

# Spreadsheets

# Spreadsheets

- A program that allows you to use **ROWS** and **COLUMNS** of data to forecast, manage, predict, and present information

**ROWS** →

	A	B
1	Birthday Gifts	
2		
3	Gift	Cost
4	CD Player	\$48.00
5	Nike Jacket	\$99.75
6	Gap Jeans	\$59.00
7	Computer Game	\$68.50
8	Three CD's	\$31.25
9		
10	Total Cost	\$306.50

↑  
**COLUMNS**

**LABEL**

	A	B
1	<b>Birthday Gifts</b>	1/4/98
2		
3	<b>Gift</b>	<b>Cost</b>
4	CD Player	\$48.00
5	Nike Jacket	\$99.75
6	Gap Jeans	\$59.00
7	Computer Game	\$68.50
8	Three CD's	\$31.25
9		
10	<b>Total Cost</b>	<b>\$306.50</b>

**VALUE**

- **ENTER**-Type in or record data in a spreadsheet
- **LABEL**-Text, symbols, dates or numbers NOT used in calculations
- **VALUE**-A number that is entered on a spreadsheet and used for calculations
- **EDIT**-To change the original entry in a spreadsheet

	A	B
1	Birthday Gifts	1/4/98
2		
3	Gift	Cost
4	CD Player	\$48.00
5	Nike Jacket	\$99.75
6	Gap Jeans	\$59.00
7	Computer Game	\$68.50
8	Three CD's	\$31.25
9		
10	Total Cost	B4+B5+B6+B7+B8
		Sum (B4:B8)

**RANGE**, for example B4:B8

**Formula**

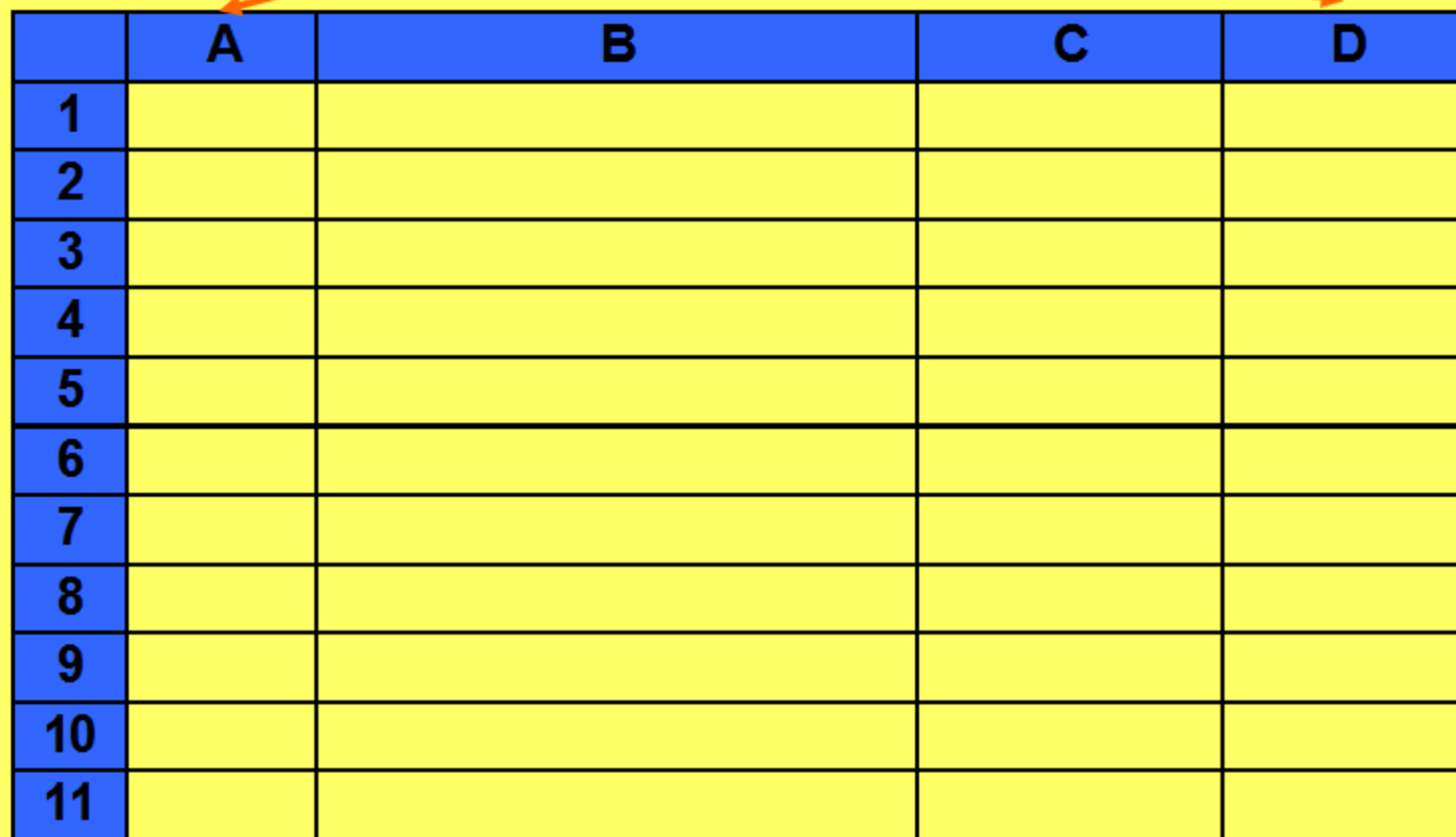
**Function**

- **FORMULA**-equation with symbols (+ - \* /) used to find an answer. A formula always starts with =
- **RANGE**-A defined block of cells
- **FUNCTION**-Create shortcut formulas for the user: SUM(auto addition) and AVG (auto averaging)

