

## **WAMC Lab Template**

Math Concept(s): PERCENTAGE DISCOUNTS

Source / Text: Algebra 1 Learning in Context

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Date: Summer Conference 2018

### **Attach the following documents:**

- ✓ Lab Instructions: Team of 4 will be preferable

### **Before the lab:**

- ✓ Print out the scavenger hunt clue posters. Print them on colored paper so they stand out, if possible. If you would like to use them for later, laminate them.
- ✓ Shuffle the pages up so they will be randomly distributed around the room
- ✓ Tape up the poster around the room
- ✓ Print out a recording sheet for each student, if you are using groups one will be okay

### **During the lab:**

1. Each group of 4 or 2 will start at a different poster. Students must write down the letter of the poster they started at in box number 1, and then solve the problem at the bottom of the poster.
2. When they have an answer, they look around the room to find the answer at the top of one of the poster. They move to that poster, write down the letter in box 2, and solve the problem at the bottom.
3. Groups continue in this manner until they return to the poster they started on. Groups should have visited all posters before returning to the start.

### **Student Handout(s):**

- Student worksheet: Write ALL your names on the paper, once the lab is done, please turn them in for credit.
- Rubric and/or Assessment Tool:
  1. Discount Worksheet
  2. Lab Group Challenge Evaluation

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CLICK LINK TO OPEN WORKSHEETS:

[http://www.missouricareereducation.org/doc/principlemktng/Pricing\\_InstrActivity3\\_Pricing\\_Math.pdf](http://www.missouricareereducation.org/doc/principlemktng/Pricing_InstrActivity3_Pricing_Math.pdf)

CLICK ON THE IMAGE TO UPLOAD THE ENTIRE PDF FILE

Please know that this idea is not mine: I had to purchase the work on teacher pay teacher.com

# Tax, Tip, Discount, Commission, & Markup {SCAVENGER HUNT} Created by Megan Wallen

**D** \$3.75  
Aaron works at a furniture store. He sells a table that normally costs \$670 but is on sale for 15% off. If he makes 8% commission on the sale price, how much will he make in commission?

**P** \$52.50  
While back to school shopping, Gretchen bought a binder for \$4, 2 packs of pencils for \$2.50 each, and a backpack for \$19. If the sales tax rate is 8%, how much did Gretchen pay altogether?

**L** \$45.56  
TV that Ian wants to buy costs \$100. It is currently on sale for 30% off. How much will Ian save by buying the sale?

MATH WITH Meaning

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

## **LAB CHALLENGE EVALUATION**

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

Project Manager: \_\_\_\_\_

### **Peer-Evaluation**

**DIRECTIONS:** Describe how you and your team contributed to this challenge.

<b>Team Member Name</b>	<b>Peer Evaluation</b>	<b>Score</b>
Your name:		
Team member:		
Team member:		
Team member:		

### **Self-Evaluation**

**DIRECTIONS:** Describe how you exhibited the 21<sup>st</sup> Century Skills involved in this challenge:

<b>21st Century Skill</b>	<b>Self - Evaluation</b>	<b>Score</b>
Think creatively		
Work creatively with others		
Implement innovation		
Solve problems		
Communicate clearly		
Collaborate with other		
Create media products		

### **Scoring Guide**

- 0 -1: I/Team member made little to no contributions to the project. I/Team member was frequently absent from class or participated minimally outside of class or during the sale.
- 2: I/Team member contributed somewhat to the project. Some effort was exerted; however it did not prove to be critical to the overall success. No leadership qualities were expressed.
- 3: I/Team member made a significant contribution to the project. I/Team member was attentive in class, outside of class and during the sale. Team member proved to be an integral part of the team's success.
- 4: I/Team member made an outstanding contribution to the project and emerged as a true leader. I/Team member exceeded expectations and contributed fully to the project, demonstrating commitment and hard work. I/Team member is a worthy candidate of becoming "THE APPRENTICE."

**Short Description (Be sure to include where in your instruction this lab takes place):**

Lab will take place in my classroom.

**Lab Plan**

Lab Title: Discount Percentage: Tax, Tip, Store Discount & More Scavenger Hunt.

Prerequisite skills: Students have learned how to:

1. Multiply % on a calculator
2. How to use % discount in our daily life.

Lab objective:

Learning Objectives	Students will be able to: <ul style="list-style-type: none"> <li>• Define the term “Discount %”</li> <li>• Self-reflect on personal and group strengths</li> </ul>
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**Standards: (Note SPECIFIC relationship to Science, Technology, and/or Engineering)**

Mathematics K–12 Learning Standards:

Standards for Mathematical Practice: CCLS- Math:

Mathematics K–12 Learning Standards: NQ 1 Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.

