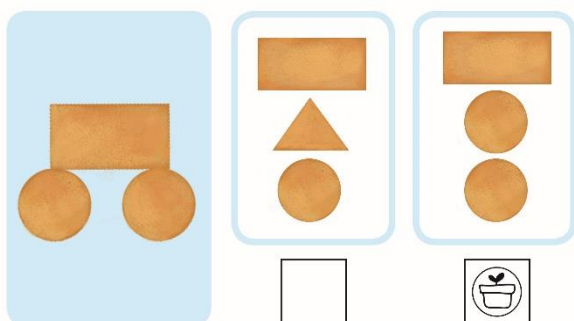
Look at the picture on the left. What shapes of cookies do you see? Stamp in the ☐ of the correct answer.

รูปตัวอย่างประกอบด้วยรูปทรงใดบ้าง หากคำตอบที่ถูกต้องแล้วประทับตราในช่อง ☐

1



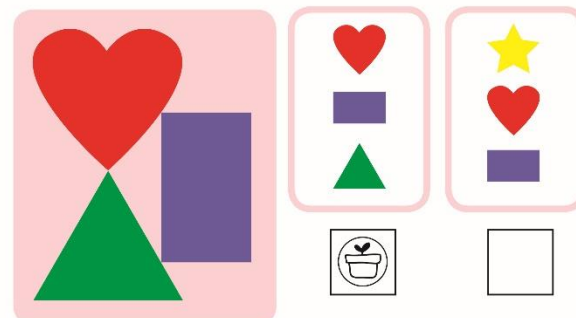
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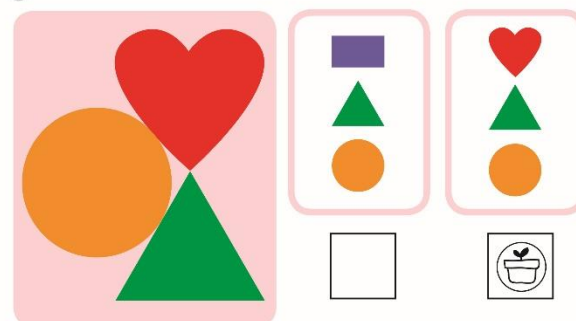
Look at the picture on the left. Match them with the foam shapes and stamp in the ☐ of the correct answer.

รูปทรงตัวอย่างประกอบด้วยรูปทรงใดบ้าง นำรูปทรงจากกล่องอุปกรณ์มาเขียน พร้อมหาคำตอบที่ถูกต้อง แล้วประทับตราในช่อง ☐

1



2



Class		Teacher	
Unit	B1-5	Topics	Putting Shapes Together

Manipulatives : Stamp, foam shapes

Learning Activities

1. Put some cookie cards on one side of the whiteboard, and some shapes cards on the other side of the whiteboard.
2. Circle some cookie cards. Ask students what shapes are in this circle.
3. Have a student come up to make the same combination using the shape cards on the right.
4. Practice with more shape combinations.
5. Ask students to take out their foam shapes. Randomly assign three shapes. Students have to create a figure with the corresponding foam shapes.
6. Have one student come up and show his/her figure. Invite another student to come up and try to make the same figure.

Student Book Activities

Guide students to complete the practice using the manipulatives and crayons.

Extended Activities

Creative shapes:

1. Pair up students. Provide each group a drawing paper and a set of paper shape cards (made with colored paper).
2. Guide students to create artworks with the shape cards. Have students take turns to show and tell their artworks.



There are 3 differences in each pair of pictures. Look and circle the differences on the bottom pictures.

ส่องภาพมีสิ่งที่แตกต่างกันอยู่ 3 แห่ง วงกลมตรงจุดที่แตกต่างในภาพด้านล่าง



11

12

Class		Teacher	
Unit	B1-6	Topics	Telling the Differences

Manipulatives: None

Learning Activities

1. Enlarge, photocopy, and color the two rabbits on Student Book page 11. Put the poster on the whiteboard.
2. Guide student to observe and tell the features of each rabbit.
3. Ask students to tell the differences of these two rabbits.

Student Book Activities

Guide students to complete the practice using the crayons.

Extended Activities

Spot the differences:

1. Ask two students to come up and pose differently.
2. Ask the class to observe and tell the differences between the two poses.
3. To simplify the activity for younger students, have two students make the same pose first, and then one student remains the same pose, while the other student changes his/her pose. Compare the different poses.



There are 3 differences in each pair of pictures. Look and circle the differences on the bottom pictures.

สองภาพมีสิ่งที่แตกต่างกันอยู่ 3 แห่ง วงกลมตรงจุดที่แตกต่างกันในภาพด้านล่าง



13

14

Class		Teacher	
Unit	B1-7	Topics	Telling the Differences

Manipulatives: Foam shapes

Learning Activities

1. Enlarge and photocopy the two pictures on Student Book page 13.
2. Put one of the posters on the whiteboard. Guide students to observe and tell the features of the five animals in the poster.
3. Put the other poster next by the first one. Ask students to observe the racoons in both posters.
4. Continue with the other four animals.
5. Make a house with some shape cards, and then make a different house with some foam shapes. Ask students to compare and tell the differences of the two houses.
6. Ask students to create figures with their own foam shapes. Guide students to compare and tell the differences of their figures.

Student Book Activities

Guide students to complete the practice using the manipulatives and crayons.

Extended Activities

Same and different:

1. Prepare some paper frames of different shapes. Each shape has two frames.
2. Each student gets one frame, and color the frame freely.
3. Students with the same frame make a pair, and compare the colors of their frames.

Look at each column of pictures. Circle the one in the middle.

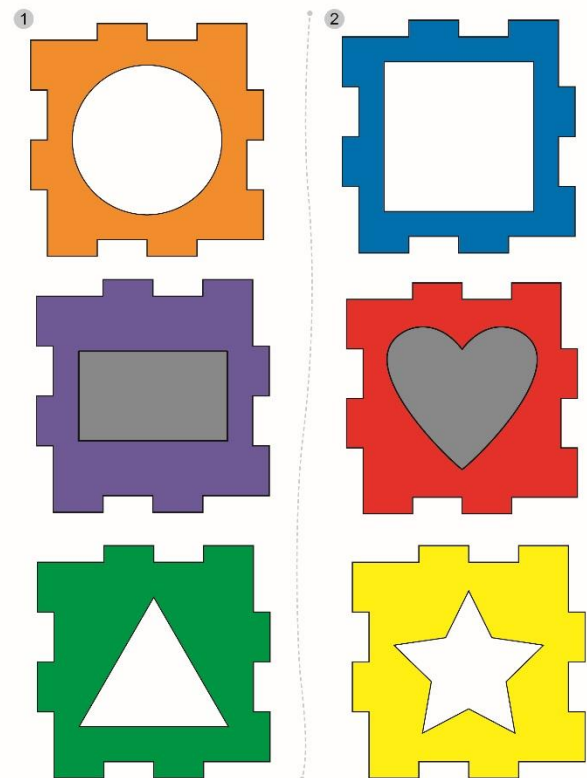
ให้มองแถวของภาพที่อยู่ในตำแหน่งตรงกลางของแต่ละด้าน



15

Match the hollow foam shapes with the frames below. Find and color the middle one in each row.

นำกรอบรูปทรงจากกล่องอุปกรณ์มาหา และระบายลงในช่องว่าง



16

Class		Teacher	
Unit	B1-8	Topics	Finding the Middle One

Manipulatives: Foam shapes

Learning Activities

1. Prepare three pictures.
2. Place the pictures in a row. Ask students to observe the pictures.
3. Guide students to look at the pictures from the top one to the bottom one. Ask students to tell the features of the pictures.
4. Draw a grid with three boxes in a row. Introduce the position of each box to students, and then place a shape card in each box.
5. Guide student to tell the position of each shape card: top, middle, and bottom.

Student Book Activities

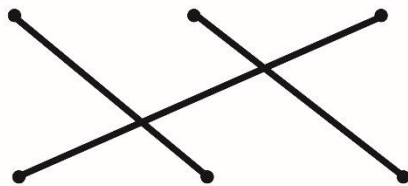
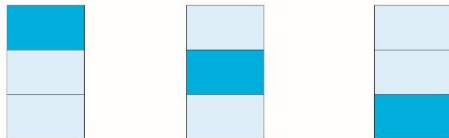
Guide students to complete the practice using the manipulatives and crayons.

Extended Activities

Slam dunk:

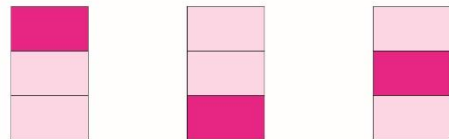
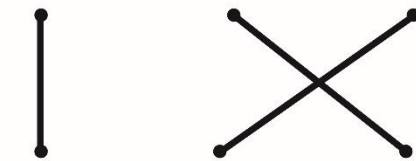
1. Prepare three boxes and some balls. Stack the three boxes in a row on the table against the wall.
2. Draw a line on the floor 30 cm away from the table. Have students stand behind the line.
3. Students take turns to throw a ball into the boxes. The student who throws a ball into the middle box gains one point.

Look at the items on the shelf. Match each layer of the shelf with the items.
ดูจากตำแหน่งของสิ่งของในภาพ ให้อย่าง ลากเส้นจับคู่ให้ถูกต้อง



17

Match the layers of the cabinet with the fruits.
ผลไม้แต่ละชนิดวางไว้ที่ตำแหน่งไหนของชั้นวางของ ให้อย่าง ลากเส้นจับคู่ให้ถูกต้อง



18

Class		Teacher	
Unit	B1-9	Topics	Top, Middle, and Bottom

Manipulatives: Foam shapes

Learning Activities

1. Prepare three figure cards.
2. Draw a grid with three boxes in a row. Place one figure card in each box.
3. Guide students to observe the figure in each box, and then ask students to tell the position of each figures.
4. Take down the figure cards. Invite one student to come up and place the figures cards in the corresponding boxes according to the teacher's instructions.
5. Have each student take out three foam shapes. Guide students to line up the foam shapes according to the assigned positions.

Student Book Activities

Guide students to complete the practice using the manipulatives and crayons.

