

# THE PIZZA SHOP (AND LESSON)

## **Goal of the lesson:**

Composing and decomposing numbers to 5.

## **Specific Learning Goals (curricular expectations):**

*By the end of these lessons, students will:*

- demonstrate an understanding of number relationships for numbers from 0 to 10, through investigation (e.g., show small quantities using fingers or manipulatives)
- use, read, and represent whole numbers to 10 in a variety of meaningful contexts (e.g., use a hundreds chart to read whole numbers; use magnetic and sandpaper numerals to represent the number of objects in a set; put the house number on a house built at the block centre; find and recognize numbers in the environment; write numerals on imaginary bills at the restaurant at the dramatic play centre)
- investigate and develop strategies for composing and decomposing quantities to 10 (e.g., use manipulatives or “shake and spill” activities)
- investigate addition and subtraction in everyday activities through the use of manipulatives (e.g., interlocking cubes), visual models (e.g., a number line, tally marks, a hundreds carpet), or oral exploration (e.g., dramatizing of songs)

## **Secondary Goals of the team:**

- To enact a lesson that reflects authentically the reality of the All Day-Every Day JK/SK classroom and the collaborative relationships possible between teachers and ECEs and SERTs.
- To show all the stages of purposeful play.

## **Materials:**

Five frames (some with blank number sentences)	Red circle cut-outs for pepperoni	Paper plates
Red and yellow tiles	Yellow yarn cut up for cheese	Rolling pins
Red and yellow crayons	Pizza boxes	Basket for order forms
Pencils	Playdough	

### **Success criteria:**

Co-teacher will record an “I can” chart – success criteria – as they come up in the lessons.

“I can make a pizza using a total of five toppings.”

“I can use a five frame to organize my pizza order.”

“I can keep the same colours together on my order form.”

“I can write a number sentence that matches my order.”

“I can check my order with a friend.”

## **Input lesson #1: Co-creation of Pizza Shop (10-20 minutes)**

Using student interests to guide the development of inquiry. Students will share their experiences related to pizza and pizza toppings to aid in the development of The Pizza Shop in whole or small group setting.

### Co-creating the pizza shop inquiry:

- “Yesterday we had a delicious pizza hot lunch at school....”
- “What are some of your favourite pizza toppings? [Leading towards thinking about pizza toppings and the top two toppings in the class]
- “Where can you get pizza?” [Leading towards co-creating a new station of inquiry, i.e., A Pizza Shop]
- Brainstorm with students ideas of items that would be needed to open a pizza shop in our classroom.

## **Input Lesson #2: Making Five (10-15 minutes)**

### Activating student thinking:

- “We were talking about our favourite pizza toppings and where we can buy pizza.”
- “How can we use your two favourite toppings (cheese and pepperoni) to create a pizza? Your challenge is to make a pizza using only five item altogether.”
- Begin creating Success Criteria: I can make a pizza using a total of five toppings.

### Re-activate the use of the five frame and relate to prior lessons about making five:

- Present students with five frames to help them organize their thinking/orders.
- “Where else have we used these five frames?”

### Introduce today’s activity:

- Give students cut out pizza toppings (pepperoni and cheese).
- “Use the pepperoni and cheese to create as many different pizza orders as you can and record your orders on the five frame.”
- Add to Success Criteria: I can use a five frame to organize my pizza order.

### Developing student thinking:

- Students will make different five frame combinations.
- If you notice some students who aren’t keeping all the pepperoni manipulatives together, suggest creating an organizing rule [i.e., keep all like toppings together on the five frame]
- Add to Success Criteria: I can keep the same colours together on my order form.

### Student sharing:

- “Choose your favourite order and share with the group.”
- Teacher prompts:
  - “Tell me about your thinking?”
  - “How do you know that you have five toppings altogether?”
  - “Let’s write that into a number sentence.”
  - “How is your order similar/different to a friend who has already shared?”

- Add to Success Criteria: I can write a number sentence for my order.
- Math thinking questions:
  - “How did keeping our toppings together make it easier to read our orders/number sentences?”
  - Have students look at their neighbour and decide if their order is similar/different and explain why.

Consolidating student thinking:

Look at all of the different number combinations created and highlight to students the common result is that they all equal five. Student use their favourite number combination to transfer from manipulative to a coloured-in five frame order form to use at the play centre.

**2. At the play centre:**

Activating student thinking:

- “Yesterday we made pizza order forms and you chose your favourite and put it on these five frames. Today we are going to use our order forms, just like you would at a real pizza shop.”
- “What would be the first thing you do when you go to a pizza shop? [students will answer that they need to place an order].
- How did we fill out the order forms yesterday?
- “Today, you are going to take your order and make your pizza using playdough for the dough and the pepperoni and cheese as your toppings.
- Fishbowl modeling of centre – with two students to show
  - Students will take their favourite order or create a new order to the pizza shop
  - Read it, remind ourselves what it looks like
  - Get the toppings (manipulatives) they need
  - Create the pizza using the tools provided
  - Need to make sure your order matches the pizza you made.
- Add to Success Criteria: I can check my order with a friend.

Developmental play starts

Students go to the pizza shop and fill their orders.

Elements of choice at the centre:

Choosing the combinations of numbers to make 5.

Writing the number sentence on their order form or on a sticky attached to the “pizza”.

Introducing a third topping for students who are ready.

## Wrap up and reflection\*

<p>“Time to tidy up. We’ve had some time to play. I saw some really neat math thinking. Let’s do a little reflection.”</p> <p>“Write your name on the genius board (students asked by teacher or self-selected), then back to the carpet and ask “What made you a genius today? “</p> <p>“We are going to be using this for the next week or so as one of our centres.”</p> <p>“What worked well, what could we add, what could we change at the pizza shop? (co-creation and ownership of centre)</p> <p>*Consolidation of the centre will come later. We will share what that will look like at the end of a week or so of playing and investigating.</p>	<p><b>Key questions:</b></p> <p>How many toppings do you have?</p> <p>How many pepperoni, how many cheese?</p> <p>What strategies did you use?</p> <ul style="list-style-type: none"><li>○ I counted in my head</li><li>○ I filled my five frame</li><li>○ I used my fingers</li><li>○ I asked a friend</li></ul> <p>What worked well? What didn’t?</p> <p>If you wanted to help your friend do this, what would you tell them?</p> <p>What math thinking can you tell me about your pizza?</p> <p>How did the five frame help you?</p> <p>Tell your friends about your math thinking?</p> <p>What did you notice _____ was doing?</p> <p>Did your order have more pepperoni? How many more/less did you have?</p> <p><b>Other possibilities:</b></p> <p>If students begin to fill in the five frame with one colour and then know the remaining without colouring it in, ask: “How did you know that _____ were going to be cheese?”</p> <p>If you see someone doing something different, stop and point it out.</p>
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### **Possible next steps for lessons and play:**

- Finding the number patterns: All the different ways to make 5 with two colours. “Let’s try and organize your order forms! How can we group the orders? Do you think we’re missing any or do we have them all?”
- The person putting in the order could hide one part – “I have 3, how many more do I need?”
- Introducing a third colour (making 5 with three numbers).

