

IMPROVING TEACHER QUALITY PROGRAM
Mathematics Within: Algebraic Processes and Its Connections to Geometry

Participant Name: Karen Peterson and Be Vang

Broad Topic: Measurement

Subtopic: Elapsed Time

Grade level: 3

Time Frame: 30 minutes

Aim: To learn a strategy for finding elapsed time by using a number line.

Specific Objective(s):

- Understanding what elapsed time means
- Using a concrete visual representation of time to compute elapsed time

Materials/Supplies:

- chart paper
- number line handout

References: (text/handouts, etc)

- "The Grouchy Ladybug," by Eric Carle
- *Everyday Math*

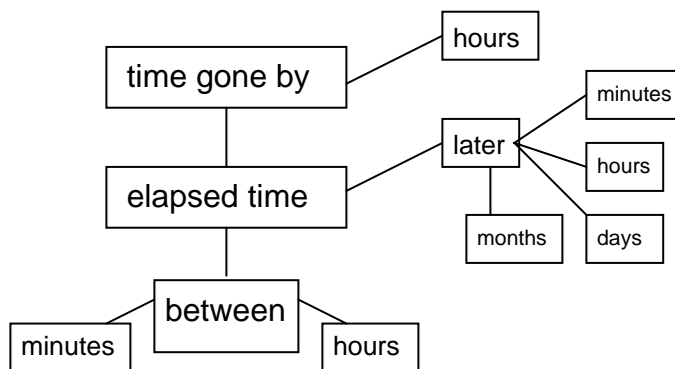
Lesson

• **Introduction**

- Pre-read "The Grouchy Ladybug" – Teacher read aloud to set the stage for the lesson.
- Brainstorm writing – Write for five minutes and fill up at least three lines:
What did you notice about telling time? Did it matter? What did time have to do with the story? What period of time did the story cover? How do you know? (Have the questions on the overhead for students to refer to while writing)
- Share the ideas of individual students (record ideas on chart paper)

• **Body**

- Discuss the meaning of "elapsed time"
- Make a graphic organizer on chart paper... a Concept Definition Web (add to as more definitions are observed)



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- **Body continued**

Demonstrate Number Line Model of finding elapsed time using questions from the story:

- 1) At 8:00 the ladybug met the praying mantis. One hour later she met a sparrow. What time was it?
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- 2) The sun came up at 5:00 am. At 2:00 pm the ladybug met a gorilla. How many hours had elapsed?
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- 3) At 5:00 pm the ladybug was at the head of the whale. How many minutes between the times she was at the head until she got to the flippers?

Students get into groups to practice using number lines to find elapsed time using questions from the story.

- 1) The sun came up at 5:00 in the morning. The ladybug met the yellow jacket at 6:00. How much time had gone by?
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- 2) At 1:00 pm the ladybug met the hyena. It had been two hours since she met the skunk. What time did she meet the skunk?
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- 3) At 6:00 pm the ladybug's journey was over. At 5:45 pm the whale's tail slapped her and sent her on her way. How long did it take her to get from the whale slap to where she landed?

- **Close**

- Whole group share answers they arrived at with their small group explorations. How did they get their answers?

- **Application/assessment**

- Continue practicing the number line model when doing length of day.
- Write about how you get from one time to another.
 - how did you figure out elapsed time?
 - what was your strategy?