

Appendix

Summer Math Problem

This 3 Act Math Problem is based on how many treats Summer the service dog has eaten. Students will be given a picture of the treats at the beginning of the day (31 small and 12 large treats for a total of 43) and a picture of the treats at the end (16 small and 6 large treats for a total of 22). Students will determine how many treats were eaten in total (21). They may choose to describe how many small treats (15) and large treats (6).

Teacher Notes

Act 1 - Engage and Perplex

GRADE 2

Teachers do	Students do
Ask students to be ready to share: What do they notice? What do they wonder? Show video twice and then discuss	Students watch the video twice
Record all types of observations and questions for the class.	Share what they notice and what they wonder.
Option: Ask students what would a mathematician notice or wonder?	Option: Students pair and share what they think.
Highlight math question(s). If needed, guide students to form a question that could be answered with the materials available. In this case, "How many treats did Summer eat?"	

Act 2 - Seek Information and Solutions

Teachers do	Students do
<p>Hand out 3 Act Tasks working page</p> <p><u>ESTIMATE</u> Guide conversation and have students share estimates that are too high and too low, giving reasons why they think that. Have students write their own middle estimate.</p>	<p>Students record the math question, "How many treats did Summer eat?"</p> <p>Students participate in discussion and copy the low and high estimates decided by the class on their paper and record their own middle estimate.</p>
<p><u>INFORMATION</u> Ask students what information they would need/like to have to answer the question.</p> <p>Decide together what information is needed.</p> <p>Go over the working page requirements and where to show their work and answer.</p> <p>Provide photos with the number of dog treats before and after. As requested by the students.</p>	<p>Students pair and share.</p> <p>Students use photos for information and show their thinking on the Three Act Tasks working page.</p>

Act 3 - Reveal Discuss Extend

Teachers do	Students do
<p>Discuss results and have some students share how they came up with their answers.</p> <p>Show the reveal video.</p>	<p>Discuss and prove their thinking.</p> <p>Check the reveal with their answer.</p>

Act 1 Video

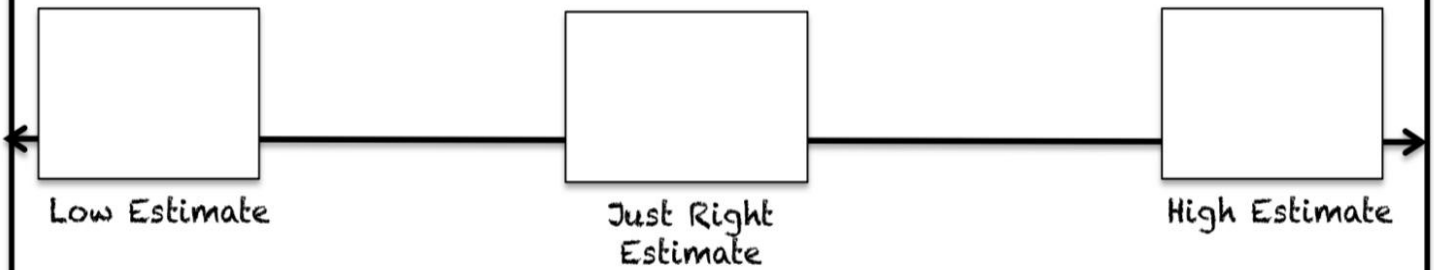


[Act 1 Video Link](#)

Three Act Tasks

What is the Main Question?

Estimate



Show your work!

Answer:

Act 2 Pictures



Before



After



Act 3 Video



[Act 3 Video Link](#)