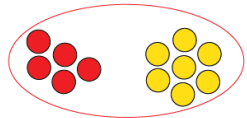# Activity 20 Assessment
## Estimating Sums and Differences

## Developing Meaning of Addition and Subtraction
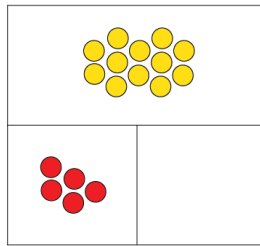
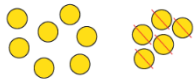| Recognizes addition and subtraction situations | Models concretely to add and subtract | Models and symbolizes addition and subtraction |
|---|---|---|

Recognizes addition and subtraction situations

Join

$5 + 7 =$ \_\_\_\_

Part-part-whole

$5 +$ \_\_ $= 12$

Separate

$12 - 5 =$ \_\_\_\_
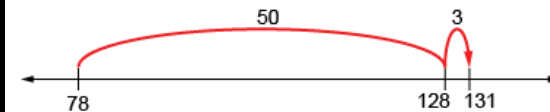
Compare
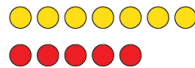
$7 = 5 +$ \_\_\_\_

Models concretely to add and subtract

$78 + 53 =$ \_\_\_\_
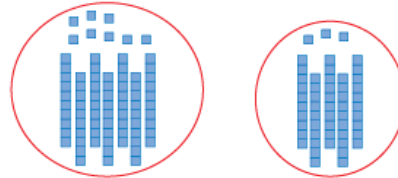
"78"  "88, 98, 108, 118, 128, 129, 130, 131"

Models and symbolizes addition and subtraction

$78 + 53 =$ \_\_\_\_

50    3

78    128  131

"I add 5 tens and 3 ones.
$78 + 53 = 78 + 50 + 3$, or 131"

## Observations/Documentation

| | | |
|---|---|---|
| | | |

# Activity 20 Assessment
## Estimating Sums and Differences

## Developing Meaning of Addition and Subtraction (con't)

| Estimates sums and differences to check reasonableness | Creates and solves problems | Uses properties and inverse operations of addition and subtraction to solve problems |
|---|---|---|
| $131 - 42 = 89$<br>"130 – 40 = 90, which is close to 89 so my answer is reasonable." | "There are 131 birds in the tree.<br>Some birds flew away.<br>Now there are 42 birds in the tree.<br>How many birds flew away?"<br><br>$131 - \square = 42$<br>89 birds flew away. | $131 - \square = 42$<br>"I can think addition to help me solve the problem:<br>$42 + \square = 131$" |

## Observations/Documentation

|  |  |  |
|---|---|---|
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| Developing Fluency for Addition and Subtraction | | |
| --- | --- | --- |
| Fluently adds and subtracts within 5<br><br>"I know 4 + 1 = 5 and 5 – 1 = 4." | Fluently adds and subtracts to 10<br><br>"I know 8 + 2 = 10 and 10 – 2 = 8."<br>(complements to 10) | Fluently adds and subtracts to 20<br><br>"I can use doubles.<br>I know 9 + 9 = 18 and 18 – 9 = 9." |
| **Observations/Documentation** | | |
|  |  |  |

| Uses known sums and differences to solve addition and subtraction equations<br><br>"25 + 37 = ▢<br>I know 25 + 30 = 55, and 55 plus 5 is 60, and 2 more makes 62."<br>(decomposing, known facts) | Develops mental strategies and algorithms<br><br>29 + 32 = ▢<br>I take 1 from 32 and give it to 29 to get 30 + 31.<br>30 + 30 = 60, and 1 more is 61."<br>(compensation) | Estimates sums and differences<br><br>49 + 38 = ▢<br>"49 is close to 50.<br>38 is close to 40.<br>50 + 40 = 90"<br>(using benchmarks) |
| --- | --- | --- |
| **Observations/Documentation** | | |
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