**Do You Want to Build a Snowman?**

Today we are going to practice using the tools in Geometer Sketchpad by building a snowman. Follow the directions below to create and animate a snowman!

**The Circle Tool:**

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| http://mathforum.org/sketchpad/intro/circle.gif | 1. Select the circle tool by using the mouse to position the arrow over the circle tool and click once.
2. To draw a circle, move the mouse to the right onto the sketch window. Press and hold the mouse button while moving the mouse. A circle should appear.
3. Practice making five or six circles of different sizes.
4. Now practice erasing them by using "Command Z" or "Undo." One by one the circles should disappear.
5. Now draw three circles of different sizes that fit on the screen.
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**The Select Tool:**

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| http://mathforum.org/sketchpad/intro/select.gif | Choose the select tool (sometimes called the translate tool).  |

1. Highlight a circle by moving the arrow close to a circle until the arrow becomes horizontal.
2. Try to avoid the point on the circle; you'll need that shortly. With the arrow horizontal, hold down the mouse button and move the mouse around.

What happens? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Arrange the circles from smallest to largest so that they look like a **SNOWMAN**. By using the select tool, how can you change the size of the circle you have already drawn?

**The Point Tool:**

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| http://mathforum.org/sketchpad/intro/point.gif | Select the point tool - it looks like a dot. Using this tool is very simple: wherever you click, a point appears. **Use the point tool to put eyes, nose, mouth, and buttons on your snowman.** |

(If you have some spiritual connection to the point tool or you're just emotionally attached to it - like a hamster to his big plastic get inside and roll around the house until someone kicks me down the stairs ball - you can put snowflakes all around your snowman.)

**The Segment Tool:**

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| http://mathforum.org/sketchpad/intro/segment.gif | The segment tool allows you to draw straight objects. When you press and hold the segment tool three other pictures appear. In the spaces below, sketch each of the other tools and fill in their names. |

1. Off to the side of your snowman you are going to practice drawing one of each of the three types of straight objects.
2. To draw a straight object, click and hold the mouse button while dragging in the direction you want your object to go.
3. Try drawing one horizontally. What happens when you hold down the SHIFT key while drawing a segment? (Hint: move the endpoint around in a circle.)

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1. Now use the segment tool to put arms and hands on your snowman. (If you are feeling particularly linear and have bonded with the segment tool like Krazy Glue to an eyelid, you could draw the ground and a put a hat on the snowman.)

**The Labeling Tool:**

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| http://mathforum.org/sketchpad/intro/label.gif | When you draw anything GSP gives it a name called a label. Sometimes, however, the label is invisible. Every point, circle, and segment you have drawn on your snowman has a label - even if you can't see it. |

1. Let's see what the program labeled your snowman's nose.
2. Choose the labeling tool from the toolbox on the left of the screen (it looks like a little hand). Move the hand close to the nose of your snowman. When you are pointing at the nose the hand will turn black. Click once and a letter should appear.
3. What is the label for your snowman's nose?

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1. Click on the nose again to make the label disappear.
2. Now you will need to put your name on your snowman so I know who it belongs to.
3. The labeling tool actually serves two purposes: labeling tool and text tool.
4. Put your name on the snowman, find an empty place on your picture and move the labeling tool there.
5. Click and hold the mouse button while dragging diagonally.
6. Type in your name, period number, and today's date. If you want to change the size and style of your font it is under the **DISPLAY** menu.