A blank setup of cells is called a GRID.

**Columns**

**Rows**



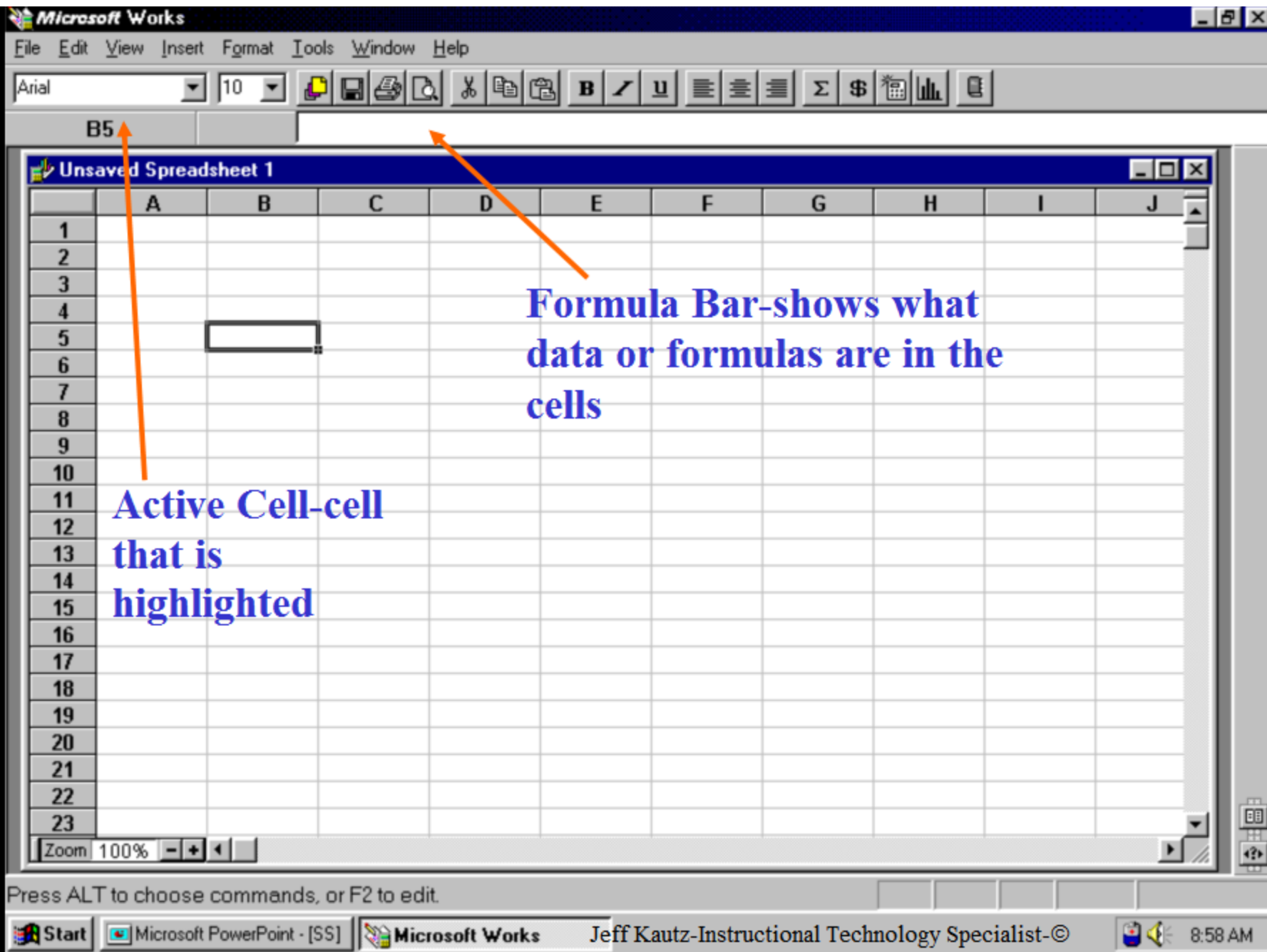
	A	B	C	D
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				

## Column B

	A	B	C	D
1				
2				
3				
4				
5				
6				

**Row 3**

Cell Address is the location of the cell in the spreadsheet, such as: B3



# Uses of Computer Spreadsheets

These are just a few examples:

- School: Student grades, payroll
- Sports: individual and team statistics
- Personal: checkbook, household expenses
- Business: payroll, investments





