

## GRADE 2/3 MATH & ADST: Food Bank Fundraiser

### Summary of Learning Opportunity

Prior to this project, students built their numerate thinking skills through various problem-solving tasks. This year, I focused on having students share different strategies and solutions to see different ways of solving, and to practice reflective thinking. For this project, students were given the opportunity to engage in an authentic situation—raising money for our local Food Bank. After individually brainstorming ways to raise money, students shared proposals and considered the parameters. In their proposals, students selected a fundraising method, calculated a realistic goal, and made a plan to reach their goal. The class then engaged in a consensus-building process to make a final choice for the best fundraising method.

Curricular Competencies	Mathematics 2 & 3	<ul style="list-style-type: none"> <li>Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solving</li> <li>Explain and justify mathematical ideas and decisions</li> </ul>
	ADST 2 & 3	<ul style="list-style-type: none"> <li>Ideating: Generate ideas from experiences and interests, Choose an idea to pursue</li> </ul>
Curricular Content	Mathematics 2	<ul style="list-style-type: none"> <li>Addition and subtraction to 100</li> <li>Financial literacy – coin combinations to 100 cents, and spending and saving</li> </ul>
	Mathematics 3	<ul style="list-style-type: none"> <li>Addition and subtraction to 1000</li> <li>Financial literacy – fluency with coins and bills to 100 dollars, and earning and payment</li> </ul>

#### Numeracy Connections

#### Instruction and Assessment

#### Competencies Developed, Practiced, and/or Assessed

NUMERACY: Interprets—Identifies parameters and limitations

Applies—Translates the scenario into a mathematical problem (mathematizes); Develops a plan of approach

1. I created a guiding sheet for students to plan their fundraising goals, and set the parameters (prices to charge—we had discussions about “just right numbers”). The students showed their financial goals in ways that made sense to them.

Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solving

Ideating: Generate ideas from experiences and interests

NUMERACY: Analyzes—Reflects on the reasonableness of the solution in context

2. As a class, we brainstormed all possible considerations when making our decision for our fundraising method.

Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solving

Ideating: Choose an idea to pursue

NUMERACY: Applies—Evaluates alternative approaches; Communicates—Defends decisions and assumptions

Students used these considerations to help them critically think about which idea we should use to raise money for the Food Bank.  
3. Using a consensus-building model, each student shared their ideas and proposals with the class. Together, we determined the best way to raise money for the local Food Bank.

Explain and justify mathematical ideas and decisions

\*Note: this teacher had practiced and utilized an Indigenous way of consensus building as a regular classroom practice

Ideating: Choose an idea to pursue

## Proficient Student Work, Teacher Assessment and Reflection

**Fundraising for the Food Bank**  
Name: \_\_\_\_\_

The Food Bank provides food for over 2000 people each week. Our school is planning to raise money for the Food Bank. What would be a realistic goal for Division 8? What do you think would be the best way to reach our goal?

What would be a realistic goal for Division 8? \$150

Make a plan to reach our goal.

we could make ART

things we need

- Panits
- brushis
- Pastel
- drawing poster
- chers
- tabuls
- Pentstichans
- pen
- Pentsul
- Paper
- cicers
- Glpe
- giter
- canfety
- carpit
- difrent colored Paper
- list

What will we need to do to reach our goal? 30

Prise \$5

1	5	
2	10	
3	15	
4	20	
5	25	
6	30	
7	35	
8	40	
9	45	
10	50	
11	55	
12	60	
13	65	
14	70	
15	75	
16	80	
17	85	
18	90	
19	95	
20	100	
21	105	
22	110	
23	115	
24	120	
25	125	
26	130	
27	135	
28	140	
29	145	
30	150	

135 140 145 150

0 5 10 15 20 25 30 35 40 45 50 55 60

50 65 70 75 80 85 90 95 100 105 110 115 120 125 130 135

After looking at all of the ideas, which do you think would be the best plan for Division 8?

ARTS and CRAFTS SALE

Why do you think it would be the best plan for Division 8?  
 because its a good time of year. it is a good pris.  
 there are alot of spise needed. 30 minits.  
 in the form of the school

### Teacher's Observations and Assessment

Grade 2

This student demonstrated good numerate understanding by identifying a realistic class goal. They were also able to use two different math strategies to solve this problem. T-charts and open number lines are both familiar strategies used in the class. When I asked them why they chose these strategies they reflected, "I am good at T-charts and open number lines". When I asked why they did both they replied, "I wanted to challenge my brain to solve it 2 ways. Then I could check if they were the same. If they are the same, then I know it's right." This provided me with evidence that they are proficient in evaluating their approach and explaining and defending their mathematical ideas.

### Teacher's Reflection

The K-12 Learning Progressions provide key aspects that teachers can use to guide their planning, teaching, and assessment of connected competencies. If we know what the destination is, we can plan lessons accordingly. I like how the focus is on the processes, rather than just finding the one single right answer.

## Fundraising for the Food Bank

Name: \_\_\_\_\_

The \_\_\_\_\_ Food Bank provides food for over 2000 people each week. Our school is planning to raise money for the Food Bank. What would be a realistic goal for Division 8? What do you think would be the best way to reach our goal?

What would be a realistic goal for Division 8? \$150

Make a plan to reach our goal.

car wash

I say we do a car wash for ~~\$500~~

Thing we need

- ①. Bocit
- ②. sope
- ③. cloth
- ④. sihs
- ⑤. ahwsis

## Teacher's Observations and Assessment

Grade 3

This student was able to set a realistic goal with parameters and use different mathematization strategies to calculate how many cars we would need to wash. When I asked them to explain their thinking they said, "First I kept adding \$5 until I reached \$50. I know that  $50+50+50=150$  so I didn't have to keep adding the 5's one at a time. I counted the 5's I added, 10 all together so then I knew  $10+10+10=30$ . That's pretty good, we only have to wash 30 cars. I think we might be able to do even more." This provided me with evidence that they are proficient in evaluating their approach and explaining and defending their mathematical ideas.

What will we need to do to reach our goal?

price: \$5.00

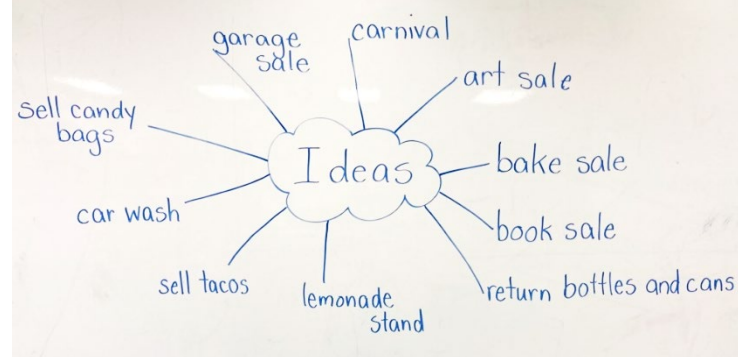
5 +5	20 +5	45 +5	30 = 150
10 +5	25 +5 30 +5	50 +30	
15 +5	35 +5 40	50 + 50 + 50 = 150	30
20 +5	45		

After looking at all of the ideas, which do you think would be the best plan for Division 8? car wash

Why do you think it would be the best plan for Division 8?

BECAUSE we have 21  
peopl in or clas  
and we could wash alot  
of cars.

Below: visualizations from the consensus building class discussion



Things to consider:

- how much will people pay (fair price)?
- time of year
- how much will it cost to buy supplies?
- what supplies are needed?
- how long will it take to get ready?
- where will we do it?
- how much could we make?