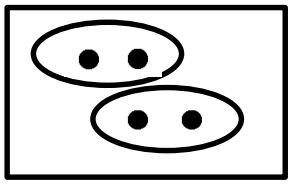
Examples of Number Talks with Dot Cards

Overview:
Dot images are a great tool for introducing composing and decomposing, practicing counting, seeing numbers in a variety of ways, subitizing (instantly recognizing a quantity), and noticing number combinations.

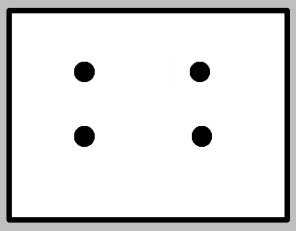
Questions:
- How many dots do you see?
- How did you know "how many"?
- Could you find the number of dots without counting them one by one?
- Is there another way to find the number of dots?
- How were the dots arranged?

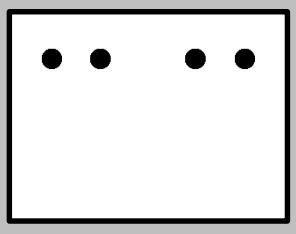
Student-Teacher Interaction:
- **Teacher:** *Do you notice anything about how the dots are arranged?*
- **Student:** *I see two together and then another two. I see two on the top and two on the bottom.*

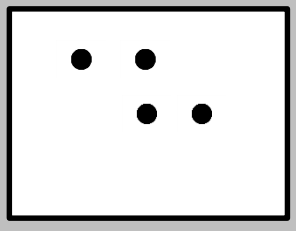


- **Teacher:** *Okay! Did anyone see it in a different way?*

Day 1:







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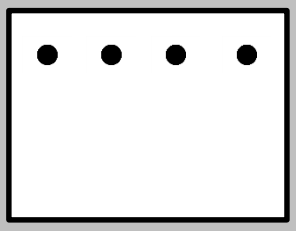
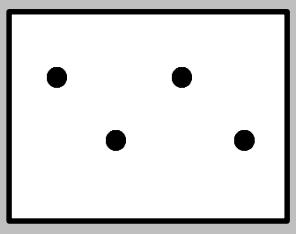
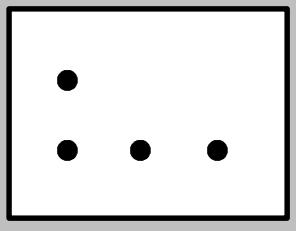
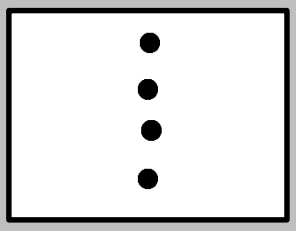
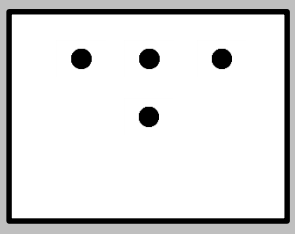


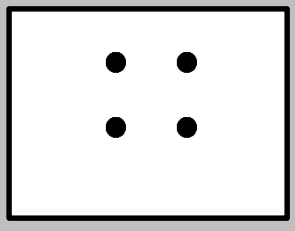




Day 3:







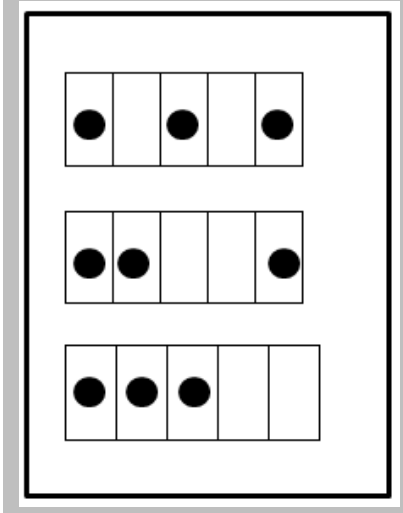
Examples of Number Talks with Five Frames

Overview:
Five frames can be used to build fluency, subitize, and develop and understanding of conservation (a quantity can be represented in more than one way). These skills are the foundation to computational fluency with addition and subtraction.

Questions:
- How did you know the amount of dots?
- Could you find the amount of dots without counting them one by one?
- Is there another way to find the amount of dots?
- What changed between the first and second (or second and third) five frame? What stayed the same?

Teacher-Student Interactions:
- **Teacher:** *How did you know how many dots are here?*
- **Student A:** *I counted the dots.*
- **Student B:** *I just knew it was three.*
- **Teacher:** *Sure. Sometimes you can instantly know "how many" without even counting.*
- **Teacher:** *How else could you find the number of dots?*
- **Student C:** *It was the same amount as the last five frame, but this time the dots were squished together.*

Day 1:



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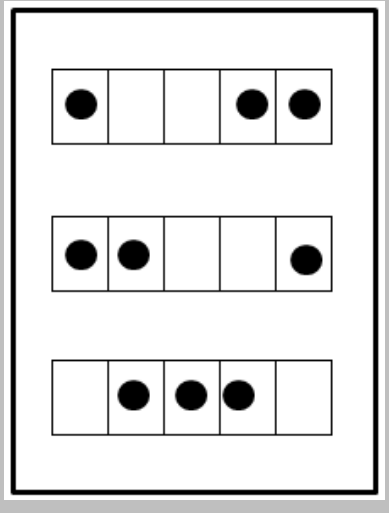

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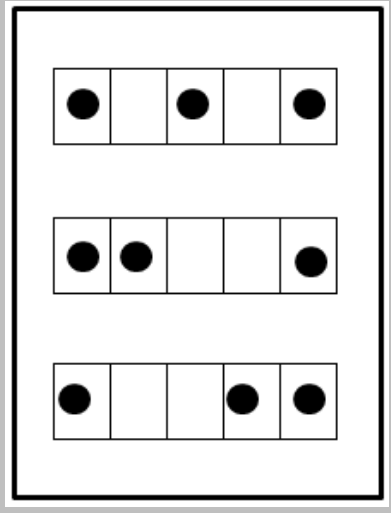


Examples of Number Talks with Rekenreks

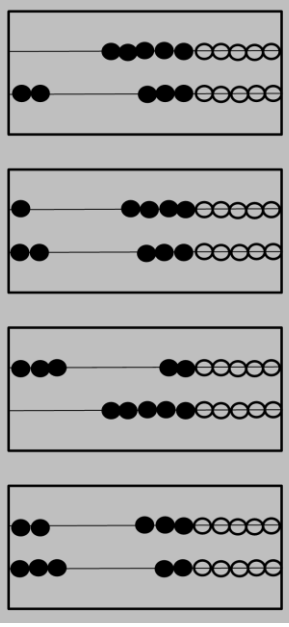
Overview:
A rekenrek is a great tool for reasoning about numbers, subitizing, building fluency, and developing number relationships.

Additional Information:
When using a rekenrek, students attend to the beads/dots on the left side. Initially, the teacher may need to cover the beads on the right side of the rekenrek to help students focus.

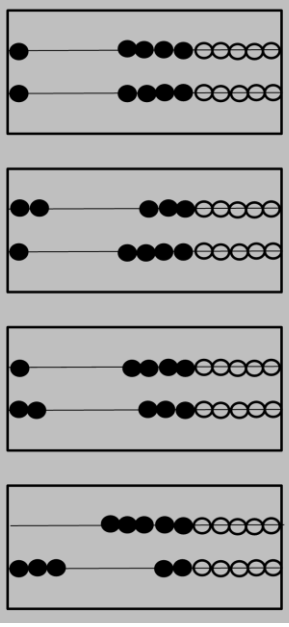
Questions:
- How did you find the amount of beads?
- Could you find how many beads there are without counting them one by one?
- Is there another way to find the amount
- How are the beads arranged?
- How can you use what you know about the first (or second) rekenrek to find the amount on the second (or third) rekenrek?

Teacher-Student Interaction:
- **Teacher:** *How do you know how many beads are here?*
- **Student A:** *I just knew it was three.*
- **Teacher:** *Sure. Sometimes you can just look at a group of objects and instantly know "how many" without even counting.*
- **Student B:** *I counted them.*
- **Teacher:** *When I looked at this, I instantly knew it was bigger than one and a bit less than five. Then, I counted and found there were three beads.*

Day 1:



Day 2:



Day 3: