

## **Objective: Make a 3-D Model of a plant or animal cell**

### **Guidelines:**

1. You may choose to make a plant or animal cell. You must label your cell as a plant or animal. Your name must be on the model as well.
2. Your cell model may be edible or non-edible.
3. All parts of your cell must be labeled clearly and neatly. Suggestion: Use toothpicks and pieces of paper to make little flags.
4. Your organelles should clearly represent the actual organelle. By just looking at an organelle, we should be able to tell what it is. (For example: the nucleus should be round, not square. Using the same colors and shapes as the diagram we drew in class will make this easier for you but is not mandatory.)
5. Actual number of organelles found in a real cell should be represented. (For example: a cell only has one nucleus and your cell should only have one as well. An animal cell has many vacuoles and this should be represented on your model.)
6. Functions of each organelle should be provided. Suggestion: Make a key on a separate piece of paper that can be attached to the cell in some way.
7. Be unique and creative! Use a variety of appropriate materials.
8. All organelles that are required are listed on the back of the paper.

**All projects are due on  
Wednesday, January 27, 2021.**

**\*\*10 points taken off for each day late.\*\***

**This counts as a test grade!**

**Cell Organelles that should be included:**

| <b>Plant cell</b>     | <b>Animal Cell</b>    |
|-----------------------|-----------------------|
| Cell Wall             | Cell Membrane         |
| Cell Membrane         | Cytoplasm             |
| Cytoplasm             | Nucleus               |
| Nucleus               | Ribosomes             |
| Ribosomes             | Endoplasmic Reticulum |
| Endoplasmic Reticulum | Vacuole               |
| Vacuole               | Mitochondria          |
| Mitochondria          | Chromosome            |
| Chromosome            | Lysosome              |
| Lysosome              | Golgi Body            |
| Golgi Body            |                       |
| Chloroplast           |                       |

## Cells Vocabulary Part 1

### WORD BANK

Cell  
Organelle

Cell Theory  
Cell Wall

Microscope  
Cell Membrane

Nucleus

1. \_\_\_\_\_ The basic unit of structure & function in all living things.
2. \_\_\_\_\_ An instrument that makes small objects look larger.
3. \_\_\_\_\_ A Rigid layer of nonliving material that surrounds the cells of plants and some other organisms.
4. \_\_\_\_\_ A widely accepted explanation of the relationship between cells and living things.
5. \_\_\_\_\_ A cell structure that controls which substances can enter or leave the cell.
6. \_\_\_\_\_ A tiny cell structure that carries out a specific function within the cell.
7. \_\_\_\_\_ A cell structure that contains nucleic acids, the chemical instructions that direct all the cell's activities.

## Cells Vocabulary Part 2

### WORD BANK

Cytoplasm  
Golgi Bodies

Mitochondria  
Chloroplast

Ribosomes  
Vacuole

Endoplasmic Reticulum  
Lysosome

1. \_\_\_\_\_ A structure in a cell that receives proteins and other newly formed materials from the ER, packages them, and distributes them to other parts of the cell.
2. \_\_\_\_\_ Rod-shaped cell structures that convert energy in food molecules to energy the cell can use to CARRY out its functions.

3. \_\_\_\_\_ A structure in the cells of plants and some other organisms that captures energy from sunlight and uses it to produce food.
4. \_\_\_\_\_ The region between the cell membrane and the nucleus; in organisms without a nucleus, the region located inside the cell membrane.
5. \_\_\_\_\_ A cell structure that forms a maze of passageways in which proteins and other materials are carried from one part of the cell to another.
6. \_\_\_\_\_ A small, round cell structure containing chemicals that break down large food particles into smaller ones.
7. \_\_\_\_\_ A sac inside a cell that acts as a storage area.
8. \_\_\_\_\_ A small grain-like structure in the cytoplasm of a cell where proteins are made

### Organelles in Each Type of Cell

In the Chart below, list each of the cell parts in the correct column. Some cell parts are found in both animal and plant cells so you will need to write them on both sides of the chart. Others are ONLY found in the plant cell, so they will only be written once.

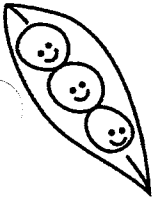
| Plant Cells | Animal Cells |
|-------------|--------------|
|             |              |

# Percent of a Number

Solve each problem. Find your answer in one of the three answer boxes. Find the problem number on the coloring page and color each section with the number the color that corresponds to your answer.