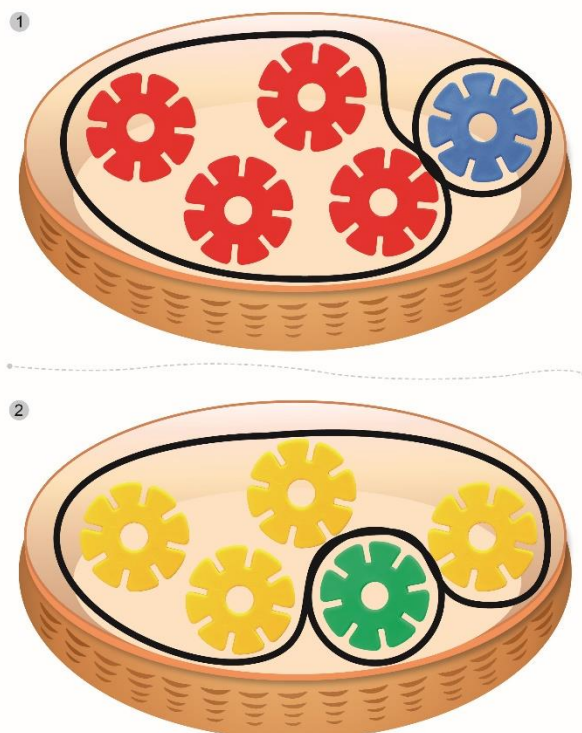
Extended Activities

Show and tell:

1. Prepare three boxes and some balls. Stack the three boxes in a row on the table against the wall.
2. Invite students to bring their favorite toys to school. Have three students come up. Each student put his/her toy in the boxes respectively.
3. The three students take turns to introduce the position of their toys, and explain how to play with the toys.
4. After everyone has a turn, students share their toys and play.

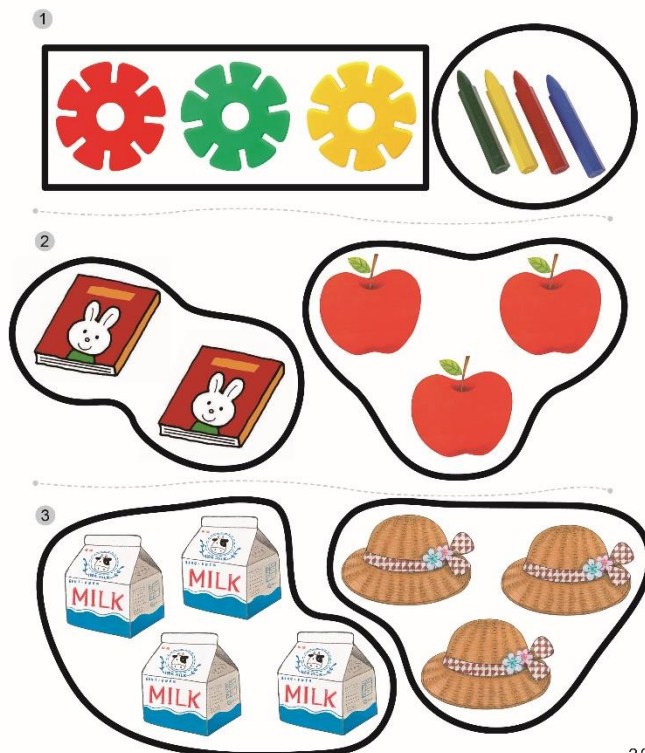


Divide the flower petals into two groups. Then explain how you divide them.
 ให้นำดอกไม้มาแบ่งเป็นสองกลุ่ม แล้วอธิบายว่าคุณแบ่งอย่างไร



19

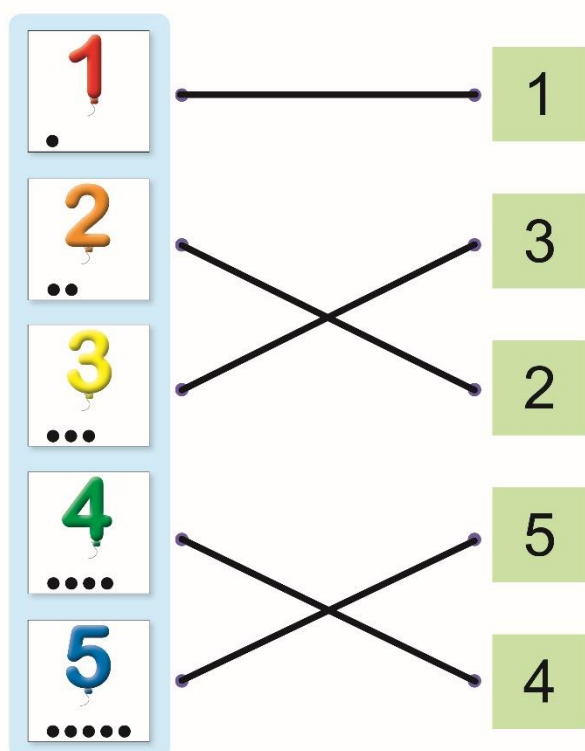
Divide the items into two groups. Then explain how you divide them.
 ให้นำของมาแบ่งเป็นสองกลุ่ม แล้วอธิบายว่าคุณแบ่งอย่างไร



20

Class		Teacher	
Unit	B1-10	Topics	Sorting Things Out
Manipulatives: Flower petals			
Learning Activities 1. Prepare some ribbon of different colors. 2. Guide students to observe and tell the colors of the ribbon. 3. Ask students what the two colors of the ribbon are? Assign one color, and have students find out all ribbon of this color; then the other color. 4. Show students some cards of two different patterns. 5. Guide students to find out the two patterns.			
Student Book Activities Guide students to complete the practice using the manipulatives and crayons.			
Extended Activities			
Picking beans: 1. Prepare two small boxes, some soybeans and black beans. Mix the beans and pour them into a tray. Guide students to pick up the beans with spoons and classify the beans. 2. To advance the practice, add in other kinds of beans (red beans, mung beans). Students can do the sorting for 3 or 4 items.			

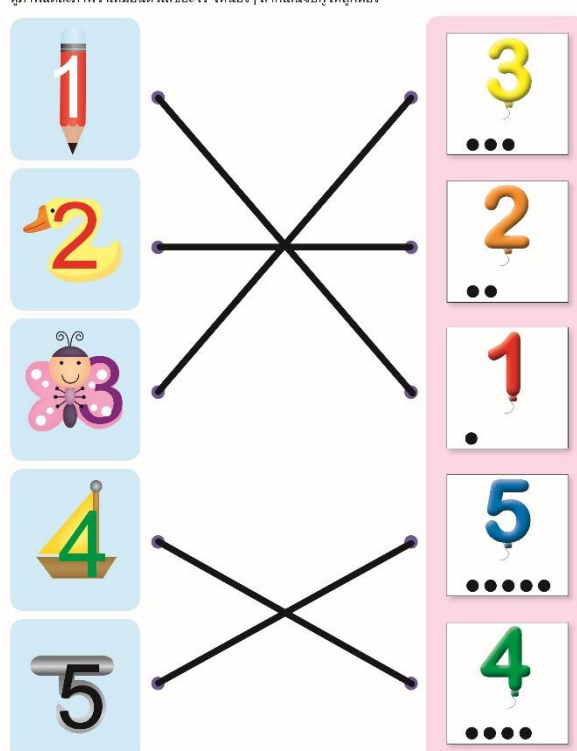
Match the balloons on the left with the numbers on the right.
นำบัตรตัวเลขจากกล่องอุปกรณ์มาเปรียบเทียบ แล้วลากเส้นจับคู่ตัวเลขให้ถูกต้อง



21

Look for the hidden numbers in the pictures on the left. Then match them with the numbers on the right.

ดูภาพแต่ละภาพว่าเหมือนตัวเลขอะไร ให้น้องๆ ลากเส้นจับคู่ให้ถูกต้อง



22

Class		Teacher	
Unit	B1-11	Topics	Numbers 1-5

Manipulatives: Number cards

Learning Activities

1. Place the number cards on the whiteboard (with the dots covered by paper). Guide students to observe the number-shape balloons and say out the numbers.
2. Ask students to take out their number cards 1-5, and place their cards on the table in order. Point to a card on the whiteboard, and have one student come up to remove the paper that covers the dots. Point to each dot, and guide the whole class to say out the number, for example, "1-2-3-4, 4."
3. Or assign a number, ask students to take out the corresponding number card.
4. Repeat the practice until students can count and say the names of number 1-5.

Student Book Activities

Guide students to complete the practice using the manipulatives and crayons.

Extended Activities

Magic numbers:

1. Write number 1-5 on drawing paper with white crayon.
2. Give each student a drawing paper with the invisible numbers. Guide students to paint over the paper with watercolor. Once the paper is painted, the numbers will be revealed.
3. Ask students to circle the numbers with crayons.



Look at the shape of the balloons. What numbers do they look like? Circle the matching numbers.

ดูภาพลูกโป่งแต่ละภาพว่าเหมือนตัวเลขอะไร วงกลมคำตอบที่ถูกต้อง

1

9 6 7

2

7 8 9

3

6 9 10

Look for the hidden numbers in the pictures on the left. Then stamp in the ☐ of the matching numbers on the right.

ดูภาพในด้านซ้ายว่ามีตัวเลขซ่อนอยู่หรือไม่ แล้วประทับตราลงในช่อง ☐ ของคำตอบที่ถูกต้อง

1

3 ☐

8 ☐

2

1 ☐

7 ☐

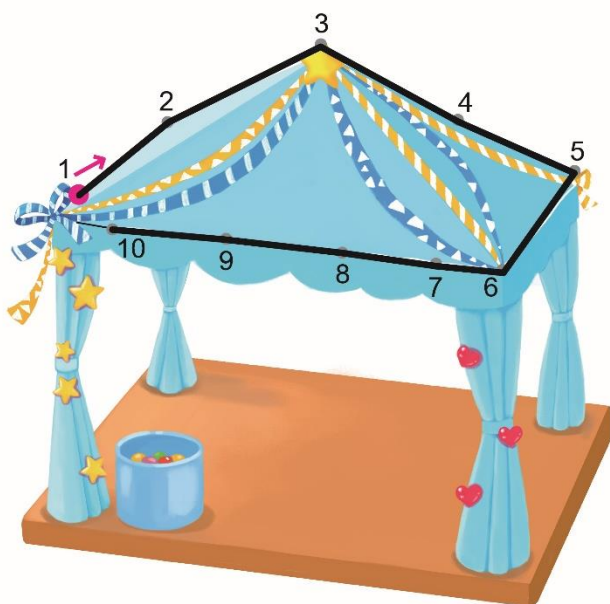
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6 ☐

9 ☐

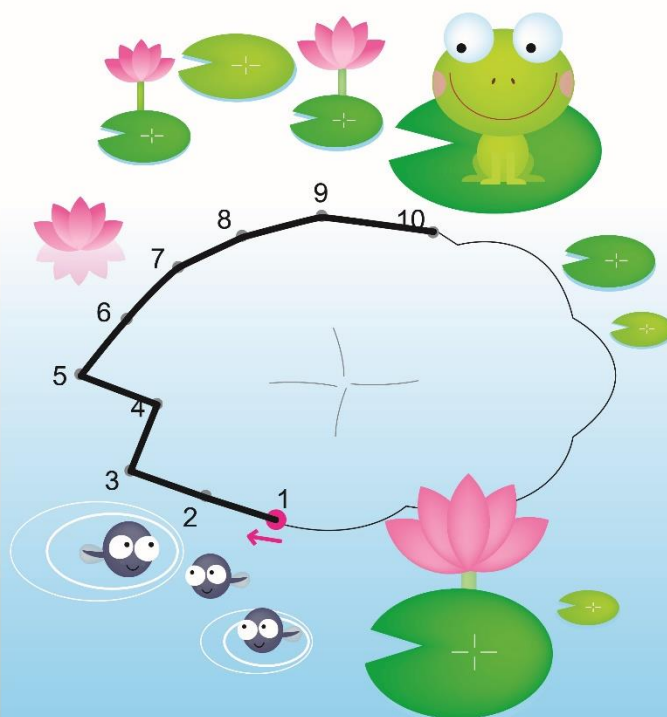
Class		Teacher	
Unit	B1-12	Topics	Numbers 6-10
Manipulatives: Number cards			
Learning Activities 1. Draw balloons with number 1-10. Tell students to observe the balloons. Guide them to find and say out the numbers on the balloons from 1 to 10. 2. Place number cards 1 to 10 on the whiteboard. Guide students to read the numbers. Pick a card, and ask students to say the number. 3. Say a number, and ask students to find that number card. 4. Repeat the practice until students can say the numbers 1 to 10. Student Book Activities Guide students to complete the practice using the manipulatives and crayons.			
Extended Activities			
Memory game: 1. Prepare two sets of number cards. Put the number cards on the whiteboard. Guide students to read the numbers. 2. Turn over the cards. Students take turns to come up and flip two cards. If the numbers are the same, then this student can continue to turn over another two cards; if not, another student comes up and play the game. 3. Start from five numbers, and move up to 10 numbers.			

Trace in the order of 1 to 10 to draw the roof of the pavilion.
ให้เด็กๆ ช่วยวาดเส้นจำนวนเรียงให้สำเร็จ โดยลากเส้นจาก 1-10



25

Trace in the order of 1 to 10 to draw the lotus leaf.
ให้เด็กๆ ช่วยวาดรูปใบไม้ให้สำเร็จ โดยลากเส้นจาก 1-10



26

Class		Teacher	
Unit	B1-13	Topics	Numbers in Order 1-10

Manipulatives: Number cards

Learning Activities

1. Prepare some figure cards.
2. Place number cards 1 to 10 on the whiteboard in order, and say the numbers from 1 to 10.
3. Show students a figure card. Tell students, "This person is going to visit his friend. Please show him how to walk along numbers 1-10." Demonstrate first.
4. Scatter the number cards a little bit (not too much in the beginning). Ask one student to come up and pick one figure card to practice the order of numbers.
5. Repeat the practice by scattering the cards differently.

Student Book Activities

Guide students to complete the practice using the manipulatives and crayons.

Extended Activities

Little server:

1. Prepare 10 plates, and place a number card on each plate from 1 to 10.
2. Prepare 10 Styrofoam balls. Write numbers 1 to 10 on each ball respectively. Put the balls into a bag.
3. Students take turns to draw one ball from the bag, say out the number of the ball, and place the ball on the corresponding plate.

Which is the longest in the group? Please stamp in the ☐ of the longest object.

เปรียบเทียบดูว่าของสิ่งไหนยาวที่สุด แล้วประทับตราลงในช่อง ☐ ของคำตอบที่ถูกต้อง

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Class		Teacher	
Unit	B1-14	Topics	Comparison of Three Objects
Manipulatives: Stamp			
Learning Activities			
1. Prepare two real objects (e.g., a pen and a ruler). Guide students to review long and short.			
2. Add in another object. Practice comparing the length of three objects.			
3. Take out three long paper strips of different colors. Fold the three strips into different length. Align the strips on the whiteboard. Ask students to compare the length and find the longest strip.			
Student Book Activities			
Guide students to complete the practice using the manipulatives and crayons.			
Extended Activities			
Relay game:			
1. Prepare some building blocks, and give each student some blocks.			
2. Divide students into groups. Each group puts their blocks together to make a long train. Compare the length of the trains.			

Which is the shortest in the group? Please stamp in the ☐ of the shortest object.

เปรียบเทียบดูว่าของสิ่งไหนสั้นที่สุด แล้วประทับตราลงในช่อง ☐ ของคำตอบที่ถูกต้อง

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Take out the flower petals and place them in sequence. Which group is the shortest? Please stamp in the ☐ of the shortest group.

นำดอกไม้จากกล่องออกมาเรียงดูว่า แถวไหนสั้นที่สุดแล้วประทับตราลงในช่อง ☐ ของคำตอบที่ถูกต้อง

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Class		Teacher	
Unit	B1-15	Topics	Comparison of Three Objects

Manipulatives: Flower petals

Learning Activities

1. Prepare some figure cards.
2. Draw three lines of different length on the whiteboard. Place one figure by each line. Ask students to compare the three lines, and tell which figure has the shortest line.
3. Make three lines with flower petals: 2 blue, 3 green, and 4 red. Ask student to observe which color has the shortest line.
4. Continue practicing until students are familiar with the concept of length.

Student Book Activities

Guide students to complete the practice using the manipulatives and the crayons.

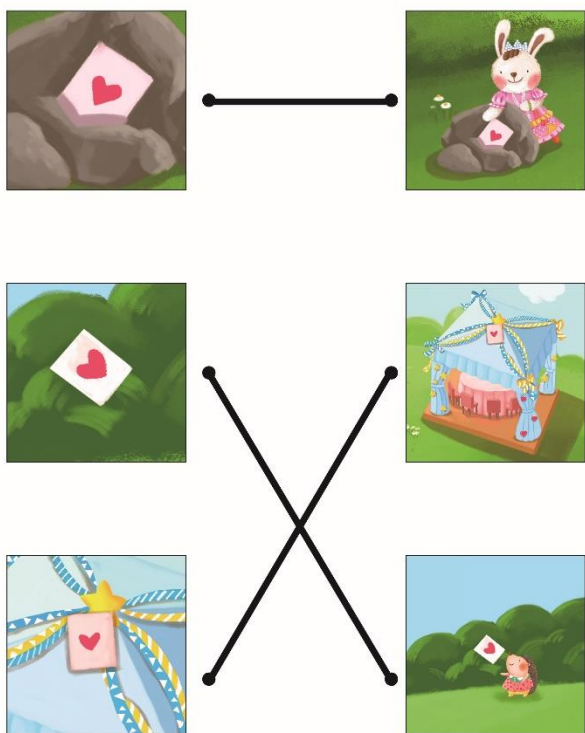
Extended Activities

Beautiful necklace:

1. Cut up straws into short pieces of 2 cm to make beads.
2. Give each students some beads and three strings of different length. Ask student to use the longest string.
3. Guide students to string the beads to make necklaces.
4. After students are done, help students wear and display their necklaces to the class.

The invitation cards are blown away. Please help the princess find them. Match the cards with the locations.

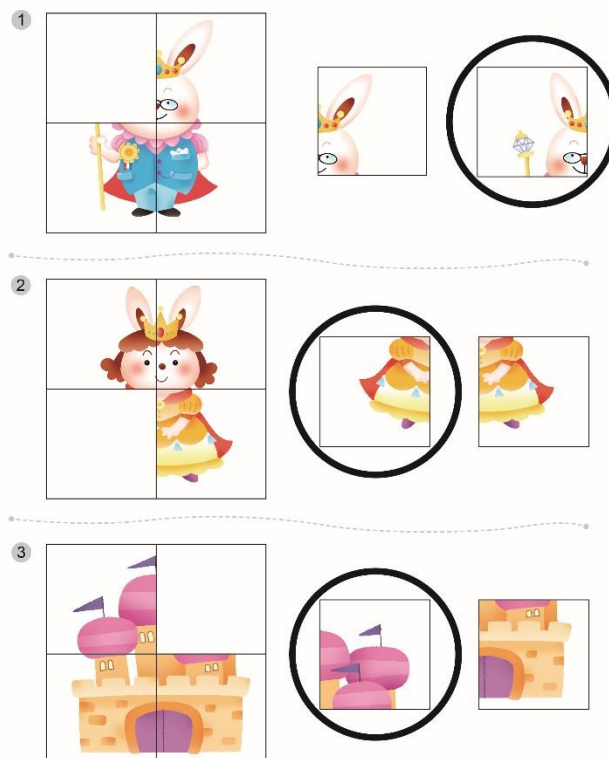
บัตรเชิญการ์ดถูกพัดอย่างง่ายดายด้วยมือเป็นส่วนใดของภาพทางด้านขวามือ



31

Circle the missing piece of each puzzle.

ภาพแต่ละภาพขาดหายไปส่วนหนึ่ง ให้นักเรียนวงกลมภาพส่วนที่ขาดหายไป



32

Class		Teacher	
Unit	B1-16	Topics	Parts and the Whole

Manipulatives: None

Learning Activities

1. Cut out two 2x2 cm squares from an A4 paper.
2. Place the A4 paper on the cover of the Student Book.
3. Point at one of the holes, and ask students to find the corresponding picture from another Student Book.
4. Continue the practice until students are familiar with the concept of parts and the whole.

Student Book Activities

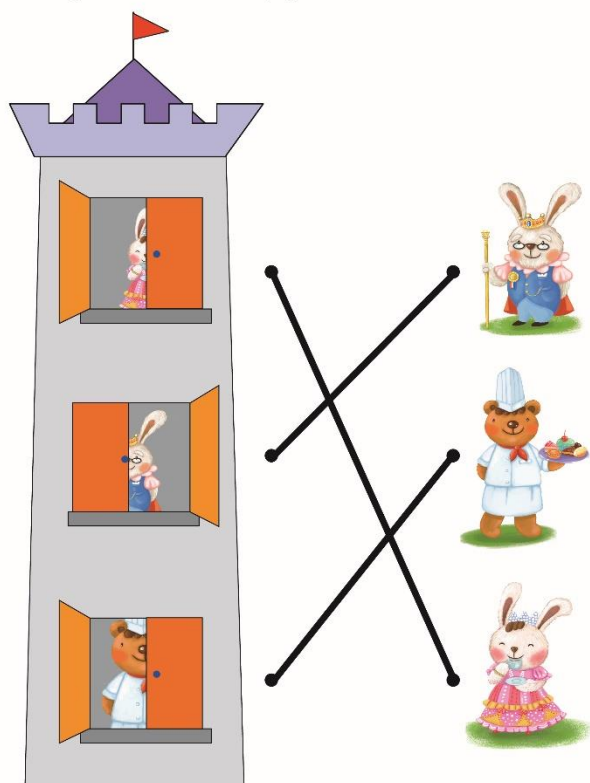
Guide students to complete the practice using the crayons.

Extended Activities

Guess the animals:

1. Prepare some animal cards.
2. Cover the cards, and only show one part of each animal. Ask students to guess the animals by observing the uncovered parts.

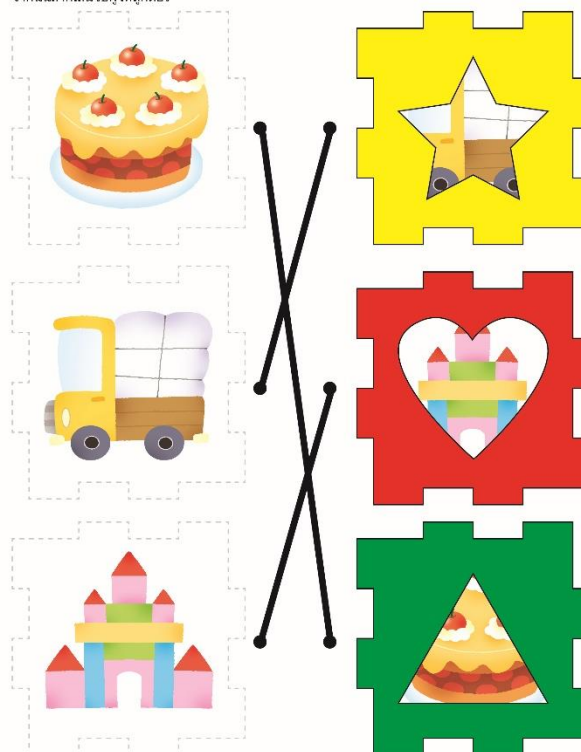
Who is standing behind each window? Match the people with the windows.
ใครกันนะอยู่หลังหน้าต่าง ให้นักเรียนจับคู่ให้ถูกต้อง



33

What's the picture behind each hollow foam frame? Use the hollow foam frames to find out the answer and match the same pictures.

นำกรอบรูปทรงจากกล่องอุปกรณ์มาลองหาภาพด้านหลังด้วยมือ แล้วดูว่าตรงกับภาพใดในขวามือ จากนั้นลากเส้นจับคู่ให้ถูกต้อง



34

Class		Teacher	
Unit	B1-17	Topics	Parts and the Whole

Manipulatives: Foam shapes

Learning Activities

1. Remove a foam shape from its frame.
2. Place the frame on the cover of the Student Book. Ask students to observe the uncovered parts and guess what's covered?
3. Take out some figure cards. Cover one card with the foam frame. Ask students to observe the uncovered parts and guess who's covered?
4. Continue the practice until students are familiar with the concept of parts and the whole.

Student Book Activities

Guide students to complete the practice using the manipulatives and crayons.

Extended Activities

Finding friends:

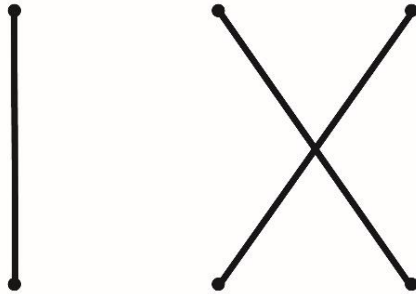
1. Prepare some cards of objects. Cut each card into four puzzle pieces. Each student gets one piece.
2. Have students hold their cards, and look for the other three related cards. The four students who have related cards can put their cards together to complete the puzzle.



How many flowers are in each basket? Count and Match.

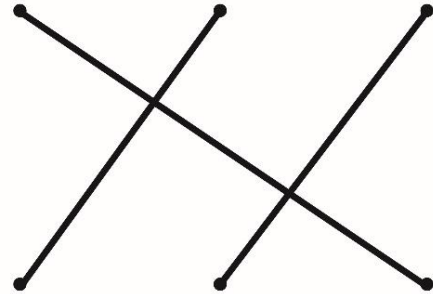
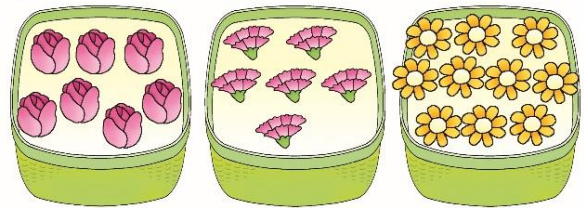
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Class		Teacher	
Unit	B2-1	Topics	Counting 1-10

Manipulatives: Number cards, flower petals

Learning Activities

1. Prepare some picture cards of flowers. Each card has flowers of different colors and numbers.
2. Guide students to observe and find, for example, the yellow flowers. Ask students to count the yellow flowers (7 flowers). Demonstrate how to check the answer by placing a corresponding number card on each flower while counting.
3. Repeat step two with other flower cards.
4. Grab some flower petals. Have students count the flower petals, and check the answer with the number cards.
5. Repeat the practice until students are able to count within 10.

Student Book Activities

Guide students to complete the practice using the manipulatives and crayons.

Extended Activities

Spring blossoms:

1. Draw a tree on a big piece of paper. Prepare 10 slips of paper. Draw a blossom on each slip.
2. Prepare number cards 1 to 10. Have one student draw a number card.
3. Guide the student to place the blossoms on the tree according to the number card. Have the student say, "Spring is here! I've ____ blossoms."

How many cards do they need? Circle the number of cards.

ดูซิว่าในมือของแต่ละคนถือบัตรเลขจำนวนเท่าไร วงกลมที่รูปการติดตามจำนวนตัวเลข

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Count the flowers. Use the number cards to check your answers, and match.

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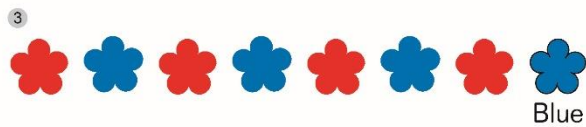
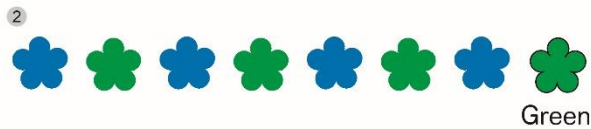
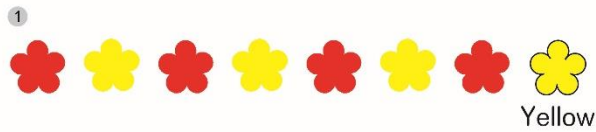
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4

Class		Teacher	
Unit	B2-2	Topics	Counting 1-10
Manipulatives: Number cards, flower petals			
Learning Activities 1. Prepare some invitation cards and number cards. 2. Place the invitation cards on the table. Guide students to count the invitation cards. 3. Have one student come up to draw a number card. That student then pick up the amount of invitation cards according to the number card. 4. Place some flower petals on the table. Have one student come up to draw a number card. That student then pick up the amount of flower petals according to the number card. 5. Repeat the practice until students are able to count within 10.			
Student Book Activities Guide students to complete the practice using the manipulatives and crayons.			
Extended Activities			
Moving balls: 1. Prepare 10 ping pong balls and 10 spoons. Place one ball on each spoon. 2. Have a student draw a number card. The student then moves the assigned number of balls to the other table using the spoons. Move one spoon each time.			

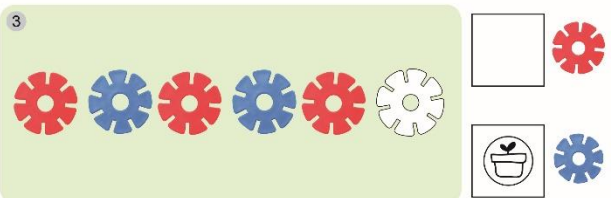
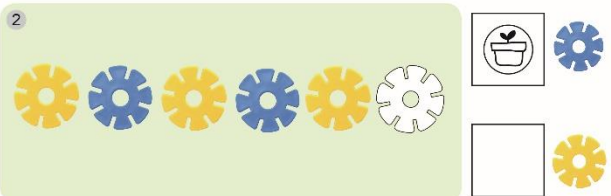
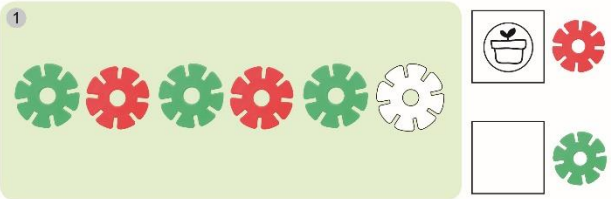


Look at the flowers in sequence. What color is the ? Think and color.
ดูการวางรูปแบบดอกไม้ น้อยๆ ลองคิดดูว่ารูปต่อไปควรจะเป็นสีอะไร แล้วระบายสี



Take out the flower petals and place them in sequence. What color is the next flower?
Stamp in the ☐ of the correct one.

