

Teacher Overview

The Dirt and Worms activity allows your students to continue to practice calculating COGS. This activity will set the foundation needed for your students to develop an understanding of pricing and as well as funding.

When to Use This Lesson

Dirt and Worms follows Hershey's Market Research as part of the YE Core roadmap; however, it can be repeated throughout the YE course.

Students will need to have a basic understanding of Costs and Unit of Sale to be successful with this activity.

Time:



BEFORE CLASS PREPARATION

- > Review entire Dirt & Worms PowerPoint.
- > Review entire Dirt and Worms Activity Guide.
- > Purchase all materials for the activity.
- > Make copies of Dirt and Worms COGS Worksheet and Dirt and Worms Pricing & Profit Worksheet.
- > Adjust the "Total Quantity" and "Cost" of each item on Slide 2 of the Dirt & Worms PowerPoint.
- > Protip: Preparing the students individual portions ahead of time is extremely beneficial. You can do this by setting them out on paper plates or putting the supplies in baggies. Doing this ahead of time saves valuable class time. If you do this, make sure you save the packaging so you can show your students where and how to find serving and packaging sizes.

LEARNING OBJECTIVES

- > Business Finance 1k

FOUNDATIONAL VALUES

- > Sound Judgment

KEY TERMS

- > Costs
- > Costs of Goods Sold (COGS)
- > Unit of Sale
- > Pricing & Profit

MATERIALS

- > Chocolate pudding cups – one for each student
- > Oreo cookies – enough for each student to have 3 cookies
- > Gummy worms – enough for each student to have 2 worms
- > Small plastic cups – one for each student
- > Plastic spoons - one for each student
- > Napkins – at least one for each student
- > Dirt and Worms COGS Worksheet and Dirt and Worms Pricing & Profit Worksheet

ACTIVITY INTRODUCTION

- > Since we have been practicing calculating COGS let's do one more to make sure you really understand how to do it. The only difference this time...you get to make the product...and eat it!

ACTIVITY DIRECTIONS

- > We will be selling Dirt and Worms. Has anyone not heard of Dirt and Worms?
 - If anyone does not know what Dirt and Worms is you should explain it to them.
 - It is a delicious mix of chocolate pudding and crumbled Oreos (that is the dirt) with little gummy worm surprises!
- > Let's assume that we are selling Dirt and Worms for market day and we need to determine our COGS.
- > What is the first thing we should do? Answers will vary.
 - What we want them to figure out is that we can't determine our COGS and COGS per Unit if we don't determine what one unit of sale is and what we need to make that one unit.
- > One unit of sale for our market day business will be one cup of Dirt and Worms. You can hold up a cup to demonstrate.
- > What do we need to make this one cup of Dirt and Worms? Again, you can hold up the ingredients.
 - The cup
 - Chocolate pudding cup
 - Oreo cookies
 - Gummy worms
 - And you can't eat it without a spoon
 - What about napkins?
- > At this point you can give each student supplies. Protip: Ask them to not eat their food until you are done with the math portion of the activity. If you let them eat while they are working through the activity they get distracted.
- > You will need to tell your students where on a product they can find the "Total Quantity" for each item. Then share what each is so they can fill in this column.
 - Point out that serving size is not necessarily important because you may not use exact serving sizes when making your product.
 - For example, one serving of gummy worms might be 3 worms but you may decide to only give them 3. The total quantity in this case is more important than number of servings.
- > Now it is time to fill in the Cost column. This is what you spent on each. You will need your receipt for this column.
 - **Protip:** It is helpful to have this already filled in before you display the slide. If you do not want to change the PowerPoint you can write it on a SmartBoard or whiteboard.
- > It is recommended that you do the pudding row, at the very least, with your students. You may also want to do the Oreo row because you have to do a little more math.
- > Let your students work through the math. Circulate the classroom so you can answer any questions that may come up as your students work through the math.

Pricing and Profit Supplemental:

Pricing and Profit is used to determine whether a business model can be profitable. You can follow up the Dirt and Worms COGS Activity with a discussion of pricing and profit.

The curriculum includes a Dirt and Worms Pricing and Profit Worksheet you can use as a follow up to the Dirt and Worms COGS Worksheet. This worksheet offers your students the opportunity to use the COGS they have already calculated to determine if they can in fact make a profit off of one unit of Dirt and Worms.

ACTIVITY DEBRIEF

- > What is the difference between fixed costs and variable costs?
 - Were the costs experienced in this activity fixed or variable?
- > What could you have done to decrease the COGS you experienced?
 - How does subjective value affect COGS?
 - Can things outside of your control effect your COGS?
- > What effects do a high COGS have on your Pricing & Profit calculation?
- > Why is it important to pay attention to COGS when developing and producing a product?
 - Can you give some examples of businesses that do things to help with their COGS? (Help students recognize that COGS Chipotle and other restaurants charge for getting "extra" of toppings or condiments.)

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