

Number Talk Planner

Goal/Focus Strategy:

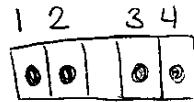
Students will develop fluency with four by finding ways to break apart and compose four.

Number String to Elicit Strategy

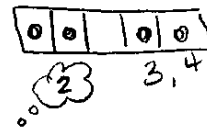


Anticipated Student Strategies & Methods of Recording

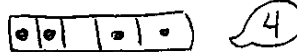
Count all:



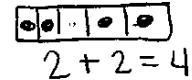
Count on:



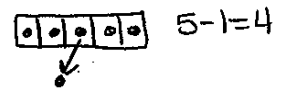
Subitize



Doubles:



One's missing



Process of Sharing Out

Prepare multiple copies of five frames from the number talk.
Record on copies and tape to board.

Questions to Students

Questions to Orchestrate Discourse (discussion) about Strategies

- How many dots are there?
- How did you see four?
- Did anyone have a different way?
- How are the dots arranged?
- Who can tell me how they found the amount of dots without counting every one?

Wrap-Up Questions/Statements to Make Connections and Focus on Efficiency

- What changed between the first and second set? What's the same?
- How does knowing there are 4 dots in the first set help you know there are four dots in the next set?
- How does know this is a five frame help you quickly know there is four in this set?

Teacher Reflection Questions:

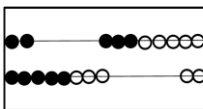
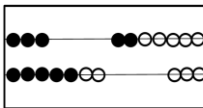
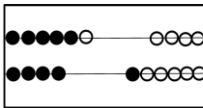
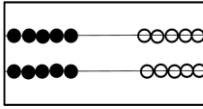
- What went well in your number talk?
- What did you find to be most difficult?
- What is your teacher goal for the next number talk?
- What string of numbers might be appropriate to do next with your students?

Number Talk Planner

Goal/Focus Strategy:

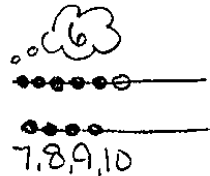
In order to develop fluency with ten, students see a find a variety of ways to compose ten.

Number String to Elicit Strategy

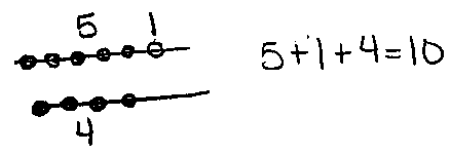


Anticipated Student Strategies & Methods of Recording

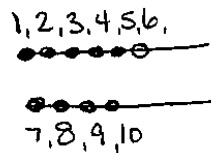
Count on:



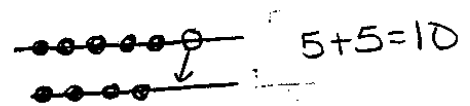
add in parts



Count all:



make it 5 and 5



Process of Sharing Out

Prepare multiple copies of five frames from the number talk.
Record on copies and tape to board.

Questions to Students

Questions to Orchestrate Discourse (discussion) about Strategies

- How did you see the total amount?
- Who can explain _____'s strategy in their own words?
- Who can tell me how they found the total without counting each dot?
- How many black beads does a rekenrek have in each row? How did this help you find the amount?

Wrap-Up Questions/Statements to Make Connections and Focus on Efficiency

- How did knowing the number in the first set help you find the amount in the next box?
- How was your thinking different from a friend's thinking?
- Which strategy would you like to try next time we work with rekenreks?

Teacher Reflection Questions:

- What went well in your number talk?
- What did you find to be most difficult?
- What is your teacher goal for the next number talk?
- What string of numbers might be appropriate to do next with your students?

Number Talk Planner

Goal/Focus Strategy:

Students will develop fluency adding single digit numbers with a focus on the doubles and near doubles strategy.

Number String to Elicit Strategy

$3 + 3$

$3 + 4$


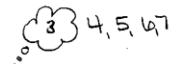
$3 + 2$

$5 + 5$

$5 + 4$

$5 + 6$

Anticipated Student Strategies & Methods of Recording

$3 + 4$
 use fingers 
 count all 1, 2, 3, 4, 5, 6, 7
 count on 
 doubles +1 $3 + 3 = 6$
 $\quad \quad \quad + 1$
 $\quad \quad \quad \underline{\quad}$
 $\quad \quad \quad 7$
 doubles -1 $4 + 4 = 8$
 $\quad \quad \quad - 1$
 $\quad \quad \quad \underline{\quad}$
 $\quad \quad \quad 7$

Process of Sharing Out

Record in a notebook under the document reader.
 Notebook will serve as an archive of student strategies.

