The Amazing Trader Joe's CHOCOLATE CHIP COOKIE Challenge

A tasty, hands-on

Math & 21st Century Skills

Activity

4th GRADE+ (also great for after school programs)

brought to you by...

CHOCOLATE CHIP COOKIE School
CHOCOLATECHIPCOOKIESCHOOL.COM

TEACHERS: COOKIE CHALLENGE OVERVIEW

How can 2 totally different packages of cookies be priced *almost* the same?! And what's the difference?

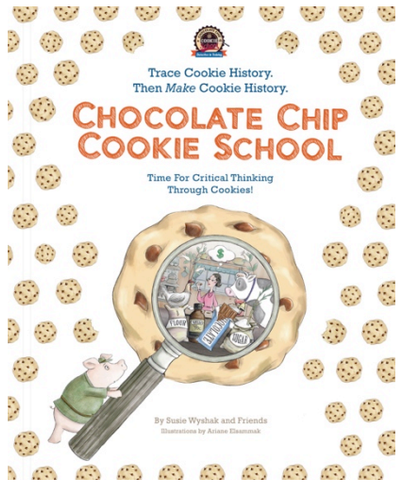
In groups or independently, students analyze and taste 2 different Trader Joe's chocolate chip cookies in this fun hands-on "cookie detective" activity.

Kids love seeing how basic math skills come in handy while practicing real world 21st Century Skills.

The Cookie Challenge involves:

- Comparing and contrasting
- Decision making
- Analysis
- Shopping economics / financial literacy
- Critical thinking
- Collaboration

It's all part of the "critical thinking through cookies" educators can also teach using the *Chocolate Chip Cookie School* book. (www.chocolatechipcookieschool.com)



Wildly different # of cookies

Nearly identical prices (Way More Chocolate Chips went up to $4.29 in 2017)

TEACHERS: HOW TO PLAN THE ACTIVITY

DURATION: 30 minutes

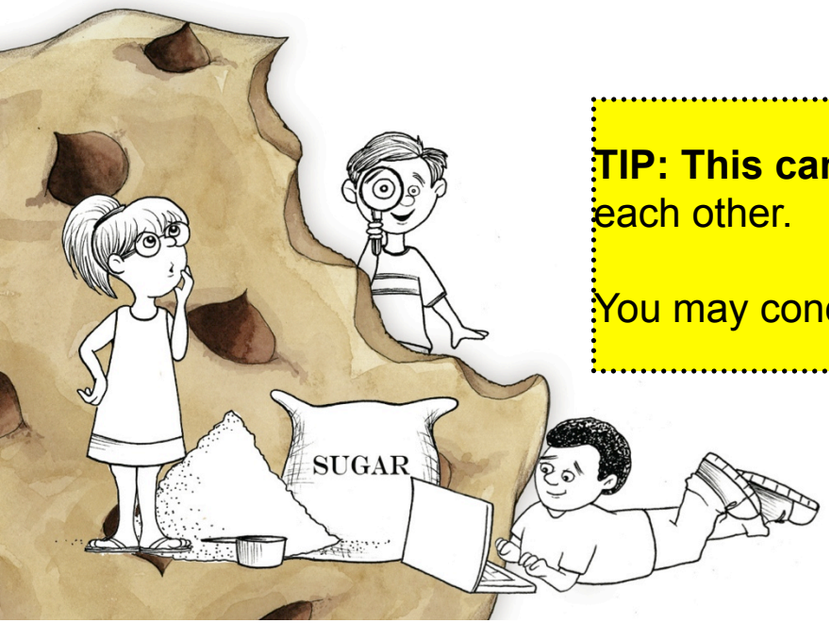
STUDENTS: Ideal for grades 4+. This could make a great adult economic literacy class too!

ALLERGENS: Cookie analysis involves tasting cookies made with gluten and dairy. *Trader Joe's also sells a much more expensive gluten-free chocolate chip cookie you could include, for additional math programs. Or kids with allergies could bring their own cookies.*

COST: About $10 TOTAL if you have 48 or fewer kids.

SHOPPING / PREP:

1. **Buy** enough tubs of the **Way More Chips** and **Crispy Crunchy** Trader Joe's chocolate chip cookies for each student to be able to taste 1 of each.
2. **Buy** small napkins or have paper towels on hand.
3. **Have tongs** or some other tool to serve the cookies.
4. **Need a flyer?** The info from the previous page and this page can flow into a flyer. *Please ask me if you'd like me to create a flyer template.*
5. **Make copies** of the student hand outs.



TIP: This can be an independent activity. Or for fun collaboration, partner kids up to interview each other.

You may conclude by having the kids read their answers out loud OR the answers of their partner.

TEACHERS: INTRODUCING THE CHALLENGE

FIRST: Decide if you are doing this as a team activity and if so, let the kids know what to do (e.g. find a partner).

SAY: Raise your hand if you want to do some math!
Raise your hand if you want to do COOKIE math!

Today you're going to be cookie detectives and figure out how packages of 2 completely different kinds of chocolate chip cookies can cost ***almost*** the same.

You'll be getting the 2 different cookies. But don't eat them until I tell you to, as part of being a cookie detective will involve some analysis.

Yes, today you will get to munch on cookies.
More importantly, you will learn the secrets of foods you eat every day that you will remember on future food shopping trips!

DO:

1. **If teaming up** let the kids know what to do (e.g. find a partner).
2. Distribute **the 2 handouts** to each student.
3. Give a napkin and one of each cookie to each student ***telling them to NOT eat them until instructed.***

TEACHING GUIDE: ANSWERS / DISCUSSION

1. What are some differences between the cookies?

PROMPTS:

APPEARANCE (size, color, etc):
- What do you think of the number of chips?
- What are some differences in the cookie sizes?

