

NYC DOE Grade 3 Math: *Cookie Dough* – Student Work Samples

This document includes the performance task and six student work samples, with varying levels of performance, which we will use to demonstrate the Student Work Protocol. Student identification and grading information has been redacted for this exercise. The performance task, ***Cookie Dough***, is the centerpiece and serves as the summative assessment for the NYCDOE Grade 3 unit of the same name. You can find the performance task in the first few pages of both this and the unit documents. In addition to this student work sample document you may also want to look through the full Grade 3 unit and a copy of the Student Work Protocol. Please follow the specific instructions below for how you would use these documents to prepare for a review session:

- Scan the entire unit and then work through the centerpiece task so that you can begin participation in the session with a clear understanding of the structure and organization of the unit, the requirements (skills and knowledge) of the task, and how the task fits into the overall unit.
- Work through the performance task, ***Cookie Dough***, keeping in mind all the possible strategies a grade-level student might use to answer the questions.
- Print the [Student Work Protocol form](#) so that you can use it during the webinar to record your observations and suggestions.

NOTE: All EQIP documents are available on [Achieve.org/EQIP](https://www.achievethecore.org/equip) website.

Cookie Dough

Clear Creek School is fundraising.
They are selling Cookie Dough in tubs.



Chocolate Chip Cookie Dough \$5 a tub	Peanut Butter Cookie Dough \$4 a tub	Oatmeal Cookie Dough \$3 a tub
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1. Jill sold 2 tubs of Oatmeal Cookie Dough.

How much did she raise? \$ _____

2. Joe sold 4 tubs of Peanut Butter Cookie Dough and 4 tubs of Chocolate Chip Cookie Dough.

How much money did he raise in all? \$ _____

Show how you figured it out.

3. Jade sold only Peanut Butter Cookie Dough. She raised \$32.

How many tubs did she sell? _____ tubs

Show how you figured it out.

4. Jermaine's mother loves oatmeal cookies. She has \$20. to spend.

What is the greatest number of tubs of Oatmeal Cookie Dough she can buy?

_____ tubs

Explain how you figured it out.

Cookie Dough

This problem gives you the chance to:

-choose and use number operations in context



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Chocolate Chip Cookie Dough \$5 a tub	Peanut Butter Cookie Dough \$4 a tub	Oatmeal Cookie Dough \$3 a tub
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1. Jill sold 2 tubs of Oatmeal Cookie Dough. How much did she raise?

$$3 \times 2 = 6$$

\$6.00

2. Joe sold 4 tubs of Peanut Butter Cookie Dough and 4 tubs of Chocolate Chip Cookie Dough. How much money did he raise in all? Show how you figured it out.

$$4 \times 4 = \$16$$

$$4 \times 5 = 20$$

$$\begin{array}{r} 20 \\ + 16 \\ \hline 36 \end{array}$$

\$36.00

3. Jade sold only Peanut Butter Cookie Dough. She raised \$32. How many tubs did she sell? Show how you figured it out.

4, 8, 12, 16, 20, 24, 28, 32
1 2 3 4 5 6 7 8

8 tubs

4. Jermaine's mother loves oatmeal cookies. She has \$20. to spend. What is the greatest number of tubs of Oatmeal Cookie Dough she can buy?

3, 6, 9, 12, 15, 18,
1 2 3 4 5 6

6 tubs

Explain how you figured it out.

I skipped counted by 3's when I got to 18 I was going to skip more but it would be 21 dollars.

Cookie Dough

This problem gives you the chance to:
-choose and use number operations in context



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Chocolate Chip Cookie Dough \$5 a tub	Peanut Butter Cookie Dough \$4 a tub	Oatmeal Cookie Dough \$3 a tub
--	---	-----------------------------------

1. Jill sold 2 tubs of Oatmeal Cookie Dough. How much did she raise?

$$1 \text{ oatmeal} = \$3 \times 2 = \$6 \quad \$ \underline{6}$$

2. Joe sold 4 tubs of Peanut Butter Cookie Dough and 4 tubs of Chocolate Chip Cookie Dough. How much money did he raise in all? Show how you figured it out.

$$\begin{array}{r} \$16 \\ + \$20 \\ \hline \$36 \end{array} \quad \text{- This is my work of how I figured it out.} \quad \$ \underline{36}$$

3. Jade sold only Peanut Butter Cookie Dough. She raised \$32. How many tubs did she sell? Show how you figured it out.

$$\left(\frac{32}{4} \times 4 \right) = 32 \quad \text{or another way...} \quad \begin{array}{r} 8 \\ \hline 32 \div 4 = 8 \end{array} \text{ tubs}$$

4. Jermaine's mother loves oatmeal cookies. She has \$20. to spend. What is the greatest number of tubs of Oatmeal Cookie Dough she can buy?

$$\underline{6} \text{ tubs}$$

Explain how you figured it out.

