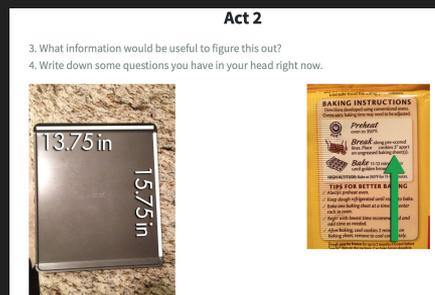# How Many Will Fit? Grade 3

This lesson begins with a 14 second video to engage students in thinking about spatial relationships and benchmarks. The video asks, "How many cookies will fit?" Using what is seen on the video, students create a model to determine a good estimate for how many cookies will fit on the tray.

Students receive 3 additional clues to solve the problem. Students rework the model and share possible solutions. The next video provides more detailed clues.

Students share their final finding and their reasons for coming up with the solution they have.

This lesson:

❏   Follows the 5 action steps for modeling (Meyer, 2015)

❏   Allows for extensions to continue problem solving tasks that relate to real world thinking

❏   Aligns with Common Core Standards for measurement, multiplication, and estimation

❏   Supports key concepts of the Eight Standards of Math Practice

Extensions and Exit Ticket

Act 1

Act 2

3. What information would be useful to figure this out?
4. Write down some questions you have in your head right now.

13.75 in

15.75 in

Standards

Mathematical Practice Standards:

-Standards for Mathematical Practice: CCSS.Math.Practice.MP2.: Reason abstractly and quantitatively

-Standards for Mathematical Practice: CCSS.Math.Practice.MP4: Model with Mathematics

-Standards for Mathematical Practice: CCSS.Math.Practice.MP5: Use appropriate tools strategically

Common Core State Standards:

-3.MD.C: Geometric measurement: understand concepts of area and relate area to multiplication and division.

-3.OAA1: Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each.

-3.MD.C7- Relate area to the operations of multiplication and addition

-3.MD.C7b- Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems.