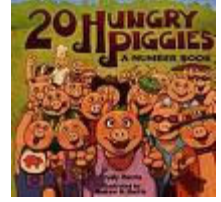


Book Title: 20 Hungry Piggies: A Number Book by Trudy Harris

Grade Levels: K-3



Learning Outcomes:

Kindergarten

A4 Represent and describe numbers 2 to 10, concretely and pictorially.

A5 Compare quantities, 1 to 10, using one-to-one correspondence

Grade 1

A9 Demonstrate an understanding of addition of numbers with answers to 20 & their corresponding subtraction facts concretely, pictorially & symbolically by:

- using familiar and mathematical language to describe additive and subtractive actions from their experience
- creating & solving problems in context that involve addition & subtraction
- modeling addition and subtraction using a variety of concrete & visual representations, and recording the process symbolically

Grade 2

A9 Demonstrate an understanding of addition (limited to 1 and 2-digit numerals) with answers to 100 and the corresponding subtraction by:

- using personal strategies for adding and subtracting with and without the support of manipulatives
- creating and solving problems that involve addition and subtraction

Grade 3

A9 Demonstrate an understanding of addition & subtraction of numbers with answers to 1000 (limited to 1, 2 and 3-digit numerals) by:

- using personal strategies for adding and subtracting with & without manipulatives
- creating and solving problems in context that involve addition and subtraction of numbers concretely, pictorially and symbolically.

Materials:

- Bags of counters as needed (20 unifix cubes for k and 1, 50 units cubes for 2 and 3)
- Book: 20 Hungry Piggies A Number Book by Trudy Harris
- Pig finger puppets
- Pig Partitioning Cards
- Story Problem Think Board
- Story Problem worksheets – grade specific
- Story Problems – grade specific

Lesson Focus 'Change Unknown' Problems:

1. Discuss learning intention: "I can write an equation that shows how I solved a story problem."
2. Warm-up students with a game – using images of pigs, and a number and have them determine the number of missing pigs. Give time for students to share their strategies.
3. Read the story, 20 Hungry Piggies. One child could have finger puppets or unifix cubes on fingers as the story is being read. Stop reading at the page where 19 pigs are lined up in front of the wolf.
4. Explain to the class that you are going to make a pig problem for them to solve.
5. Pose the problem (adjust numbers for the ability of your class):
The wolf sees 14 pigs in the line.
Some run away.
Now the wolf sees 8 pigs.
How many ran away?

Use a unifix cubes to represent the 14 pigs. Brainstorm ways to model the problem.

6. Give the children an opportunity to discuss their strategies, then record their thinking on the Think Board (electronically or on an overhead) an equation that represents the way they solved the problem.
7. Repeat for:
The wolf sees 11 pigs in the line.
Some more pig arrived.
Now the wolf sees 15 pigs.
How many new pigs arrived?
8. Have pairs or small groups of students take the problem papers – one at a time to solve. A variety of addition and subtraction problems are purposefully included – all change unknown.
9. Independent practice – complete attached sheet – recording equation and solution on the sheet but completing the work on the story board. (grade 1 sample provided only)
10. Have students debrief, first with a turn and talk and then whole group, the strategies they used to help them decide how to solve the problems.
11. Ticket out the door: 'Which type of problem did they find easier to solve – a subtraction or an addition?'