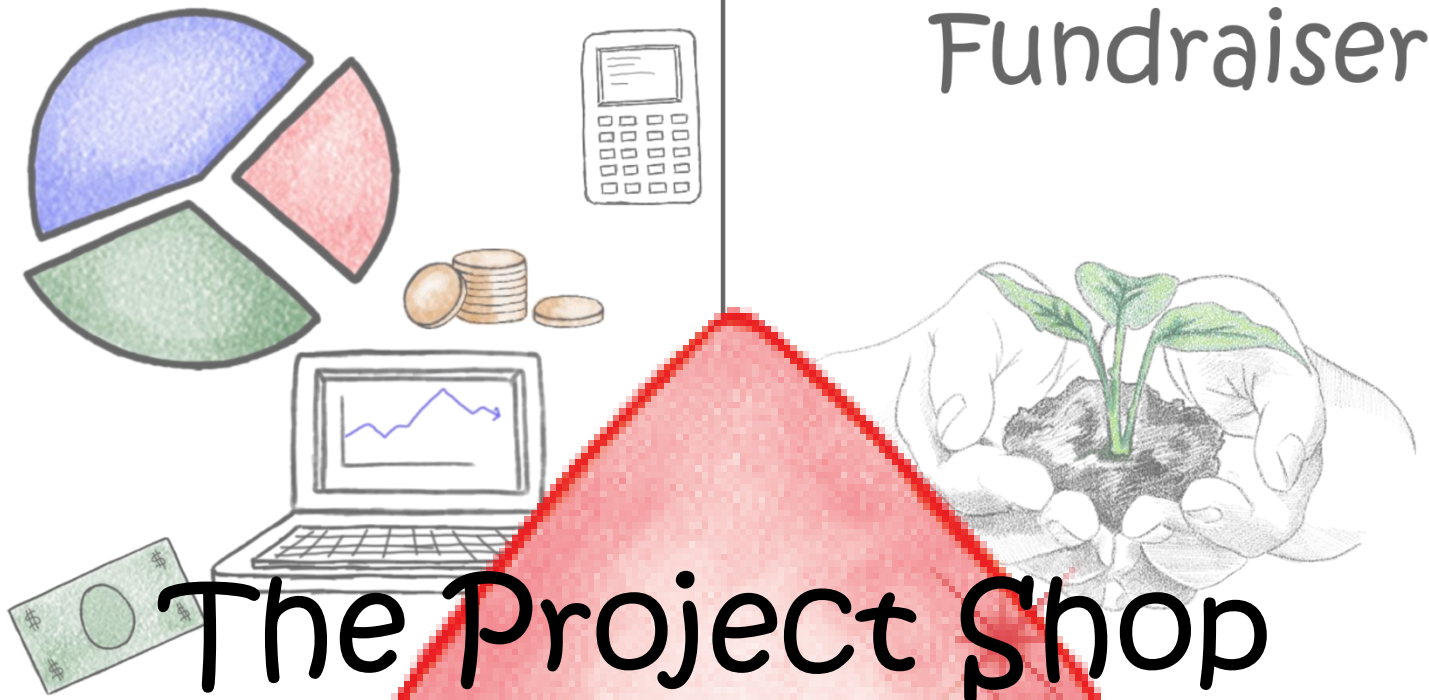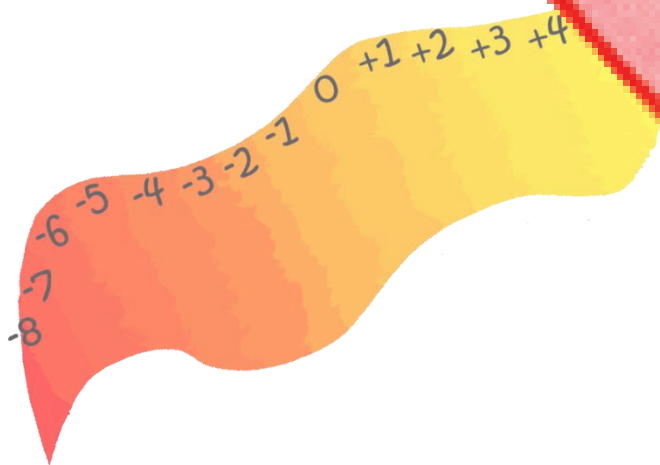# Budget Maker