นำดอกไม้จากกล่องอุปกรณ์มาวางเรียงดูว่า ดอกต่อไปควรจะเป็นสีอะไร ประทับตราลงในช่อง ☐ ของคำตอบ



Class		Teacher	
Unit	B2-3	Topics	Repeated Patterns of Two Elements
Manipulatives: Number cards, flower petals, stamp			
Learning Activities 1. Prepare two posters. Draw the flower patterns of Student Book page 5 on one poster, and page 6 on the other poster. 2. Show students the two posters. Guide students to observe the color patterns of the flowers. Introduce the concept of repeated patterns of two elements. 3. Line up some flower petals in repeated patterns. Guide student to find the repeated patterns. 4. Practice more with different repeated patterns. Student Book Activities Guide students to complete the practice using the manipulatives and crayons.			
Extended Activities			
Tweezer fun: 1. Place three difference colors of paper slips (2 x 5 cm) on a try. 2. Students take turns to pick up paper slips with a tweezer, and then line up the paper slips in a repeated pattern according to the teacher's instruction.			

B2-4 Repeated Patterns of Two Elements การวางรูปแบบซ้ำซ้อน



Look at the ornaments in sequence. What is the next ornament? Stamp in the ☐ of the correct one.

ดูการวางรูปแบบของตุ๊กตารูปดาว ลองคิดดูว่ารูปต่อไปควรจะเป็นสีอะไร ประทับตราลงในช่อง ☐ ของคำตอบ

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Look at the flower petals in sequence. What color is the ? Think and color.
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Blue

Green

Yellow

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Class		Teacher	
Unit	B2-4	Topics	Repeated Patterns of Two Elements

Manipulatives: Flower petals, stamp

Learning Activities

1. Prepare candies of two different colors.
2. Guide students to observe the colors of the candies. Line up the candies in a pattern, and have students count the candies by color.
3. Cover the last candy in the row with a piece of paper. Guide students to count the candies by color (e.g., red, yellow red, yellow, ...), and predict the color of the last candy that is covered.
4. After the students say out the last candy's color, remove the paper to check the answer.
5. Repeat the practice until students are familiar with the concept of repeated patterns.

Student Book Activities

Guide students to complete the practice using the manipulatives and crayons.

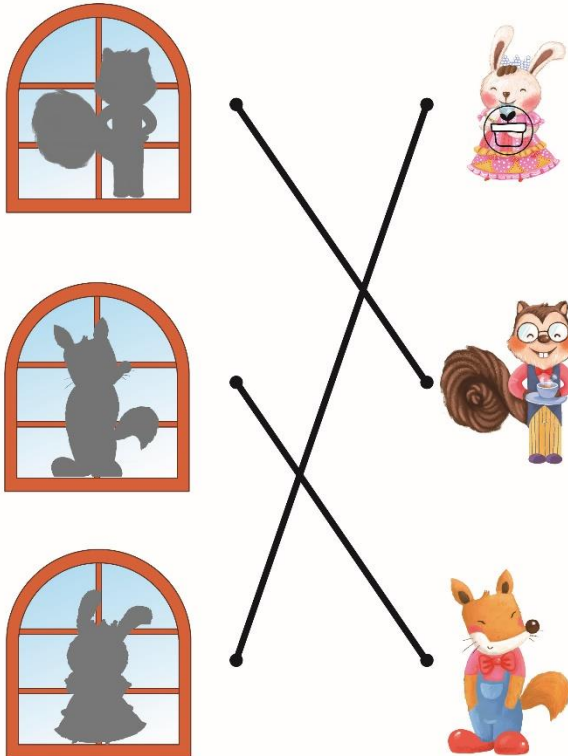
Extended Activities

Mystery bag:

1. Put some shape cards in a mystery bag.
2. Assign a shape pattern (e.g., triangle, circle, triangle, circle, triangle, circle, ...). Students take turns to draw a card from the bag. If the card doesn't match the shape pattern, this student has to draw again until he/she gets a shape card that matches the pattern. The next student then proceeds to draw a card from the bag.



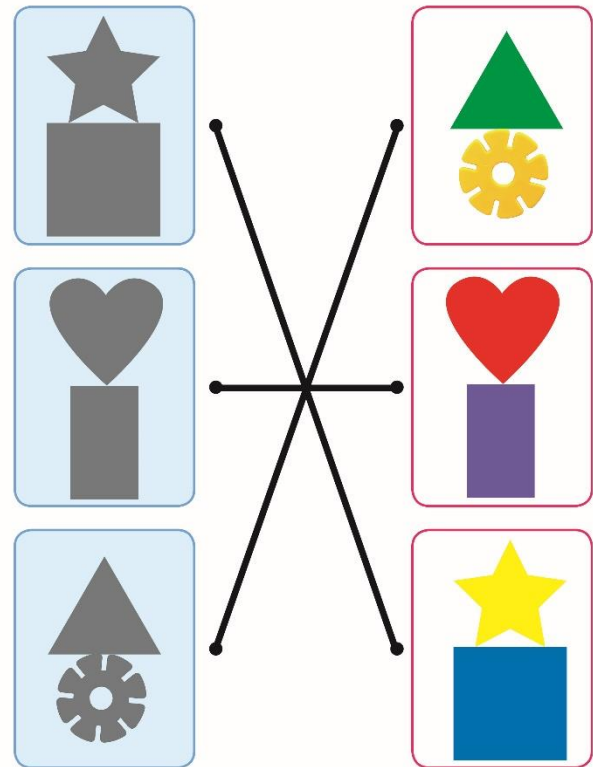
Whose shadow is it? Match the shadows with the people.
ลองเดาดูซิว่า ภาพซ้ายมือเป็นเงาของใคร ลากเส้นโยงคำตอบให้ถูกต้อง



9

Take out the foam shapes and flower petals to form the pictures on the right. Then match the pictures with the shadows on the left.

นำรูปทรงต่างๆ จากกล่องอุปกรณ์มาทาบดู หารูปภาพซ้ายมือเป็นเงาของรูปทรงใด ลากเส้นโยงคำตอบให้ถูกต้อง



10

Class		Teacher	
Unit	B2-5	Topics	Shadow of One Object

Manipulatives: Foam shapes, flower petals

Learning Activities

1. Draw a shadow on the whiteboard. Tell students, "This object is chubby and has two ears. You can find it in the grass." Ask students to raise their hands if they know the answer.
2. Repeat step 1 with other animals.
3. Hold a piece of white paper, and have a student hold a foam shape behind the paper. Shine the flashlight behind the foam shape. Ask students to tell the shape and find the same foam shape from their Math Box.

Student Book Activities

Guide students to complete the practice using the manipulatives and crayons.

Extended Activities

Finding shadows:

1. Remind students to be careful when playing in a dark room. For example, don't push, don't stick out arms and slap things.
2. Turn the classroom light off. Guide students to look for shadows with their flashlights.



The kitchen is dark. Please help the princess find out the items she needs. Circle them in the picture below.

ในครัวมืดมาก ช่วยน้องกระต่ายหาของสามสิ่งที่อยู่ในครัว วงกลมที่เงาของสิ่งของที่น้องกระต่ายต้องการหา

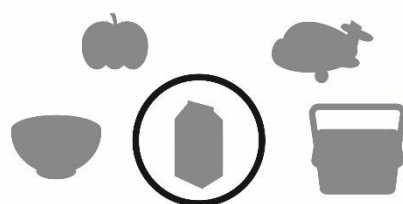


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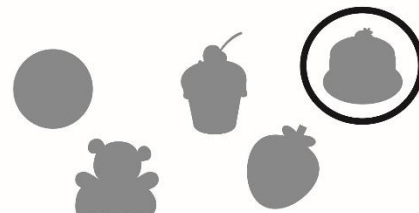
Circle the shadow that matches the item.

ดูจากภาพ วงกลมเงาของภาพตัวอย่างให้ถูกต้อง

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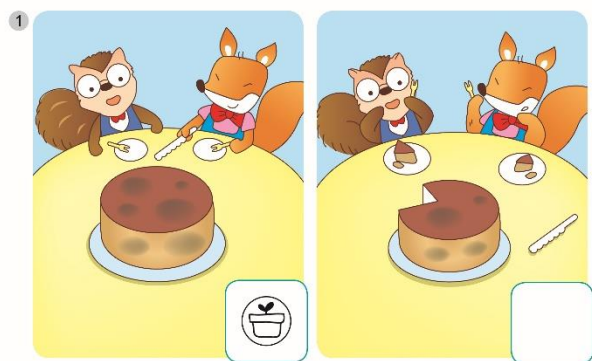


12

Class		Teacher	
Unit	B2-6	Topics	Shadow of One Object
Manipulatives: Foam shapes			
Learning Activities 1. Prepare a mini shadow theater (use a piece of plain paper as the screen). Show students some character cards, and then introduce the names of the characters. Have students observe the features of each character. 2. Place on character card behind the screen. Shine light behind the card to make a shadow. Have students guess who it is. 3. Repeat step 2. Practice with different character cards. 4. Have one student come up with his/her favorite foam shape. Place the foam shape behind the screen and make a shadow. Ask students to find the same foam shape from their Math Box.			
Student Book Activities Guide students to complete the practice using the manipulatives and crayons.			
Extended Activities			
Shadow theater: 1. Prepare a shadow theater and some paper puppets. 2. Instruct students to perform a play using the paper puppets.			

Which happened first? Please stamp in the ☐ of the picture.

ดูจากภาพ เหตุการณ์ไหนเกิดขึ้นก่อน ประทับตราลงในช่อง ☐ ของคำตอบ



Class		Teacher	
Unit	B2-7	Topics	Sequence of Two Events
Manipulatives: Foam shapes, stamp			
Learning Activities			
1. Tell students that little bunny is going to make a cake. There are two things she needs to do: stir the ingredients and bake the cake. Ask students which one goes first, and why?			
2. Draw two pictures on the whiteboard. One is a big bowl with ingredients, the other one is a cake. Draw a shape above each picture. Ask students which picture happens first? Students answer the question by holding the foam shape that indicates that picture.			
3. Continue practicing until students are familiar with the concept of sequence.			
Student Book Activities			
Guide students to complete the practice using the manipulatives and the stamp.			
Extended Activities			
Mysterious pictures:			
1. Draw three pictures of the same object. The first one only has an outline, the second one is colored, and the third one has glitter (or other decorations) on it.			
2. Display the three drawings. Ask students if they can tell the sequence of the three drawings, and why?			

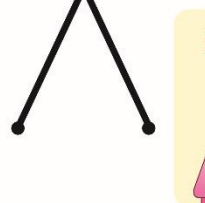
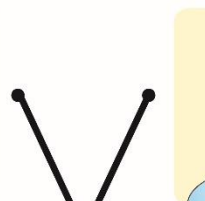
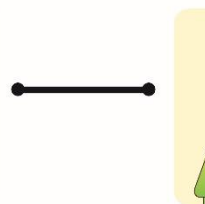


Look at the pictures on the left. What happens next? Match the pictures.
ดูจากภาพซ้ายมือ ลองคิดว่าเหตุการณ์ต่อไปจะเป็นอย่างไร ลากเส้นโยงคำตอบให้ถูกต้อง

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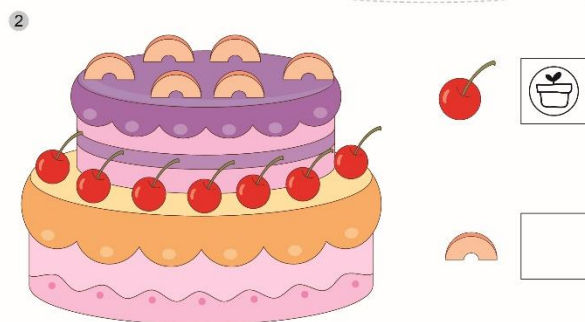
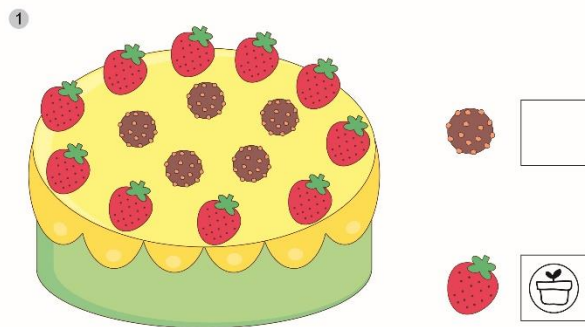


Class		Teacher	
Unit	B2-8	Topics	Sequence of Two Events
Manipulatives: None			
Learning Activities 1. Draw two cakes on the whiteboard. One is plain, and the other one is decorated. Ask students which one happens first? 2. Repeat step one. Have students practice telling the sequences of events. 3. Draw a small circle on a big piece of paper. Have students take turns to draw on that paper. Take a picture of the paper after each student draws on it. 4. At the end of the class, show students the pictures, and see if they can tell the sequence of the pictures.			
Student Book Activities Guide students to complete the practice using the crayons.			
Extended Activities			
Beautiful cake: 1. Cut out a circle from a Styrofoam sheet. Tell students they're going to decorate a cake. 2. Guide students to decorate the cake with pipe cleaners, beads, and colored paper. Give instruction such as, "Put the beads on the cake first, and then decorate the cake with colored paper." Reinforce students with the concept of sequence.			

B2-9 Comparing Numbers of Two Objects

Count the number of different cake decorations. Stamp in the ☐ of the one with more quantity.

ลองตกแต่งเค้กหน้าเค้กอะไรที่มีมากกว่ากัน ประทับตราลงในช่อง ☐ ของคำตอบ

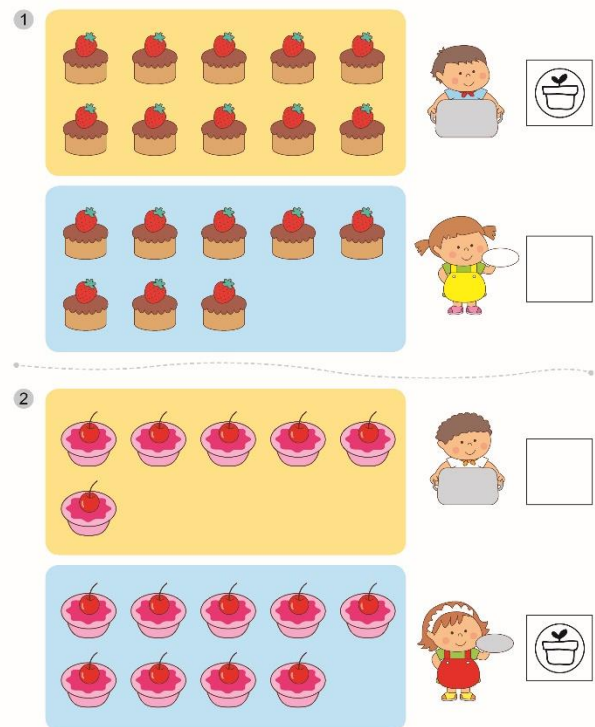


17

การเปรียบเทียบจำนวนตัวเลข

Which kid makes more cakes? Please stamp in the ☐.

ใครมีขนมเค้กมากกว่านะ ประทับตราลงในช่อง ☐ ของคำตอบ



18

Class		Teacher	
Unit	B2-9	Topics	Comparing Numbers of Two Objects
Manipulatives: Stamp			
Learning Activities			
1. Draw a cake decorated with jelly beans and strawberries.			
2. Ask students to observe the jelly beans and the strawberries on the cake. Ask students which one has more? Jelly beans or strawberries?			
3. Guide students to check the answer by counting the strawberries. Every time a strawberry is counted, cross it out and draw a strawberry next to the cake. Make sure the strawberries are aligned. Count the jelly beans in the same method.			
4. Have students match and count the rows of strawberries and jelly beans. Ask students which row has more.			
Student Book Activities			
Guide students to complete the practice using the stamp.			
Extended Activities			
Snack time:			
1. Prepare two plates and some flower petals. Have two students come up and give each student a plate.			
2. Say, "Time for snack. Please serve yourself." Each student grabs some flower petals and place them on their plates. Ask students to observe the two plates and tell which one has more flower petals.			
3. Line up the flower petals in rows to find out who has more.			

B2-10 Comparing Numbers of Two Objects

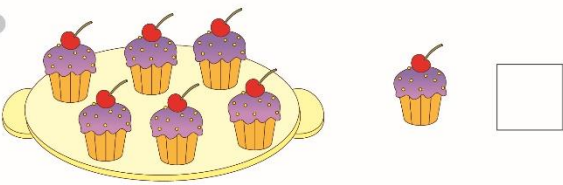
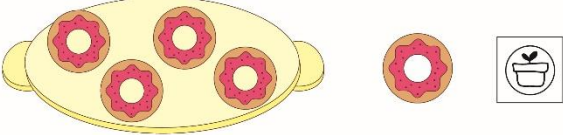
การเปรียบเทียบจำนวนตัวเลข



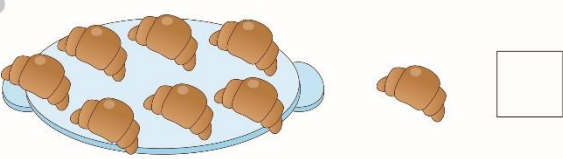
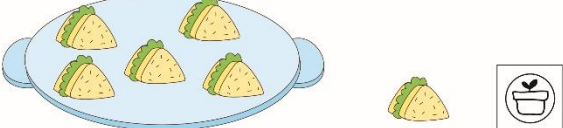
Count the pastry on each tray. Please stamp in the ☐ of the pastry with less quantity.

นับดูซิว่าถาดไหนมีขนมเค้กน้อยกว่า ประทับตราลงในช่อง ☐ ของคำตอบ

1

2

Count the flowers in each vase. Please stamp in the ☐ of the flowers with less quantity.

นับดูซิว่าดอกไม้นั้นแจกันไหนมีน้อยกว่า ประทับตราลงในช่อง ☐ ของคำตอบ

1




2




19

20

Class		Teacher	
Unit	B2-10	Topics	Comparing Numbers of Two Objects

Manipulatives: Flower petals, stamp

Learning Activities

1. Prepare 15 invitation cards. Randomly color the back of the cards in red or yellow. For example, 9 red and 6 yellow.
2. Ask student to sort the cards, compare the numbers of the different color cards, and then find out which color has more?
3. Prepare two trays. Place some flower petals in each tray. Ask students to compare the numbers of flower petals that are on the trays. Ask students which tray has less? Guide students to find out the answer by moving the flower petals into rows, matching and comparing the numbers of the flower petals.
4. Continue practicing until students are familiar with the comparison of numbers.

Student Book Activities

Guide students to complete the practice using the stamp.

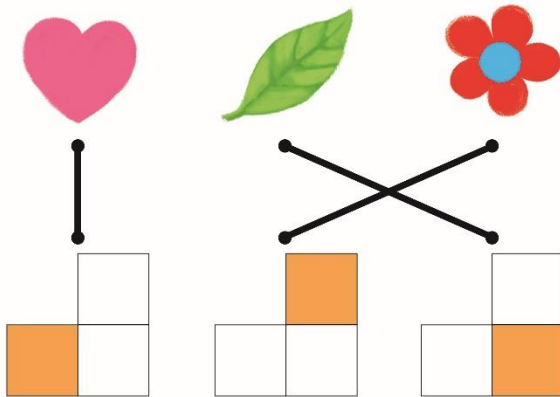
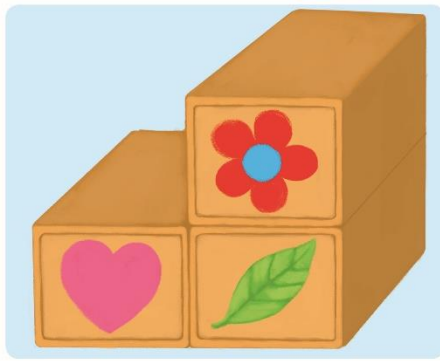
Extended Activities

Beautiful flowers:

1. Guide students to draw a big vase and some flowers on a drawing paper.
2. Put the artworks on the whiteboard. Ask students to count and compare the numbers of the flowers in the drawings.



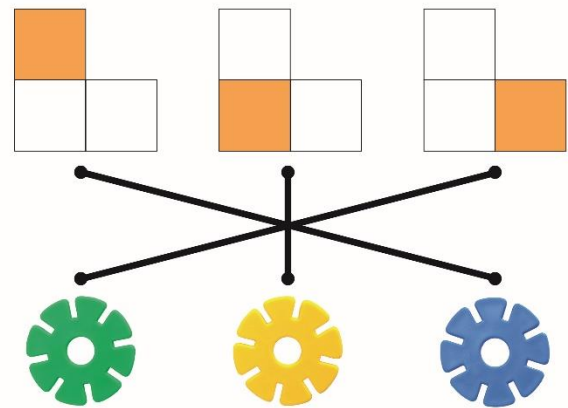
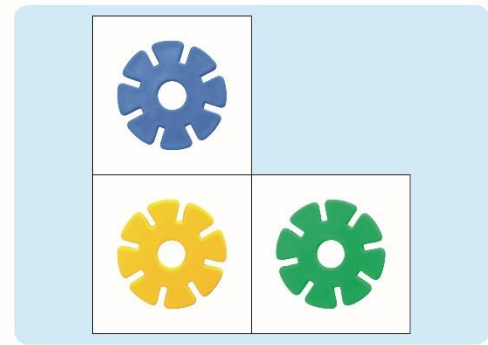
Where is each item placed? Match the items with the locations.
ให้มองหาภาพต่างๆ วางอยู่ในตำแหน่งไหน ลากเส้นโยงให้ถูกต้อง



21

Match the flower petals with the locations. Then take out the flower petals and place them in the matching positions.

นำดอกไม้จากกล่องอุปกรณ์มาวางตาม ดอกไม้แต่ละสีวางอยู่ในตำแหน่งไหนกันนะ ลากเส้นโยงให้ถูกต้อง



22

Class		Teacher	
Unit	B2-11	Topics	2D Spatial Relations

Manipulatives: Flower petals, foam shapes

Learning Activities

1. Prepare some figure cards and shape cards.
2. Draw three square boxes in a L shape (as on Student Book page 21). Place a figure card in each box.
3. Guide students to observe the positions of the figures. Assign one box, and have students tell which figure is in this box. Repeat practicing with the other two figures.
4. Place a shape card in each box. Select one box, and have students tell which shape is in this box. Students can also answer by holding a corresponding foam shape.

Student Book Activities

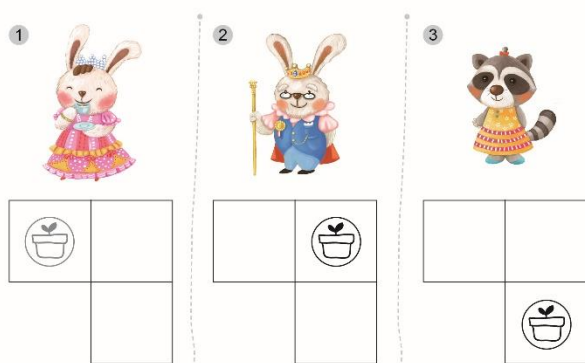
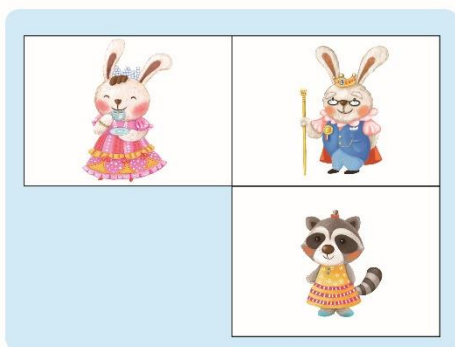
Guide students to complete the practice using the manipulatives and crayons.

Extended Activities

Position game:

1. Draw three big squares on the floor in a L shape , and then draw a shape in each square.
2. Put three position cards in a mystery bag (e.g., , , ). Students take turns to draw a card, and walk into the corresponding square. Check if each student gets to the correct position.

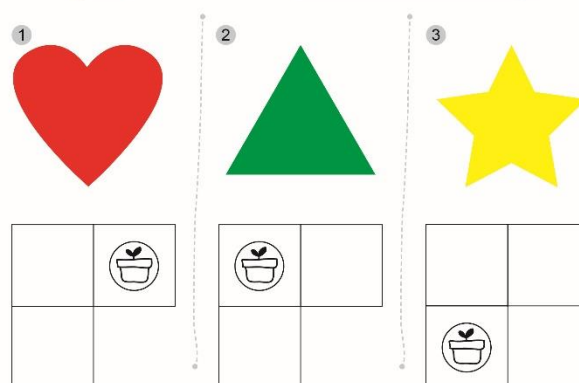
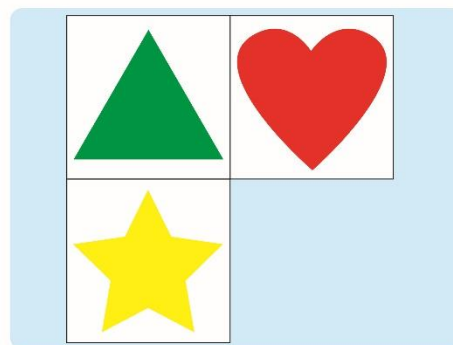
Where are the princess, the king, and the raccoon? Stamp on the matching positions.
 หนูน้อยๆ ลองดูว่าแต่ละคนยืนอยู่ตำแหน่งไหน ประทับตราที่ตำแหน่งของคนให้ถูกต้อง



23

Where are the foam shapes placed? Stamp on the matching positions. Then take out the foam shapes and place them in the matching positions.

นำรูปทรงต่างๆ ในกล่องอุปกรณ์มาวางทับ แล้วดูว่าแต่ละรูปทรงวางอยู่ตำแหน่งไหน ประทับตราที่ตำแหน่งของแต่ละรูปทรงให้ถูกต้อง



24

Class		Teacher	
Unit	B2-12	Topics	2D Spatial Relations

Manipulatives: Foam shapes, stamp

Learning Activities

1. Draw three square boxes in a L shape (same as Student Book p. 23). Place a different color of flower petal in each box.
2. Guide students to observe the boxes. Select one box and ask student to tell the color of the flower petal in that box. Repeat the practice with the other two boxes.
3. Continue practicing until students are familiar with the concept of spatial relations.

Student Book Activities

Guide students to complete the practice using the manipulatives and crayons.

Extended Activities

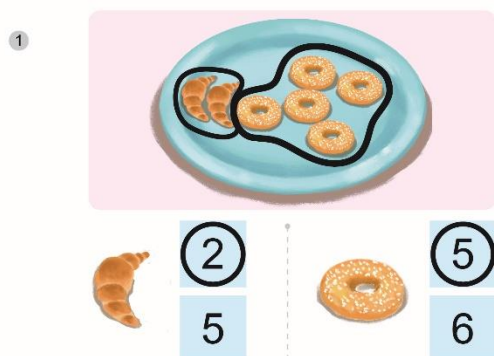
Little helpers:

1. Prepare some empty boxes. Line them up in a L shape.
2. Draw three position cards, each indicates the position of one box (same as Activity Book page 23).
3. Prepare some stationary and toys. Ask students to help put things into the boxes according to the position cards.



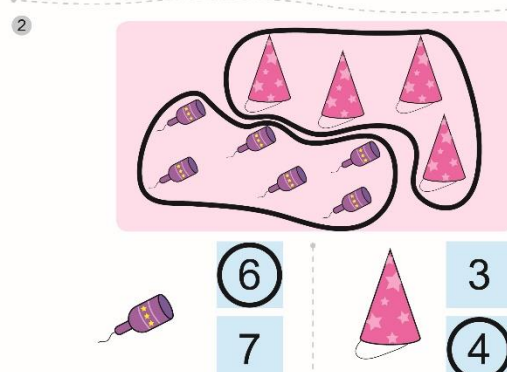
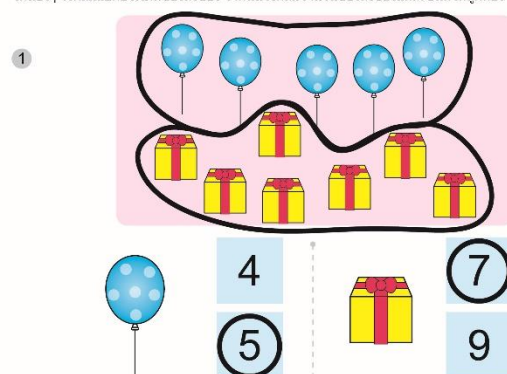
Divide the pastries into two groups by circling the same kinds together. Then count and circle the matching number.

ให้แบ่งของว่างประเภทขนม แล้ววงกลมจำนวนของขนมแต่ละชนิดให้ถูกต้อง



Divide the items into two groups by circling the same kinds together. Then count and circle the matching number.

ให้แบ่งของว่างประเภทของสิ่งของ จากนั้นวงกลมจำนวนของสิ่งของแต่ละชนิดให้ถูกต้อง



Class		Teacher	
Unit	B2-13	Topics	Categorizing & Counting

Manipulatives: Flower petals

Learning Activities

1. Draw a poster of snacks. Ask students to observe and tell how many kinds of snacks they can find.
2. Ask one student to come up and choose his/her favorite snack. Have the student circle all pictures of this kind of snack.
3. Repeat step 2 until all snacks are circled.
4. Place some flower petals of different colors on the table. Have some students come up to sort the flower petals by color. Have another student check if the sorting is correct, and then invite one student to count the flower petals of each color.

