GETTING STARTED – MATH AND TECHNOLOGY

Participants are introduced to some of the basic technologies that will be used throughout the course.

Lesson Goals

- Learn how to use a Flash drive
- Create and use folders to organize files
- Use MathType to create a Standards based quiz
- Use the drawing toolbar in Microsoft Word

Word Bank Flash drive Microsoft Word MathType email attachment drawing toolbar

ISTE National Educational Technology Standards

- I-B: Demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies
- IV-A: Apply technology in assessing student learning of subject matter using a variety of assessment techniques
- V-C: Apply technology to increase productivity
- V-D: Use technology to communicate and collaborate with peers, parents, and the larger community in order to nurture student learning
- VI-A: Model and teach legal and ethical practice related to technology use

CA Mathematics Standards - In Brief

- Order rational numbers on a number line
- Perform operations with rational numbers
- Reviewing your own grade level standards

MY EMAIL LIST

TECH AUTOBIOGRAPHY PROMPTS

This is your chance to let your instructor know a bit more about you, your feelings, and your attitudes towards technology. Type a 1-2 page paper responding to a few of these questions:

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•	How do you feel about using technology?
•	How do you use technology in your classroom now?
•	What frustrates you about technology?
•	How do your feelings and attitudes toward technology affect how you use technology in the classroom?
•	How would you like to be able to use technology in the classroom?
•	Do you think you are good at learning to use technology?
•	What expectations do you have for this course?

INTRODUCTION TO MATH AND TECHNOLOGY CHEAT SHEET AND NOTES

Inserting a Flash Drive

- Also called "jump drive" or "memory stick."
- Insert your Flash drive into the USB port on your computer located either on the back or on the side of your computer.
- An icon should appear in the My Computer folder.

Locating files on the Flash Drive.

My Computer → Removable Disk [XX] → MAT Course Info.

Creating a New Folder

- In a blank space on the screen in the folder, right click your mouse.
- On pull down menu, select: New → Folder.

Renaming a Folder

- Right click on the current name.
- Type in the new name.

Copying Text

- Highlight the text that you wish to copy.
- On the pull down menu: Edit → Copy or hold down Ctrl+C on your keyboard.

Pasting Text

- Put your cursor where you want the text to be pasted.
- On the pull down menu: Edit → Paste or hold down Ctrl+P on your keyboard.

Saving a Document on a Flash Drive

On the pull down menu: File → Save As → Click on the arrow next to the 'Save in:' drop down box at the top → Find and click on the name of your flash drive (i.e. Lexar Media) → Click on the folder you wish to save your document in → Name your document → Save.

Opening a New Document in Word

- On your toolbar, click on the picture of a white piece of paper, or
- On the pull down menu: File → New, or
- On your keyboard, hold down Ctrl+N.

Setting Up a Group Email List

- There are several ways to set up a group email and it also depends on the email program. Some possible ways are:
 - 1. name1 <email1>, name2 <email2>, name3 <email3>,
 - 2. email1, email2, email3,
 - 3. reply to a group email sent to you and then save the addresses.
- If you set up your document like example 1 or 2 you can just cut and paste the information into an email.

Putting Tick Marks on a Number Line

- A shortcut to evenly spacing tick marks on the number line is as follows:
 - 1. Copy and paste one tick mark until you have the number of tock marks desired.



2. Place the first and last tick marks where you would like them on the number line.



- 3. Highlight all of the tick marks using the arrow.
- 4. Using the Draw menu, select 'align and distribute,' and 'align top.'



5. Using the Draw menu, select 'align and distribute,' and 'distribute horizontally.'



Accessing the MathType User Manual

- On the flash drive: Articles → MathType5WinManual
- Adobe Acrobat is needed to view the file.

SOME USEFUL MATHTYPE INFORMATION

Within the equation area itself, there are three items of interest:

Empty Slot

A slot containing no text is displayed with a dotted outline.

Insertion Point

A blinking marker consisting of a horizontal line and a vertical line that indicates where text or templates will be inserted next.

Selection

The part of the equation that will be affected by any subsequent editing commands is highlighted.

The MathType toolbar contains five separate areas: the Symbol and Template Palettes, the Small Bar, and the Large and Small Tabbed Bars.

Symbol Palettes

If you press or click on one of these buttons, a palette containing various symbols will appear. If you choose one of the symbols, it will be added to your equation at the insertion point.

Inserting Symbols

To insert a symbol, click on it in one of the bars, or choose it from one of the Symbol Palettes. The Symbol Palettes work like standard Windows menus — just press or click the left mouse button to display the palette's contents, then choose the desired symbol. The symbol will be inserted immediately to the right of the insertion point or, if something is highlighted (selected), the symbol will replace it.

Template Palettes

If you press or click on one of these buttons, a palette containing various templates will appear. If you choose one of the templates, it will be added to your equation at the insertion point or, if something is highlighted (selected), it will "wrap" around it.

Inserting Templates

To insert a template, click on it in one of the bars, or choose it from one of the Template Palettes. The Template Palettes work like standard Windows menus — just press or click the left mouse button to display the palette's contents, then choose the desired template. The template will be inserted immediately to the right of the insertion point or, if something is highlighted (selected), the template will "wrap" itself around it.

A template is a formatted collection of symbols and empty slots. You build expressions by inserting templates and then filling in their slots. You can insert templates into the slots of other templates, so complex hierarchical formulas can be built up in a natural way. Slots are "intelligent" in the sense that they control the properties of any characters inserted into them. For example, any text that you insert into the upper limit slot in a summation template is automatically reduced in size and is centered above the summation sign.

The Bars

The Small Bar and the Large and Small Tabbed Bars are containers in which you can store frequently used symbols, templates, and expressions (whole equations or parts of equations).

Style and Sizing in MathType

MathType contains defaults settings for fonts, styles, and sizes that you may want to change to match the Word document you are creating.

To change the font and style of your equation, open the Style dialog box in the MathType window (Style → Define...). At the top of the dialog box, make sure the "Simple" box is checked. Once you are comfortable with MathType, you may want to explore the advanced section of the dialog box, but for now we will work with the simple styles. In this section, you can choose the font for your equation, and whether the variables or Greek symbols will be italicized. To choose a font, simply choose a font from the pull-down menu. To italicize variables or Greek symbols, check the boxes next to those choices.

To change the size of your equation, open the Size dialog box in the MathType window (Size → Define...). The number next to Full Typesize will be highlighted. Type in the font size you want, and click OK. The size of the entire equation will change.