Charity Fundraiser

The Project Shop
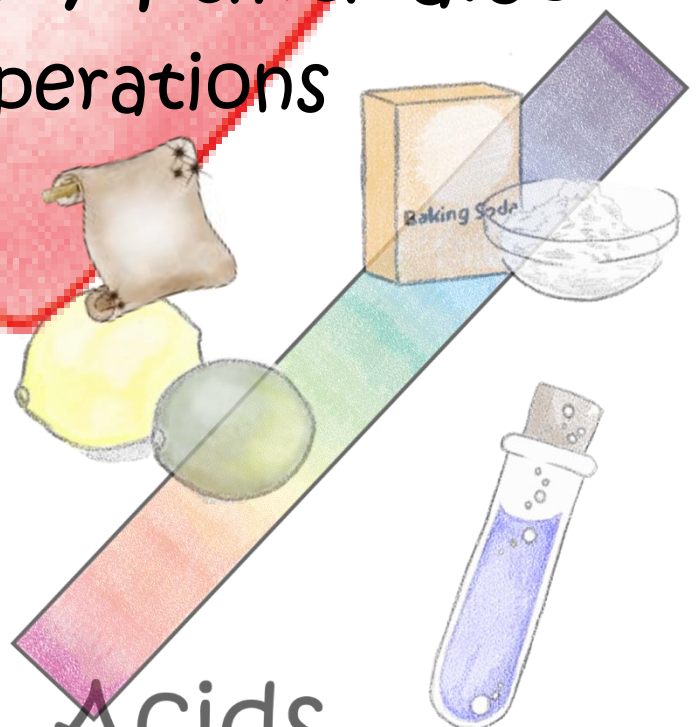
A Montessori Approach to Middle School Mathematics

Project: Charity Fundraiser
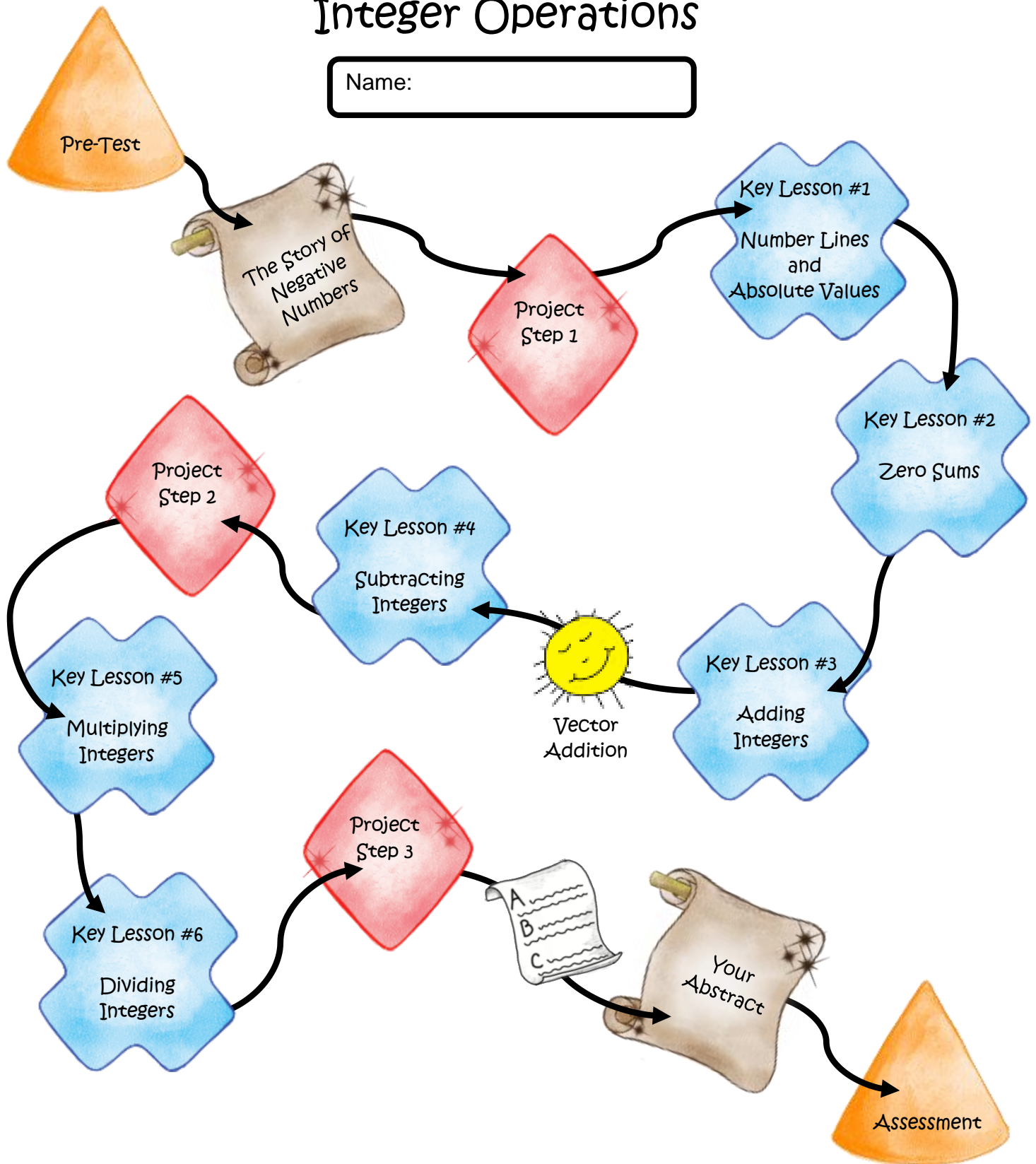## Integer Operations

Color Gradients

Acids and Bases

+1 +2 +3 +4 0 -1 -2 -3 -4 -5 -6 -7 -8

Integer Operations

Name:

Pre-Test

The Story of Negative Numbers

Project Step 1

Key Lesson #1

Number Lines and Absolute Values

Key Lesson #2

Zero Sums

Project Step 2

Key Lesson #4

Subtracting Integers

Vector Addition

Key Lesson #3

Adding Integers

Key Lesson #5

Multiplying Integers

Key Lesson #6

Dividing Integers

Project Step 3

A
B
C

Your Abstract

Assessment

"What makes a mathematician is not technical skill or encyclopedic knowledge but insatiable curiosity and a desire for simple beauty."

Paul Lockhart

2

Symbol Key
for
Student Maps

Assessments: A teacher must give you this step

Reading or Writing Assignment: You should be able to do this step on your own but feel free to ask questions.

Project Step for all projects: You should be able to do this step on your own but feel free to ask questions.
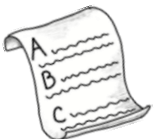
Key Lesson: When it is not sparkly, a teacher must give you this step.

Key Lesson: When it is sparkly, you should be able to do this step on your own but feel free to ask questions.

Optional Lesson and Skill, usually related to the previous skill.

Vocabulary Activity

3

Charity Fundraiser
Teacher Tips

Introduction:

This lesson is one part of a Montessori middle school math unit on Integer Operations. It covers the Common Core Objective 7NS. Though this lesson can stand alone, the full unit is a Montessori approach to project-driven mathematical learning. The complete parts are outlined in the student map on page 2. It includes 4 different project choices, meaningful work, material lessons, assessment, lots of practice and answer keys.

Overview:

In this project, students will be researching local charities and holding a fundraiser to make a donation to the charity of their choice. They will choose which charity to work with, contact them to determine if cash donations are accepted, and organize and hold a fundraiser. They will work with the cost of the items for the fundraiser and then evaluate the profit made before donating the money.

Since fundraisers of any sort require some preplanning, it is helpful to determine what kind of fundraiser is feasible for your students prior to the start of this project. It may also be help to do a bit of preparation in advance, such as setting a date or contacting your administration.

Step 1: Researching Charities and Deciding on a Fundraiser

In this step, students are researching and contacting local charities. Then they are brainstorming possible fundraisers and deciding which they will choose. This gives you time to prepare if necessary. This is when a date should be set for the fundraiser.

When preparing to call a business, it can be helpful for students to write a "script" of what they want to say and what they need to ask while on the phone. This helps prevent nervous mistakes and gives students more confidence on the phone.

Help students collaborate to decide on a fundraiser by being a mediator so that everyone is heard.

Step 2: Creating a Chart, Planning the Fundraiser, Holding the Fundraiser

In this step, students are creating a chart either in Excel or by hand with a ruler and pencil. It is important that students consider all the costs that are required to hold their fundraiser.

Adding negative decimals can be tricky. Discuss methods for checking their own work. At this point, allowing students to use a calculator would be an adult-like way of checking costs. If they are working in Excel, and you want to expand their technology understanding, you could show them how to use the SUM formula.

Once the costs are considered and a plan for the fundraiser is set, have student perform the fundraiser. Depending on the type of fundraiser, records will need to be kept of the income received.

Step 3: Analyzing the Profits, Donating to Charity

In this step, students input their income and analyze their profits. They will then donate these profits to the local charity. You will need to help them with the transfer of money, whether it will be a check, money order, sent in the mail, or personally delivered will depend on your environment.

Finally, students are expected to create a finalized, professional version of their chart. This could be printing the chart out or outlining the chart with pen if they completed it on paper. Blank printer paper is more professional than lined paper. If your students will be presenting their projects or creating a portfolio, remind them that copies of this chart will be required. It is powerful for students to present a brief summary of their work to the community, if possible.

Remediation

Students who are finding this work too challenging may need you to work through the creation of a chart. In some cases, creating the chart for them and helping them get started with writing in the columns will give them concrete examples to work with.

There is some research that shows students who struggle with abstracting concepts benefit from calculator use throughout their math work. Though the idea of this unit is to learn the basic rules of operations for negative numbers, this project requires a lot of decimal addition and subtraction. This may muddle the purpose of the unit and create anxiety in students with learning needs. Consider calculator use or a review of how to line up decimals and perform operations.

Enrichment/Extension

Some students may find this work to be too easy. Consider having these students write a proposal for a larger fundraiser that could potentially earn even more money for their local charity of choice. Perhaps require them to include a chart, an formal proposal, and give them an opportunity to discuss their idea with administration.

Charity Fundraiser
Step 1

Charity and giving in America has a long history. From Benjamin Franklin's first volunteer fire department to contemporary Doctors Without Boarders, there is a long history of volunteering citizens. Some of these include Harriett Tubman who provided safe houses to escaping slaves during the Civil War, Clara Barton who opened the first American Chapter of the Red Cross, and even actor Paul Newman who created Newman's Own salad dressings and donates the profits to food banks across America.

In this project, you will research a local charity and use your skills with integers to organize and implement a fundraiser for this organization.

Task 1

Research charities in your area to find three charities you would like to donate money to.
1. First, find a charity. Some helpful websites are:

   - Volunteer Match   http://www.volunteermatch.org/
   - Great Non Profits   http://greatnonprofits.org/
   - Give Well   http://www.givewell.org/

2. Once you find a charity you need to determine if they accept money donations. You can read through their website, send them an email, or call to find this information.
3. Once you have a charity, list it below. Then write a brief description about the charity and why you chose it.
4. Do the same for two more charities.

Task 2

If you are working in a group, you will need to meet together to decide which charity you will all be donating to. Write this decision below.

If you are working alone, OR if you are working with a group but you've decided to send money to multiple charities, this part is easy. Simply write your charity below.

Task 3

In your group, or on your own, decide what type of fundraiser you are going to have. You will not be doing much planning for this fundraiser, but your teacher needs to know your plans so that dates and some preparation can be decided.

Here are some ideas of fundraisers, though many more can be researched online:

- Bake Sale
- Car Wash
- Lemonade Stand
- Selling Candy Bars
- Selling Homemade Goods

- Contests (hula hoop, limbo, jumping rope, etc.)
- Dunk Tank or Whipped Cream Pie Throwing
- Dance-a-thon

Write your decision below.

7

Charity Fundraiser
Step 2

In this step, you will be organizing and carrying out the fundraiser that you planned in Step 1.

Task 1

First, you need to create a chart of Excel spreadsheet to record your income and expenses. You can use Excel or you can create a chart on paper. If you create your own chart, you need to use a ruler and pencil.

You need a total of 4 columns. The number of rows you need will depend on how many items you need to purchase and later, how much you have sold during your fundraiser. Leave the bottom of the chart open to add rows as needed.

Task 2

Label the First Column of your chart "Item Description". In this column, list all the items that you will need to purchase in order to hold your fundraiser. For example, if you are selling cookies you will need a list of the items to buy in order to bake your cookies, package, and sell them.

Take your time and make sure you include everything, but if you later find you need to purchase more items it is simple to add them to the list.

Task 3

Label the second column "Expenses". As the items for your fundraiser are purchased, you need to place the cost of each item in the second column. Don't forget that these items are negative and that you should include "tax" as a separate expense!

Task 4

Skip the third column and label the fourth column "Total". Create a running total of expenses. To do this, add the first two expenses and place this total in the second row of column four. Add the third expense to this total and place the new total in row three. Continue adding negative numbers until you've completed the total expenses.

Charity Fundraiser
Step 3

In this final step, you will be analyzing the income and expenses in order to determine your total profits and then donating this amount to your charity of choice.

Task 1

You should have continued to add your income as the fundraiser went along to determine your total Profits. Now, at the bottom of each column, write your column totals.

So, there should be a total negative value at the bottom of column two, indicating your total costs for the fundraiser.

There should be a total positive value at the bottom of column three, indicating your total income for the fundraiser.

At the bottom of column four, there should be a total profit (hopefully it is positive!!).

Task 2

Discuss with an adult the manner in which you will be donating this money to the charity of your choice. Perhaps you will simply give cash or need to visit a bank to exchange this money for a money order or check.

Finally, donate your money!

Task 3

Prepare your work to share with others; whether you print your chart from Excel, or outline your chart with pen, your final version needs to be professional in quality.

THE PROJECT SHOP FEEDBACK FORM

Name:

School:

Grades:

Please rate the following:	Scale				
	Poor	Good			Excellent
Formatting and Layout					
1. Graphics and pictures	1	2	3	4	5
2. Font	1	2	3	4	5
3. Organization	1	2	3	4	5
4. Overall formatting of the document	1	2	3	4	5
Teacher Tips					
5. Description of each step	1	2	3	4	5
6. Helpfulness of "Discussion Tips"	1	2	3	4	5
7. Clarity of the overview	1	2	3	4	5
8. Usefulness of Differentiation suggestions	1	2	3	4	5
Project					
9. Feasibility of project in a small classroom setting	1	2	3	4	5
10. Feasibility of the project in a large classroom setting	1	2	3	4	5
11. Clarity of each project step for students	1	2	3	4	5
12. Student engagement in the project topic	1	2	3	4	5
13. Amount of graphic organizers (written boxes, pictures, etc.)	1	2	3	4	5

This is a work in progress so we'd love to hear your comments and suggestions….

Please send form to theseneyprojectshop @gmail.com