First, I thought in my mind hmmm... how many times can 3 go into 20? Then I counted 3, 6, 9, 12, 15, 18, But then I noticed 21 was too much to spend. Then I looked how many numbers did I write when counting by 3's? Then I counted 3=1 6=2 9=3 12=4 15=5 18=6. I can't go on anymore because than it'll be too much money, so the answer is six tubs.

I erased 21 because it was too much.

Cookie Dough

This problem gives you the chance to:

-choose and use number operations in context



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--	---	-----------------------------------

1. Jill sold 2 tubs of Oatmeal Cookie Dough. How much did she raise?

\$ 6

2. Joe sold 4 tubs of Peanut Butter Cookie Dough and 4 tubs of Chocolate Chip Cookie Dough. How much money did he raise in all? Show how you figured it out.

$P = 16$ $C = 25$

\$ 31

$$\begin{array}{r} 16 \\ + 25 \\ \hline 31 \end{array}$$

3. Jade sold only Peanut Butter Cookie Dough. She raised \$32. How many tubs did she sell? Show how you figured it out.

8 tubs

~~$4 \times 4 = 16$~~ ~~$4 \times 5 = 20$~~ ~~$4 \times 6 = 24$~~ ~~$4 \times 7 = 28$~~

4. Jermaine's mother loves oatmeal cookies. She has \$20. to spend. What is the greatest number of tubs of Oatmeal Cookie Dough she can buy?

18 tubs

Explain how you figured it out.

I made a chart and
 $3 \times 6 = 18$ and $3 \times 7 = 21$
it was 18

3	3	3	3	3	3	3	3
0	0	0	0	0	0	0	0
3	3						
0	0						

Cookie Dough

This problem gives you the chance to:

-choose and use number operations in context



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Chocolate Chip Cookie Dough \$5 a tub	Peanut Butter Cookie Dough \$4 a tub	Oatmeal Cookie Dough \$3 a tub
---	--	--------------------------------------

1. Jill sold 2 tubs of Oatmeal Cookie Dough. How much did she raise?

\$ 6

2. Joe sold 4 tubs of Peanut Butter Cookie Dough and 4 tubs of Chocolate Chip Cookie Dough. How much money did he raise in all?
Show how you figured it out.

\$ 34

3. Jade sold only Peanut Butter Cookie Dough. She raised \$32. How many tubs did she sell?

Show how you figured it out.

$$\begin{array}{r} 32 \\ -4 \\ \hline 8 \end{array}$$

8 tubs

4. Jermaine's mother loves oatmeal cookies. She has \$20. to spend.
What is the greatest number of tubs of Oatmeal Cookie Dough she can buy?

6 tubs

Explain how you figured it out.

I got the answer by counting by threes.

Cookie Dough

This problem gives you the chance to:

-choose and use number operations in context



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Chocolate Chip Cookie Dough \$5 a tub	Peanut Butter Cookie Dough \$4 a tub	Oatmeal Cookie Dough \$3 a tub
--	---	-----------------------------------

1. Jill sold 2 tubs of Oatmeal Cookie Dough. How much did she raise?

\$ 6.00

2. Joe sold 4 tubs of Peanut Butter Cookie Dough and 4 tubs of Chocolate Chip Cookie Dough. How much money did he raise in all? Show how you figured it out.

\$ 36.00

$$\begin{array}{r} 20 \\ + 16 \\ \hline \$36.00 \end{array}$$

3. Jade sold only Peanut Butter Cookie Dough. She raised \$32. How many tubs did she sell? Show how you figured it out.

$$\begin{array}{r} 32 \\ \times 3 \\ \hline 96 \end{array}$$

96 tubs

4. Jermaine's mother loves oatmeal cookies. She has \$20. to spend. What is the greatest number of tubs of Oatmeal Cookie Dough she can buy?

5 tubs

Explain how you figured it out.

Beucse $5 \times 4 = 20$

Cookie Dough

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Chocolate Chip Cookie Dough \$5 a tub	Peanut Butter Cookie Dough \$4 a tub	Oatmeal Cookie Dough \$3 a tub
--	---	-----------------------------------

1. Jill sold 2 tubs of Oatmeal Cookie Dough. How much did she raise?

~~2 x \$3.00 = \$6.00~~ \$ 6.00

2. Joe sold 4 tubs of Peanut Butter Cookie Dough and 4 tubs of Chocolate Chip Cookie Dough. How much money did he raise in all? Show how you figured it out.

$4 + 4 + 4 + 4 = 16$
 $16 + 5 = 21$
 $21 + 5 = 26$
 $26 + 5 = 31$
 $31 + 5 = 36$
 $36 + 5 = 41$
\$ 41.00

3. Jade sold only Peanut Butter Cookie Dough. She raised \$32. How many tubs did she sell? Show how you figured it out.

8 tubs

4. Jermaine's mother loves oatmeal cookies. She has \$20. to spend. What is the greatest number of tubs of Oatmeal Cookie Dough she can buy?

7 tubs

Explain how you figured it out.

$4 + 4 = 8 + 8 = 16 + 4 = 20$