# Advantages of Computer Spreadsheets

- Can Answer “What is....?”
  - students current grade
  - schedules
  - budgets
  - census results
- Can Answer “What if....?”
  - win/loss record changes
  - hourly wage rate changes

# Formulas

A tool for making calculations with the numbers on your spreadsheet

- |            |   |       |
|------------|---|-------|
| • Add      | + | A1+B1 |
| • Subtract | - | C3-D4 |
| • Multiply | * | B6*A2 |
| • Divide   | / | F1/F3 |

Formulas always start with an equals =



# Function

is a shortcut for the most common calculations used in spreadsheets

- SUM-will add all numbers you specify
- AVG-will average all numbers you specify

	A	B	C
1	<b>Birthday Gifts</b>	1/4/98	
2			
3	<b>Gift</b>	<b>Cost</b>	
4	CD Player	\$48.00	
5	Nike Jacket	\$99.75	
6	Gap Jeans	\$59.00	
7	Computer Game	\$68.50	
8	Three CD's	\$31.25	
9			
10	<b>Total Cost</b>	<b>Sum (B4:B8)</b>	<b>\$306.50</b>
11	<b>Average Cost</b>	<b>AVG (B4:B8)</b>	<b>\$61.30</b>

The colon shows  
the range of cells

Notice the  
difference between  
SUM and AVG

# A Look at the Picnic Budget

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
<b>1</b>		Class Picnic Budget		
<b>2</b>	Qty.	Items	Prices	Cost
<b>3</b>	4	Packs of Hotdogs	\$2.79	\$11.16
<b>4</b>	6	Packs of Hotdog Buns	\$1.89	\$11.34
<b>5</b>	8	Cartons of Potato Salad	\$2.65	\$21.20
<b>6</b>	5	Bags of Potato Chips	\$2.17	\$10.85
<b>7</b>	3	Cherry Pies	\$5.00	\$15.00
<b>8</b>	2	Jars of Pickles	<u>\$1.69</u>	<u>\$3.38</u>
<b>9</b>			Subtotal	\$72.93
<b>10</b>			6% Tax	\$4.38
<b>11</b>			Total	\$77.31

Are all of the food items located in a **cell**,  
**row**, or **column**? **Column**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
<b>1</b>		Class Picnic Budget		
<b>2</b>	Qty.	Items	Prices	Cost
<b>3</b>	4	Packs of Hotdogs	\$2.79	\$11.16
<b>4</b>	6	Packs of Hotdog Buns	\$1.89	\$11.34
<b>5</b>	8	Cartons of Potato Salad	\$2.65	\$21.20
<b>6</b>	5	Bags of Potato Chips	\$2.17	\$10.85
<b>7</b>	3	Cherry Pies	\$5.00	\$15.00
<b>8</b>	2	Jars of Pickles	<u>\$1.69</u>	<u>\$3.38</u>
<b>9</b>			Subtotal	\$72.93
<b>10</b>			6% Tax	\$4.38
<b>11</b>			Total	\$77.31

Is the word **Prices** in a **cell**, **row**, or **column**? **Cell**

	A	B	C	D
1		Class Picnic Budget		
2	Qty.	Items	Prices	Cost
3	4	Packs of Hotdogs	\$2.79	\$11.16
4	6	Packs of Hotdog Buns	\$1.89	\$11.34
5	8	Cartons of Potato Salad	\$2.65	\$21.20
6	5	Bags of Potato Chips	\$2.17	\$10.85
7	3	Cherry Pies	\$5.00	\$15.00
8	2	Jars of Pickles	\$1.69	\$3.38
9			Subtotal	\$72.93
10			6% Tax	\$4.38
11			Total	\$77.31

Is the information from cell A3 to A8 values, labels, or formulas? **Values**

	A	B	C	D
1		Class Picnic Budget		
2	Qty.	Items	Prices	Cost
3	4	Packs of Hotdogs	\$2.79	\$11.16
4	6	Packs of Hotdog Buns	\$1.89	\$11.34
5	8	Cartons of Potato Salad	\$2.65	\$21.20
6	5	Bags of Potato Chips	\$2.17	\$10.85
7	3	Cherry Pies	\$5.00	\$15.00
8	2	Jars of Pickles	\$1.69	\$3.38
9			Subtotal	\$72.93
10			6% Tax	\$4.38
11			Total	\$77.31

Where are the cells that are probably holding a formula? **Cells D3 through D11, D3:D11**

	A	B	C	D
1		Class Picnic Budget		
2	Qty.	Items	Prices	Cost
3	4	Packs of Hotdogs	\$2.79	\$11.16
4	6	Packs of Hotdog Buns	\$1.89	\$11.34
5	8	Cartons of Potato Salad	\$2.65	\$21.20
6	5	Bags of Potato Chips	\$2.17	\$10.85
7	3	Cherry Pies	\$5.00	\$15.00
8	2	Jars of Pickles	\$1.69	\$3.38
9			Subtotal	\$72.93
10			6% Tax	\$4.38
11			Total	\$77.31