Questions to Students

Questions to Orchestrate Discourse (discussion) about Strategies

- What number did you get for your solution?
- How did you find the total?
- Who can explain how they used the total from the first problem to help find the total of the second one?
- Can someone explain _____'s strategy in their own words?

Wrap-Up Questions/Statements to Make Connections and Focus on Efficiency

- Are there two strategies that are similar? How are they the same? How are they different?
- Many of you know your doubles facts, like $3 + 3$. How can you use $3 + 3$ to help you solve $3 + 4$?
- Is there a strategy that you haven't thought about before? How is this different from the way you thought about the problem?

Teacher Reflection Questions:

- What went well in your number talk?
- What did you find to be most difficult?
- What is your teacher goal for the next number talk?
- What string of numbers might be appropriate to do next with your students?

Number Talk Planner

Goal/Focus Strategy:

Develop fluency subtracting double-digit numbers, with a focus on the constant difference strategy.

Number String to Elicit Strategy

Anticipated Student Strategies & Methods of Recording

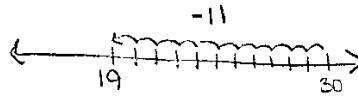
$31 - 20$

$30 - 19$

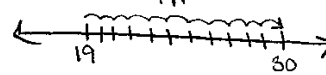
$49 - 30$

$50 - 31$

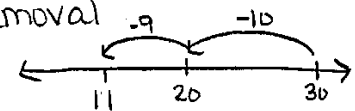
Count back



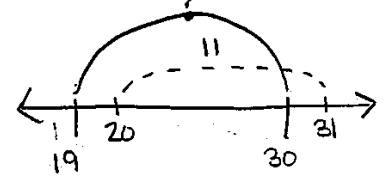
Count up



Removal



Constant difference



Process of Sharing Out

Record in a notebook under the document reader.
Notebook will serve as an archive of student strategies.

Questions to Students

Questions to Orchestrate Discourse (discussion) about Strategies

- How did you find the difference between ___ and ___?
- Did anyone think about this differently?
- Who can say how they used the difference from the first problem to help solve the second problem?
- Does anyone have questions about _____'s strategy?

Wrap-Up Questions/Statements to Make Connections and Focus on Efficiency

- What's the same about the first and second problem?
- How could we change the problem's numbers to make it easier to solve?
- Numbers from a subtraction expression can be moved up or down a number line by the same amount without changing the difference (space between them). How does this make problem solving easier?

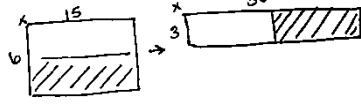
Teacher Reflection Questions:

- What went well in your number talk?
- What did you find to be most difficult?
- What is your teacher goal for the next number talk?
- What string of numbers might be appropriate to do next with your students?

Number Talk Planner

Goal/Focus Strategy:

Develop fluency multiplying single and double-digit numbers with a focus on the doubling and halving strategy.

Number String to Elicit Strategy	Anticipated Student Strategies & Methods of Recording
6×8 4×12 3×30 6×15	<p>6×15</p> <p>mentally do standard algorithm</p> $\begin{array}{r} 15 \\ \times 6 \\ \hline 90 \end{array}$ <p>break into addends</p> $\begin{array}{r} 6 \times 15 \\ (3+3) \end{array} \quad \begin{array}{r} 3 \times 15 = 45 \\ 3 \times 15 = 45 \\ \hline 90 \end{array}$ <p>break apart by place value</p> $\begin{array}{r} 15 \\ \wedge \\ 10 \quad 5 \end{array} \quad \begin{array}{r} 10 \times 6 = 60 \\ 5 \times 6 = 30 \\ \hline 90 \end{array}$ <p>double and half</p>  $\begin{array}{r} 6 \times 15 \\ \div 2 \quad \times 2 \\ 3 \quad 30 \end{array} \quad 3 \times 30 = 90$

Process of Sharing Out

Record on chart paper to serve as a reference tool.

Questions to Students

Questions to Orchestrate Discourse (discussion) about Strategies

- What is the product of ___ and ___?
- How did you solve this problem?
- Can someone explain _____'s strategy in their own words?
- Did anyone use a different method?
- Who can explain how they used the first expression to find the value of the second expression?

Wrap-Up Questions/Statements to Make Connections and Focus on Efficiency

- How are the first two expressions the same?
- How could you use the first expression to help you solve the second expression?
- After introducing the doubling and halving strategy: When will this strategy work? When will this strategy not work?

Teacher Reflection Questions:

- What went well in your number talk?
- What did you find to be most difficult?
- What is your teacher goal for the next number talk?
- What string of numbers might be appropriate to do next with your students?