

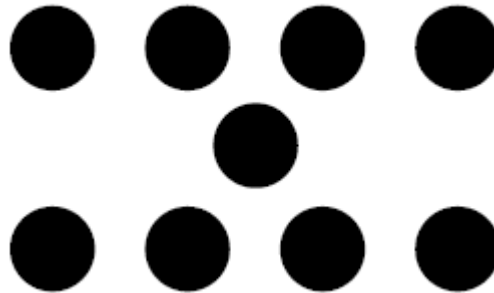
**Three Act Task:** Don't spill the Beans



**Learning Targets:** I can share and develop my math ideas.



**Dot Card Number Talk:** Invite students to look at the dot card and, without counting one by one, figure out how many dots there are. (Reminder to students to have their fists in a discreet position and put up a thumb when they think they know how many dots there are). Then, show the dot card. When most thumbs are up, invite willing students to share how many dots they see. Gather several answers on the board. Next, invite students to describe how they saw it. Consider how best to record each way of seeing. Paraphrase student responses, ask questions to clarify, and record students' thinking in pictures and numbers. (from p.14-15 in *Making Number Talks Matter*, Humphreys and Parker, 2015)



**Number Talk:** A number string to be strategic and playful around the number 20. "What is your solution?" "How did you arrive at your thinking?"

$3+8+2+7$
$4+4+6+6$
$9+1+1+9$

**BIG MATH IDEAS:**

- When we count a set we can count in many ways by 1's, 2's, 5's, 10's, 20's or 25's and some more. The answer is always the same !
- There are patterns in place value that are based on 10-ness.
- It is important to be able to make connections to the real world when we imagine bigger numbers.

Inclusion	Numeracy
For ALL	I can work collaboratively with another student to engage in a problem solving connected to a story.
For Some	I can write my story as an equation using numbers and symbols.
For a Few	I can model different ways to represent my thinking.

**A Three Act Task:** Don't spill the beans <https://mscastillosmath.wordpress.com/2017/10/24/3-act-dont-spill-the-beans/>



**ACT ONE:** Watch the 22 second clip. As a whole group, invite students to think about and share what they noticed in the clip and what they wonder, and record their ideas.

What did you notice?	What do you wonder?

How many beans altogether? Any suggestions? (Discuss the difference between an observation and an estimation). Invite students to estimate how many jellybeans are in the box - come up with a *too low estimate* and a *too high estimate*. An estimate is a wonder! Students write their estimates on two different coloured post-its and walk them to the chalkboard or record suggestions from the class.

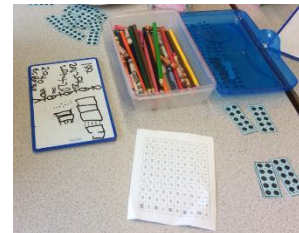
A too low estimate:	A too high estimate:

Scanning the estimates, collectively identify the range - the lowest estimate in the class and the highest of the estimates in the class.

Next, invite students to **think about and share information they believe would be useful to know for solving this problem.** Record ideas shared.

Arrange Random Groupings to work with white boards

**ACT TWO:** Looking at the photograph, invite students to first consider how many pink Jelly Beans there are and how many of each fit in the section of container.



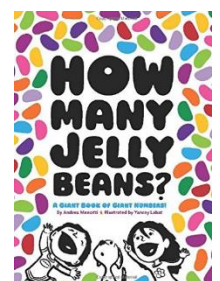
In random groups of three, using the vertical nonpermanent surfaces (or small whiteboards), invite students to figure out how many jellybeans must fit the whole box. Students are encouraged to show their thinking in pictures, numbers and words.

**ACT THREE:**

Share the final photos  $20 + 20 + 20 + 20 + 20 = 100$   
or  $5 \times 20 = 100$

**Closure:**

View the blank picture at the end of the 3 Act Task.  
Think mathematically: *what else do you wonder?*



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