**EXCEL NOTES**

**Named Ranges**

* **Definition**: A named range assigns a human-readable name to a cell or range.
* **Why**: It makes formulas easier to understand and manage.

**How to Implement:**

1. Select a cell or range (e.g., B2:B6 which might represent Sales).
2. Go to **Formulas** → **Define Name**.
3. Name it e.g., SalesData.
4. Use in formula: =SUM(SalesData)

**Teaching Tip:**

* Compare =SUM(B2:B6) vs =SUM(SalesData)
* Show **Name Manager** to edit/delete names.

**Exploring Formulas**

* Use the **Formulas** tab → **Show Formulas** to display all formulas.
* Use **Trace Precedents** and **Trace Dependents** to visualize relationships.

**Example Activity:**

* Have students create a formula like =B2+C2 in cell D2.
* Ask them to trace the **precedents** from D2.

### ****Descendants (Dependents)****

* Explain **Dependents** as cells affected by a selected cell.
* Example: If A1 is used in B1, then B1 is a dependent of A1.

**Visualizing:**

* Select A1, click **Formulas → Trace Dependents**.
* Arrows will point to all formulas using A1.

### ****Precedents****

* Explain **Precedents** as cells that are **used in the formula** of a selected cell.
* **Example**: If A1 and B1 are used in the formula in C1 (=A1+B1), then A1 and B1 are **precedents** of C1.

**Visualizing:**

* Select the formula cell (e.g., C1).
* Click **Formulas → Trace Precedents**.
* Arrows will appear from the precedent cells (A1 and B1) pointing toward the selected cell (C1), showing **where the data is coming from**.

### ****Referencing: Relative, Absolute, Mixed****

| **Type** | **Formula Example** | **Behavior** |
| --- | --- | --- |
| Relative | =A1+B1 | Changes as you drag the formula |
| Absolute | =$A$1+$B$1 | Fixed reference — doesn’t change when dragged |
| Mixed | =$A1+B$1 | Row or column stays fixed depending on $ |

1. Create a **multiplication table**:
   * Row: Numbers 1–10
   * Column: Numbers 1–10
2. Use $A2\*B$1 in a cell and drag it.
3. Students can **observe** how different referencing types affect results.