K-12 Learning Standards-ELA (Reading, Writing, Speaking & Listening):

CCSS.ELA-LITERACY.SL.9-10.1

Initiate and participate effectively in a range of collaboration discussions (one-on-one, in groups, and teacher led), with diverse partners on grades 9-12 topics, texts, and issues building on others’ ideas and expressing their won clearly and persuasively.

Leadership/21st Century Skills:

21st Century Interdisciplinary themes (Check those that apply to the above activity.)			
<input type="checkbox"/> Global Awareness	<input type="checkbox"/> Financial/Economic/Business/Entrepreneurial Literacy	<input type="checkbox"/> Civic Literacy	
<input type="checkbox"/> Health/Safety Literacy	<input type="checkbox"/> Environmental Literacy		
21st Century Skills (Check those that students will demonstrate in the above activity.)			
<b>LEARNING AND INNOVATION</b> <u>Creativity and Innovation</u> <input checked="" type="checkbox"/> Think Creatively <input checked="" type="checkbox"/> Work Creatively with Others <input type="checkbox"/> Implement Innovations <u>Critical Thinking and Problem Solving</u> <input type="checkbox"/> Reason Effectively <input type="checkbox"/> Use Systems Thinking <input type="checkbox"/> Make Judgments and Decisions <input checked="" type="checkbox"/> Solve Problems <u>Communication and Collaboration</u> <input checked="" type="checkbox"/> Communicate Clearly <input checked="" type="checkbox"/> Collaborate with Others	<b>INFORMATION, MEDIA &amp; TECHNOLOGY SKILLS</b> <u>Information Literacy</u> <input type="checkbox"/> Access and Evaluate Information <input type="checkbox"/> Use and manage Information <u>Media Literacy</u> <input type="checkbox"/> Analyze Media <input type="checkbox"/> Create Media Products <u>Information, Communications and Technology (ICT Literacy)</u> <input type="checkbox"/> Apply Technology Effectively	<b>LIFE &amp; CAREER SKILLS</b> <u>Flexibility and Adaptability</u> <input checked="" type="checkbox"/> Adapt to Change <input checked="" type="checkbox"/> Be Flexible <u>Initiative and Self-Direction</u> <input type="checkbox"/> Manage Goals and Time <input type="checkbox"/> Work Independently <input checked="" type="checkbox"/> Be Self-Directed Learners <u>Social and Cross-Cultural</u> <input type="checkbox"/> Interact Effectively with Others <input type="checkbox"/> Work Effectively in Diverse Teams	<b>Productivity and Accountability</b> <input checked="" type="checkbox"/> Manage Projects <input checked="" type="checkbox"/> Produce Results <u>Leadership and Responsibility</u> <input type="checkbox"/> Guide and Lead Others <input type="checkbox"/> Be Responsible to Others

### **Leadership component for this lab:**

Students will pick a group leader for the project. The leader will be ensuring that guideless will be follow and keep everyone on task. Group will need TWO calculator person for double checking on answers, and scribe. The scribe will write the answers on the worksheet and will make sure ALL WORK IS shown on each square. Students will ALL communicate clearly, efficiently, and collaborate with each other providing that they can group as a group with respect!

### **Teacher Preparation: (What materials and set-up are required for this lab?)**

#### Materials

- Pencils, Discount worksheet and YOUR AMAZING BRAIN!

#### Set-Up Required:

- Have students get in groups of 4's and designate the team responsibilities. Team leader will come up to the front of the table and get the ONE worksheet for the team. Once worksheet is collected, groups will group under a poster that is located around the room.

### **Lab Organization Strategies:**

Leadership (Connect to 21<sup>st</sup> Century Skills selected):

- Think creatively
- Work creatively and respectfully with others
- Solve problems
- Communicate clearly
- Adapt to change and attitudes
- Be flexible
- Be self-directed learners
- Manage projects
- Produce results

#### Cooperative Learning:

- Students work in a team with a designated lead. All students will contributed their ideas clearly and productively.

#### Expectations:

Students will stay focus, on task, and will share their results with the teacher. Worksheet must have 4 names on paper for grading.

#### Timeline:

- 15-30 minutes

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**Post Lab Follow-Up/Conclusions:**

Discuss real world application of learning from lab

- Discount percentage is useful for everything outside this room. (e.g. shopping, eating out, buying a home, tips).

Career Applications

- Business, Marketing, Investor, Stock Market

Optional or Extension Activities

- Exit post-it notes tickets to be place on STOP LIGHT on your way out the classroom

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