Introduction to Spreadsheets

Lesson: Introduction to Spreadsheets

ISTE Standard: 6: Creative Communicator (6a) - Students choose appropriate platforms and tools to effectively communicate and create digital content.

Objective: Students will create a personal monthly budget spreadsheet that includes data entry, calculations, and formatting.

Materials:
- Computers or laptops with Microsoft Excel installed
- Sample dataset (optional) for practice
- Step-by-step project instruction sheet (optional)

Safety Precautions:
1. Ensure students save their work frequently to avoid data loss.
2. Remind students to handle computers gently and avoid consuming food or drinks near electronic devices.
3. Emphasize proper use of shared equipment and respect for others' files.

Procedures:

1. Preparation:
- Introduce the project: "You will create a personal monthly budget spreadsheet to track income and expenses."
- Discuss real-world applications of spreadsheets, such as managing finances or organizing data for a science project.

2. Project Steps:

Step 1: Plan Your Budget
- List hypothetical income sources (e.g., allowance, part-time job).
- Brainstorm common expenses (e.g., food, transportation, entertainment).

Step 2: Create the Spreadsheet
1. Open Microsoft Excel and create a new spreadsheet.
2. In Row 1, enter headers such as:
    - **Income Source**
    - **Amount**
    - **Expense Category**
    - **Amount**
    - **Balance**

Step 3: Enter Data
- Fill in sample data for income sources and expenses in appropriate columns.
- Ensure entries are clear and organized.

Step 4: Perform Calculations
- Use formulas to calculate:
    - **Total Income:** Use `=SUM()` for the income column.
    - **Total Expenses:** Use `=SUM()` for the expense column.
    - **Balance:** Subtract total expenses from total income using a formula like `=B2-B7`.

Step 5: Format the Spreadsheet
- Apply formatting to improve readability:

- o Bold headers.
- o Use colors to highlight income and expenses.
- o Adjust column widths to fit content.

Step 6: Add a Chart (Optional)
- Create a simple pie chart or bar graph to represent income and expenses visually.

Note:
Clean-Up
- Save your spreadsheet with a clear file name (e.g., "Monthly_Budget_YourName").
- Close Excel properly and ensure your workstation is tidy.