NOW YOU CAN EAT THE COOKIES – but slowly, because you'll be analyzing them as you go!

FLAVOR:
- Do you taste any particular flavors in each?

TEXTURE:
- What are some texture differences? Is one more soft or crunchy? Or crumbly?

WHAT ELSE?
- Anything else you notice?

2. Which do you like better? Why?

Frequent answers…

Smaller:
1. So I can eat more cookies
2. Easy to throw in my mouth
3. Tastes better

Bigger:
1. To take more bites into a cookie
2. To get more chips in each cookie
3. Tastes better

3. Why might one cookie cost more?

1. More ingredients used in a bigger cookie
2. Maybe more expensive ingredients
3. The overall cost per cookie is higher since there are fewer per package (e.g. the labor and materials are spread across fewer cookies).

SAY: Now, you're going to calculate how much each cookie costs.
Believe it or not, both of these tubs of cookies costs $3.99!

#1: "WAY MORE CHIPS" COOKIE (bigger) costs $4.29 and has **48** cookies per tub = how much? (**Ans**: **9** cents each)

#2: "CRISPY CRUNCHY" COOKIE (smaller) is $3.99 and has **184** cookies per tub = how much? (**Ans**: **2** cents each)

What's the difference in cost per cookie? (**Ans**: COOKIE #**1** costs **7** cents more.)

TEACHING GUIDE: ANSWERS / DISCUSSION

Aside from choosing a cookie because you like it better, there might be different reasons to choose one package instead of the other! (That's why Trader Joe's offers these different styles of chocolate chip cookie.)

How would you decide which cookies to buy?

TYPICAL ANSWERS

MORE SMALLER COOKIES

- For a party
- If I want to eat a lot of cookies
- For a small treat

FEWER LARGER COOKIES

- If I want a cookie that takes a few bites to eat it
- If I want a more chocolatey cookie

EXTRA COOKIE CREDIT: Why do cookies in a package, like Chips Ahoy, look so similar?

ANSWERS

1. To standardize production equipment. Most cookies you find in the supermarket are made with automated machines that drop the dough onto a conveyor belt for baking or uses a stencil-like mold to cut out the cookies.

2. So they are finished baking at exactly the same time

3. To fit in standardized packaging. Imagine if cookies were all different sizes!

4. To predict the average cost and price.

5. For accurate nutrition and serving size information

6. So you (consumers) know what to expect. The size / shape and number of chips becomes part of the brand's identity. Imagine one day finding ½ as many chips.

7. When they all look the same, kids won't fight over them! (ha ha)

Anything else?

TEACHING GUIDE: Cookie Detective Wrap-up

Look back at what you learned from the Cookie Challenge. What lessons can you use in your real life?

EXAMPLE ANSWERS:

- How to **decide** which cookies to buy
- How to figure out the **best deal** on a food
- Why foods in packages often look alike
- How products can have the **same price** even when they are very different
- **Math** is actually useful!

_____

_____

_____

_____

_____

TEACHING GUIDE: Common Core

EXAMPLE THIRD GRADE COMMON CORE MATH

CCSS.MATH.CONTENT.3.OA.A.4
Determine the unknown whole number in a multiplication or division equation relating three whole numbers.

CCSS.MATH.CONTENT.3.OA.B.5
Apply properties of operations as strategies to multiply and divide.

You may find the cookies and containers can extend into Common Core lessons, such as:

- Based on the **serving size** on the cookie tub label, **how many servings** does each of the tubs of cookies have? (*Remember: the larger cookies have 48 per tub; the smaller have 184 cookies per tub.)*
- How many calories does each type of cookie have? *(Divide the number of calories per serving based on the # of cookies per serving.)*
- How many calories are in each tub of cookies? *(Multiple the # of calories per serving x the number of servings the tub of cookies has.)*

Teachers! I would love to hear any other Common Core applications you find.

Thanks – Susie Wyshak cccokieschool@gmail.com or 510-269-7794

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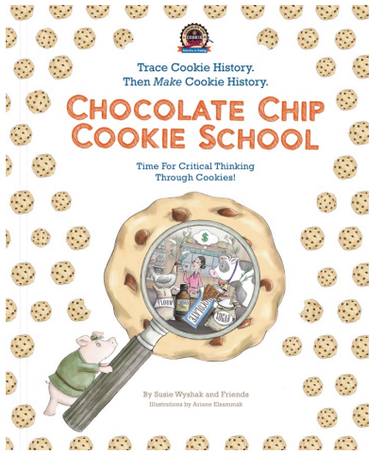

Time to be a cookie detective!

What are some differences between the cookies?

APPEARANCE (size, color, etc):

_____

_____

FLAVOR: _____

_____

TEXTURE: _____

_____

WHAT ELSE? _____

Which do you like better? Why?

1. _____

2. _____

3. _____

Why might one cookie cost more?

_____

_____

_____

Calculate the cookie costs

#1: 2-inch wide cookies - $4.29 / 48 cookies per tub = ___ cents per cookie

#2: 1-inch wide cookies - $3.99 / 184 cookies per tub = ___ cents per cookie

Subtract the CHEAPER cookie to get the price difference: COOKIE #__ costs ___ cents more.

Critical Thinking Through Cookies

How would you decide which cookies to buy?

MORE SMALLER COOKIES

_____

_____

_____

FEWER LARGER COOKIES

_____

_____

_____

EXTRA COOKIE CREDIT: Why do you suppose they make cookies in a package look so alike?

1._____

2._____

3._____

4._____

5._____

6._____

7._____

8._____

CHOCOLATE CHIP COOKIE School
COOKIE DETECTIVES
CONNECT THE CRUMBS

Cookie Detective Wrap-up

Look back at what you learned from the Cookie Challenge.
What lessons can you use in your real life?

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____