| Grade 2 | Lesson: 7-5<br>**Problem Solving: Missing or Extra Information** | Reference to English |
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**Math Standard(s): 2.NBT.5 (also 2.NBT.7)        Domain: Numbers and Operations in Base Ten**

| Content Objective(s): | Language Objective(s): |
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| Students will determine whether they can solve problems with missing information or extra information.<br>*I can determine whether they can solve problems with missing information or extra information.* | Students will listen to the stories and draw them on their boards.<br>*I can listen to the story and draw it on my board.* |
| **Essential Understanding:**<br>Some problems have data missing needed to find the answer, and some problems have extra data not needed to solve the problems. | **Required Academic Vocabulary for Word Wall:**<br>**Listen:**<br>**Read:**<br>**Write:**<br>**Speak:**<br>**Sentence Frame:** |
| **Materials:**<br>• Connecting Cubes (or Teaching Tool 1)<br>• Whiteboards, erasers and markers | **Additional Lesson Vocabulary:**<br>Baseball cards, basketball cards, toy truck, toy car, toy plane, wall, window, pictures, rings, hair clips |

| Lesson: | Instructional Time:  20 minutes |
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**Opening: (1 minutes)**

T: **"You have learned how to read, understand, and solve story problems.  Today, you will learn to look for extra information in subtraction story problems."**

**Introduction to New Material (Direct Instruction): (4 minutes)**

• Pass out whiteboards, erasers, and markers.

T: **"I am going to read you a story.  I need you to draw it as I read it and listen for the extra information."**

• Draw a picture of the story as you tell it.

T: **"Kareem has 15 baseball cards. Draw 15 baseball cards."**

S: *will draw 15 baseball cards.*

T: **"He also has 6 basketball cards.  Draw 6 basketball cards."**

S: *will draw 6 basketball cards.*

T: **"Kareem gave away 8 of his baseball cards.  We need to cross out 8 of the baseball cards."**

S: *will cross out 8 baseball cards.*

T: **"How many baseball cards does Kareem have now?  Count them and write the subtraction sentence on your board."**

S: *will write the subtraction sentence on their board.*

T: **"Show me your boards.  Good job, you all wrote the subtraction sentence.  Let's read it together."**

S: *will read with the teacher, "15 minus 8 equals 7."*

T: **"Good job.  I have one more questions.  Does this story have extra information?"**

S: *will answer, "yes" or "no"*

T: **"The story does have extra information.  The part about basketball cards.  We can cross that out on the board because we don't need it."**

• Teacher will cross out baseball cards on the board.

**Practice: (7 minutes)**

• Draw a picture of the story as you tell it.

T: **"I am going to read you another story problem.  Pedro has 18 toy cars, let's draw 18 cars on our boards.**

S: *will draw 18 dots for cars on their board.*

T: **"5 toy trucks, draw 5 trucks on your board."**

S: *will draw 5 trucks on their board.*

T: **"and 3 toy planes, draw 3 toy planes on your board."**

S: *will draw 3 toy planes on their boards.*

T: **"He loses some of his toy cars.  How many toy cars does Pedro have left? Look at the information you have drawn on your board."**

T: **"18 cars, 5 trucks and 3 planes.  We want to find out how many toy cars Pedro has left.  Please write the subtraction sentence on your board."**

S: *will write the information they have on an subtraction sentence.*

T: **"Do we have enough information to solve the problem?"**

S: *will say, "yes" or "no"*

T: **"We know that Pedro started with 18 toy cars and he gave some away. We don't know how many toy cars he loses, so we can't solve the problem. There is missing information."**

T: **"Erase your boards because I am going to tell you another story problem."**

S: *will erase their boards.*

T: **"As I tell you the story I want you to draw it on your board. There are 11 pictures on the wall. Draw 11 pictures on your board, like this."**

S: *will draw 11 pictures on their board (rectangles).*

T: **"There are 3 windows in the room. Draw 3 windows as circles."**

S: *will draw 3 circles.*

T: **"Joni takes 4 pictures off the wall. What should you do to 4 of the pictures (rectangles)? Do it!"**

S: *will cross out 4 pictures (rectangles).*

T: **"How many pictures are still on the wall? Please write the subtraction sentence on the your board and show me."**

S: *will write 11 – 4 = 7.*

T: **"Show me. Good job, now read it to your neighbor."**

S: *will read "11 minus 4 equals 7."*

T: **"Before we move on, does this story have extra information or missing information. Thumbs up if it has extra information."**

S: *will show thumbs up.*

T: **"Yes, it has extra information. We don't need to know that the room has 3 windows. Erase your boards."**

**Closing: (4 minutes)**

T: **"Last story problem. Remember to draw it as I read it."**

T: **"Ruth made 17 rings, draw 17 rings or circles on your board."**

S: *will draw 17 rings or circles on their boards.*

T: **"She made 11 hair clips, draw 11 hair clips or straight lines like this on your board."**

S: *will draw 11 hair clips or straight lines on their boards.*

T: **"Then she gave away some of the rings. How many rings does she have left? Tell your neighbor how many rings Ruth has left."**

S: *will talk to their neighbor.*

T: **"Yes or no, can we solve this problem?"**

S: *will say, "no."*

T: **"You are right, we cannot solve this problem. Let's look at it together."**

T: **"We know that Ruth has 17 rings. We know that she gave some away. Do we know how many she gave a way?"**

S: *will respond, "no."*

T: **"We don't know how many she gave away, so we can't solve the problem."**

T: **"Well done today!"**

| Assessment: |
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| **Guided Practice** |