

## Anchor Paper Scoring and Rationales - Task: Cookie Toppings

Name: Student A

<b>Criteria</b>	<b>Performance Level (Advanced, Proficient, Developing, Emerging)</b>	<b>Rationale</b>
<b>Mathematical Understanding</b>	Developing	The student demonstrates a partial understanding of the concepts and skills associated with this task. The student's strategy leads to an incorrect solution.
<b>Problem Solving</b>	Developing	The student chooses a problem-solving strategy that does not display a complete understanding of the problem. The bar models drawn do not accurately reflect the total number of batches of cookies made.
<b>Communication and Reasoning</b>	Emerging	The student does not provide any reasoning, justification, or use mathematical language to communicate thinking.
<b>Representations and Connections</b>	Developing	The student uses an incomplete representation to model the problem. The student does not accurately use the bar models to show the fractional amount in the total amount of cookie toppings column.

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**Name: Student B**

<b>Criteria</b>	<b>Performance Level (Advanced, Proficient, Developing, Emerging)</b>	<b>Rationale</b>
<b>Mathematical Understanding</b>	Proficient	The student shows an understanding of the mathematics concepts and skills needed to solve this task and provides a correct solution.
<b>Problem Solving</b>	Proficient	The student uses a problem-solving strategy which produced a correct solution
<b>Communication and Reasoning</b>	Proficient	The student communicates the thinking process and supports arguments and claims with evidence.
<b>Representations and Connections</b>	Developing	The student uses two representations (bar model and number sentence) to explore and model the problem.

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Name: Student C

Criteria	Performance Level (Advanced, Proficient, Developing, Emerging)	Rationale
<b>Mathematical Understanding</b>	Proficient	The student demonstrates an understanding of the concept and skills associated with the task.
<b>Problem Solving</b>	Proficient	The student's problem-solving strategy produces a correct solution relevant to the problem.
<b>Communication and Reasoning</b>	Developing	The student uses limited mathematical language to partially communicate thinking. The student does not provide an explanation where $\frac{1}{4}$ comes from in #2.
<b>Representations and Connections</b>	Developing	The student uses an incomplete representation to model the problem. The student does not provide evidence where the $\frac{1}{4}$ leftover butterscotch morsels came from.

## Anchor Paper Scoring and Rationales - Task: Cookie Toppings

Name: Student D

Criteria	Performance Level (Advanced, Proficient, Developing, Emerging)	Rationale
<b>Mathematical Understanding</b>	Developing	The student applies mathematical concepts and skills which leads to an incomplete and incorrect solution.
<b>Problem Solving</b>	Developing	The problem-solving strategy the student uses (models and number sentences) produces a solution that is relevant to the problem but is inaccurate.
<b>Communication and Reasoning</b>	Emerging	The student provides little to no reasoning or justification to communicate thinking.
<b>Representations and Connections</b>	Developing	The student makes a partial mathematical connection that is relevant to the problem. The student attempts to use a bar model and number sentences to show the distribution of the cookie toppings.

## Anchor Paper Scoring and Rationales - Task: Cookie Toppings

Name: Student E

Criteria	Performance Level (Advanced, Proficient, Developing, Emerging)	Rationale
<b>Mathematical Understanding</b>	Developing	The student demonstrates a partial understanding of the concepts and skills associated with the task.
<b>Problem Solving</b>	Proficient	The student uses a problem-solving strategy (skip counting) based on the amount of toppings per batch that leads to a correct solution.
<b>Communication and Reasoning</b>	Developing	The student uses limited mathematical language to partially communicate their thinking. The student does not provide an explanation where $\frac{1}{4}$ comes from in #2.
<b>Representations and Connections</b>	Developing	The student uses an incomplete representation to model the problem. The student provides incomplete evidence where the $\frac{1}{4}$ leftover butterscotch morsels came from.

## Anchor Paper Scoring and Rationales - Task: Cookie Toppings

**Name: Student F**

Criteria	Performance Level (Advanced, Proficient, Developing, Emerging)	Rationale
<b>Mathematical Understanding</b>	Proficient	The student demonstrates an understanding of the concepts and skills associated with the task which leads to a valid and correct solution.
<b>Problem Solving</b>	Proficient	The student's problem-solving strategy displays an understanding of the underlying mathematical concept for this task.
<b>Communication and Reasoning</b>	Proficient	The student supports their arguments and claims with evidence (mathematical model). For #2, please note that the student is referring to 7 batches of $\frac{3}{4}$ 's cup with a leftover of $\frac{1}{4}$ of a cup, not $7\frac{3}{4}$ .
<b>Representations and Connections</b>	Proficient	The student uses bar models as representation to explore this task.