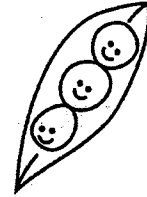
| *  |  | ANSWER 1              | ANSWER 2           | ANSWER 3             |
|----|--|-----------------------|--------------------|----------------------|
| 1  | What is 10% of 47?   | 470<br>DARK GREEN     | 4.7<br>LIGHT GREEN | 37<br>YELLOW         |
| 2  | What is 20% of 82?   | 16.4<br>BLACK         | 62<br>ORANGE       | 164<br>BLUE          |
| 3  | What is 150% of 50?  | 7.5<br>ORANGE         | 100<br>RED         | 75<br>YELLOW         |
| 4  | What is 50% of 30?   | 15<br>ORANGE          | 80<br>YELLOW       | 60<br>RED            |
| 5  | What is 10% of 9?  | 90<br>PINK            | 19<br>PURPLE       | 0.9<br>RED           |
| 6  | A \$400 TV is on sale for 25% off. What is the sale price of the TV?                       | \$100<br>GREEN        | \$300<br>BLUE      | \$375<br>YELLOW      |
| 7  | A \$65 purse is on sale for 10% off. How much money will you save if you buy it?           | \$55.00<br>BLACK      | \$10.00<br>RED     | \$6.50<br>DARK GREEN |
| 8  | The cost of a movie ticket increased by 15%. The old price was \$8. How much are they now? | \$23.00<br>LIGHT BLUE | \$9.20<br>GRAY     | \$9.50<br>PINK       |
| 9  | A \$75 jacket is 50% off. How much does the jacket cost now?                               | \$37.50<br>PURPLE     | \$40.00<br>GREEN   | \$25.00<br>RED       |
| 10 | You leave a 20% tip on your \$70 dinner bill. How much was the tip?                        | \$5.00<br>ORANGE      | \$14.00<br>PINK    | \$90.00<br>YELLOW    |





# Sweet Pea Cafe

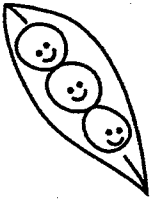
## Student Packet



Using the given menu, write down your own order below.  
You may order whatever you'd like, but you must order at least four things.

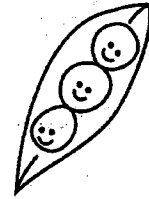
| My Order |       |
|----------|-------|
| Item     | Price |
|          |       |
|          |       |
|          |       |
|          |       |
|          |       |
|          |       |
|          |       |

Do not total your order. That will be your waiter's job!



# Sweet Pea Cafe

## Student Packet



Using the given menu, write down your own order below.  
You may order whatever you'd like, but you must order at least four things.

| My Order |       |
|----------|-------|
| Item     | Price |
|          |       |
|          |       |
|          |       |
|          |       |
|          |       |
|          |       |
|          |       |

Do not total your order. That will be your waiter's job!

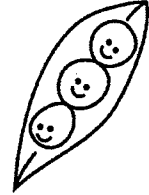








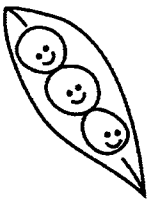
# Total + Follow Up Questions



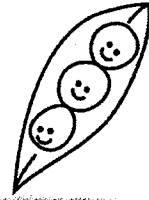
Record the total for each day below.

| Day       | Total |
|-----------|-------|
| Monday    |       |
| Wednesday |       |
| Friday    |       |
| Saturday  |       |

1. Which day was it the cheapest for three people to eat at Sweet Pea's Café?
2. Which day do you think had the better discounts? This does not mean it necessarily had to be the cheapest day. Explain.
3. If you were to really eat at this restaurant, which day would you want to go? Explain your choice.



# Independent Work



Use the mini-menu below to complete the tasks.

## Mini Menu

### Beverages \$2.00 each

Soda - Tea - Lemonade - Coffee

### Soups & Salads

Garden Salad - \$4    Chicken Noodle Soup - \$3  
Cesar Salad - \$5    Broccoli Cheese Soup - \$3

### Entrées

Hamburger - \$4    Spaghetti Bowl - \$6  
Cheeseburger - \$5    Macho Nachos - \$3  
Mini Pizza - \$5    Hot Dog - \$3

### Desserts

Chocolate Cake Slice - \$2  
Scoop of Ice Cream - \$1  
Cheesecake Slice - \$2  
Slice of Apple Pie - \$3

**You are a waiter on Tuesday. A group comes in and orders the following:**  
Two sodas, one lemonade, a garden salad, a bowl of chicken noodle soup,  
a cheeseburger, a mini pizza and one slice of chocolate cake.

**Record their order on your order tab.**

**Tuesday Specials: Buy One Entrée Get One Free**

**Plus take an additional 5% off the total bill. Sales tax is 6.5%**

### Mini Menu Order Tab

|                          |  |
|--------------------------|--|
|                          |  |
|                          |  |
|                          |  |
|                          |  |
|                          |  |
|                          |  |
|                          |  |
|                          |  |
|                          |  |
|                          |  |
| 1 <sup>ST</sup> SUBTOTAL |  |
| DISCOUNT                 |  |
| 2 <sup>ND</sup> SUBTOTAL |  |
| TAX                      |  |
| TOTAL                    |  |

Use the space here to do your calculations and show your work to prove how you came up with the total for each table. Be sure to take into consideration all specials offered for your day and sales tax!