Student Book Activities

Guide students to complete the practice using the manipulatives and crayons.

Extended Activities

Little baker:

1. Prepare some clay of different colors.
2. Each student makes one snack with the clay. After everyone is done, guide students to observe how many kinds of snacks they had made. Practice sorting and counting.



Divide the birthday hats into two groups by circling the same kinds together. Then count and match.

ให้น้องๆ วงกลมแยกสีของหมวกปาร์ตี้ จากนั้นลากเส้นโยงจำนวนของหมวกแต่ละสีให้ถูกต้อง

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2

3

27

Divide the cookies into two groups by circling the same kinds together. Then count and match.

ให้น้องๆ วงกลมแยกประเภทของขนมปังกรอบ จากนั้นลากเส้นโยงจำนวนของขนมปังกรอบแต่ละชนิดให้ถูกต้อง

1

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3

28

Class		Teacher	
Unit	B2-14	Topics	Categorizing & Counting

Manipulatives: None

Learning Activities

1. Cut out flowers of different shapes from colored paper. Place the flowers on the whiteboard.
2. Draw three square boxes in a L shape (two boxes at the bottom). Ask a student to divide the flower into three groups by their shapes. Ask another student to move the flowers into the boxes respectively.
3. Guide students to check if the flowers are categorized correctly. Instruct students to count the number of each group of the flowers and put the corresponding number card next by each box.
4. For more practices, use different colors of flowers, or different shapes of items.

Student Book Activities

Guide students to complete the practice using the crayons.

Extended Activities

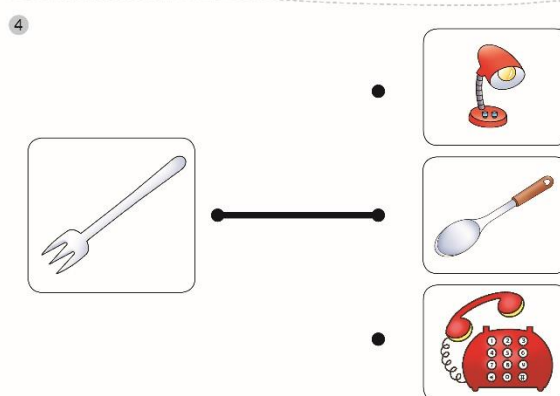
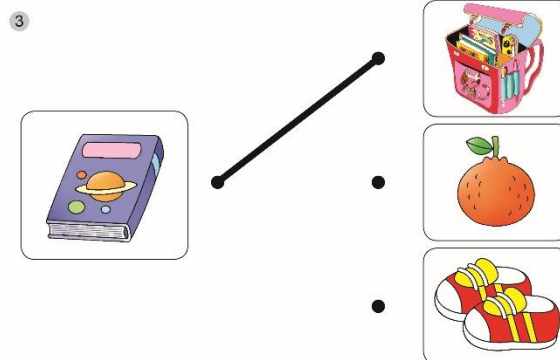
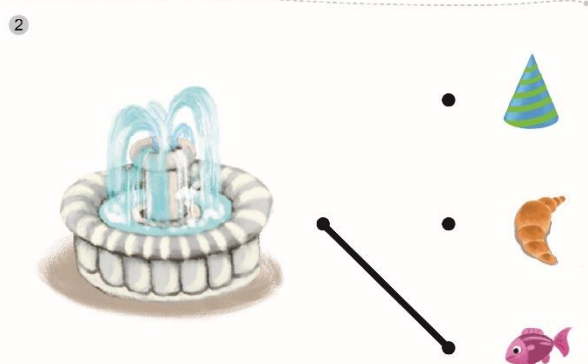
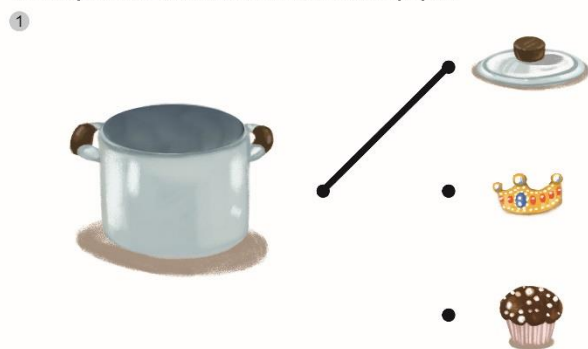
Birthday hats:

1. Prepare some drawing paper, and markers of 4 different colors.
2. Each student gets a marker and design his/her own hat with the marker.
3. After everyone is done. Students wear their hats and walk around. Ask students how they can categorize the hats, and then count the hats of each category.



Which object on the right can be associated with the picture on the left? Think and match.

ให้ลองๆ คิดดูซิว่าสิ่งของสิ่งใดมีความสัมพันธ์เกี่ยวข้องกัน ลากเส้นโยงจับคู่ให้ถูกต้อง



Class		Teacher	
Unit	B2-15	Topics	Relationship Among Objects
Manipulatives: None			
Learning Activities 1. Prepare some related objects. For example, a spoon and a bowl, a pair of scissors and a piece of paper, a school bag and a pencil case. Guide students to find the relationships between the objects. 2. Prepare some picture cards of different objects. Have two students come up to find two cards that are related. The first one finding the cards wins and can continue to play with the next student.			
Student Book Activities Guide students to complete the practice using the crayons.			
Extended Activities Association game: Say one object, and ask students to think of related things. For example, teacher says “zoo”, students say related things such as lion, panda. Teacher says “sea shore”, and students say “beach, sea shell, crab”.			



Which object on the right can be associated with the picture on the left? Think and stamp in the ☐ of the object.

ให้เด็กๆ คิดดูซิว่าสิ่งของสิ่งใดมีความสัมพันธ์เกี่ยวข้องกับ จากนั้นประทับตราลง ☐ ของคำตอบที่ถูกต้อง

1



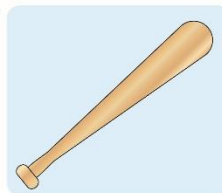
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5



3



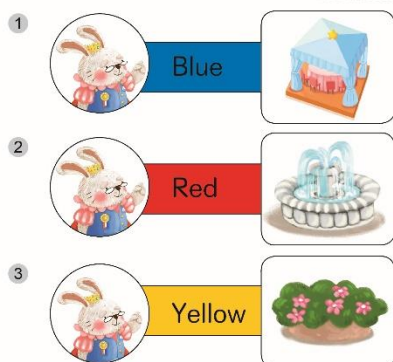
6



Class		Teacher	
Unit	B2-16	Topics	Relationship Among Objects
Manipulatives: Stamp			
Learning Activities 1. Enlarge and photocopy Student Book page 31. Have students observe the pictures and discuss the relationship between the left and the right items. For example, what is related to a table? (a chair) And why? 2. Give each student a piece of paper. Teacher says one object, and students draw related things. Have students display and explain their drawings. For example, teacher says "a raining day", students can draw a raincoat, an umbrella, etc. 3. Repeat step 3 and practice more with different objects.			
Student Book Activities Guide students to complete the practice using the stamp.			
Extended Activities			
Tidy up: 1. Take one item from each learning corner. 2. Ask students to tell the features of each item. Guide students to discuss about the relationships between the items and the learning corners. Ask students which corner does each item belongs to. For example, the book belongs to the reading corner, and the building blocks belong to the construction corner.			

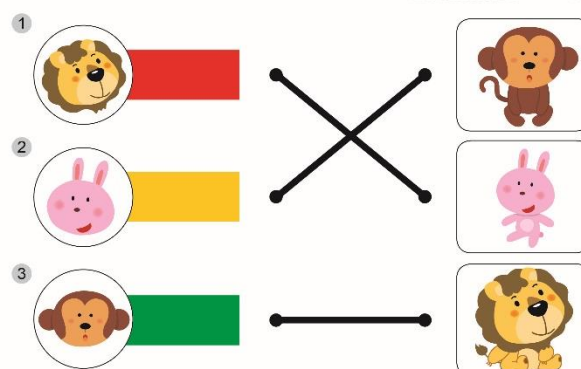
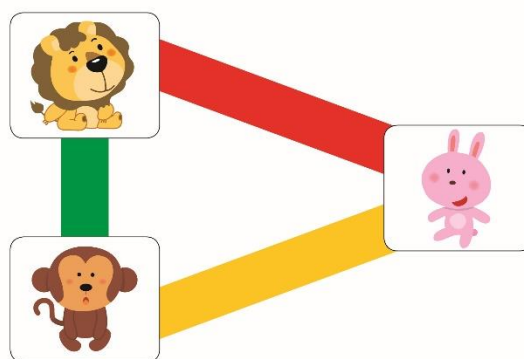
The picture shows the routes for the king to go to different places in the castle. Color the route to each place in the matching color.

ดูจากภาพตัวอย่าง ให้นักเรียนระบายสีเส้นทางของพระราชานี้ให้ถูกต้อง



Which animal would they meet? Follow the route map and match.

ดูจากเส้นทางในภาพตัวอย่าง ให้นักเรียนลากเส้นจับคู่ให้ถูกต้อง



Class		Teacher	
Unit	B2-17	Topics	Paths
Manipulatives: Foam shapes			
Learning Activities 1. Draw the same paths on the whiteboard as on Student Book page 34. 2. Place an animal card at each intersection. Guide students to observe the paths and the animals. Ask students whom Bunny will meet if Bunny takes the red path? After students understand the relationship between the animals and the red path, practice more with the other two paths. 3. Ask students which path Bunny should take if Bunny wants to meet Monkey. 4. Replace the animal cards with foam shapes. Have students tell the colors of the paths that are between the shapes. 5. Practice with different combinations until students are familiar with the paths.			
Student Book Activities Guide students to complete the practice using the manipulatives and crayons.			
Extended Activities			
Fast delivery: 1. Draw some paths on the floor, and then draw an icon on each end to represent a store. (e.g., a cake icon represents a bakery, a book icon represents a bookstore, a M icon represents a fast food restaurant.) 2. Indicate the start and the end icon. Have one student come up and move a toy car accordingly.			