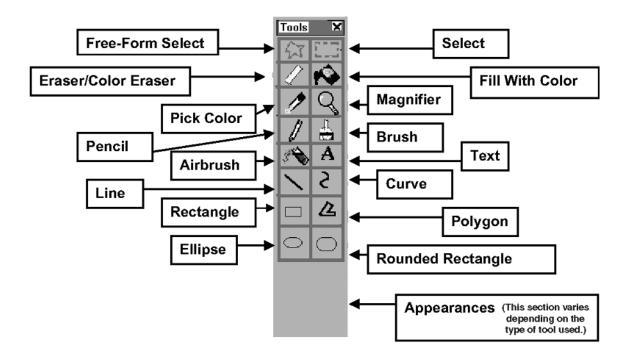
Section 1

GETTING STARTED

Getting Started with the Paint Tool Box

The Microsoft Paint Tool Box is reproduced below along with an explanation of each tool's function. To change colors, use the Color Box at the bottom of the Paint screen.



Free-Form Select

• To select a free-form area by dragging the pointer around the area

Select

- To copy and paste part of an image
- To erase (delete)
- To flip and rotate an image

Getting Started with the Paint Tool Box (continued)

• To stretch or skew an image

Eraser/Color Eraser

• To erase a small area in white or in color

Fill With Color

• To color an enclosed area

Pick Color

• To copy color from one area to another

Magnifier

• To display grid lines and to zoom in and out of a picture

Pencil

• To draw a free-form line

Brush

• To paint with different-shaped brushes

Airbrush

• To paint using an airbrush effect

Text

To type and format text

Line

• To draw straight and free-form lines

Curve

• To draw one or two arcs

Rectangle

Getting Started with the Paint Tool Box (continued)

• To draw a rectangle or a square

Polygon

• To draw polygons

Ellipse

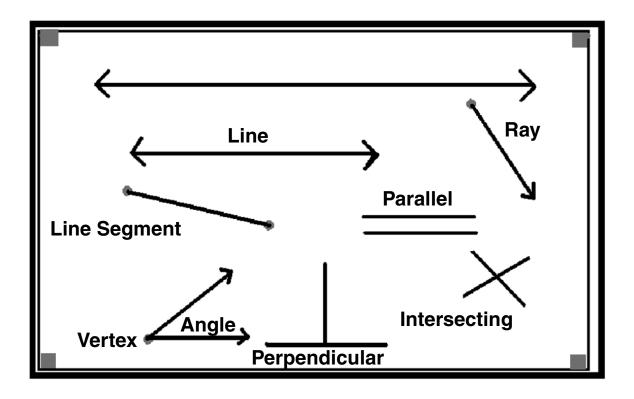
• To draw an ellipse or a circle

Rounded Rectangle

• To draw a round-cornered rectangle or square

The Starting Line

Objective: To represent different lines using the Line button in the Paint Tool Box



- A *line* is made up of points and is straight. It continues in opposite directions without ending. To show this, we draw an arrow on each end.
- A *line segment* or segment is the part of a line between two points. It is straight and has a beginning and an end. To show this, we may draw dots at each end or we may not.
- A *ray* is part of a line that has a beginning but no end. To show this, we draw a dot at one end and an arrow at the other end.
- *Parallel lines* are always the same distance apart and they never intersect.

The Starting Line (continued)

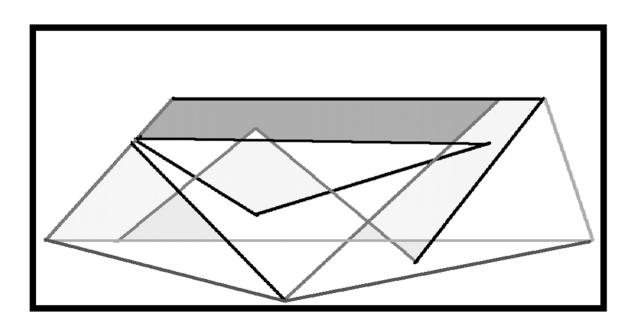
- *Perpendicular lines* cross or meet at right (90-degree) angles.
- *Intersecting lines* cross at a point.
- An *angle* is formed when two rays meet at a point. This point is called the *vertex*. The rays are called the sides of the angle.
- **1.** Click on the Line button in the Tool Box and choose the thickest size from the section at the bottom of the Tool Box.
- 2. Click somewhere on the page, and while holding down the Shift key, drag a straight line across the page. (*Note:* Holding down the Shift key while dragging makes a straight line that will move in 45-degree angles. If you are using the Rectangle button, holding down the Shift key will make a perfect square, and if you are using the Ellipse button, holding down the Shift key will make a perfect circle.) Release the mouse first, then release the Shift key to end the line.
- **3.** Use the method in step 2 to draw arrows at the ends of the line. You have drawn the symbol for a line.
- **4.** In the Color Box, right click on red and left click on red. (This will make the foreground and the background of the shape you draw red.)
- **5.** Click on the Ellipse button in the Tool Box and choose the opaque symbol at the bottom of the Tool Box (shaded box with an outline). Click on a spot on the page and make a small red dot by holding the left mouse button down and dragging the mouse slightly.
- **6.** Click on the Select button in the Tool Box and choose the transparent symbol at the bottom of the Tool Box. Select the red dot on the page by clicking and dragging over the area with the mouse.
- **7.** Go to Edit and choose Copy.
- **8.** Go to Edit and choose Paste.
- **9.** Hold the left button on the mouse down and move the pasted dot to a spot away from the original dot.
- **10.** Choose the Line button and the color black from the Color Box (right click on white and left click on black). Drag a line connecting the two dots.

The Starting Line (continued)

- **11.** Drag another line on the page without the dots at the ends. You have drawn the symbols for a line segment or segment.
- **12.** Go to Edit and choose Paste.
- **13.** Drag the pasted dot to a position on the screen.
- **14.** Click on the Line button and drag a line from the dot. Draw an arrow at the end of the line. You have drawn the symbol for a ray.
- **15.** Go to Edit and choose Paste.
- **16.** Use the left mouse button to drag the pasted dot to a position on the screen.
- **17.** Click on the Line button and draw two rays extending from the dot in different directions. You have drawn an angle with two sides.
- **18.** To label your drawings, click on the Text button and click and drag an area on the page to make a text box. Choose Arial font, size 14, and type a label in the text box. Label the following: line, line segment, ray, vertex, and side.
- **19.** To move your labels to the right spots, click on the Select button, outline the words, and move them next to their symbols.
- **20.** Looking at your symbols, compare a line to a line segment, compare a line to a ray, and compare a ray to a line segment.
- **21.** Click on the Text button, create a text box, and type your observations.
- **22.** Practice using the Line button to draw the parallel, perpendicular, and intersecting lines, as shown in the art at the beginning of this activity.

Line Design

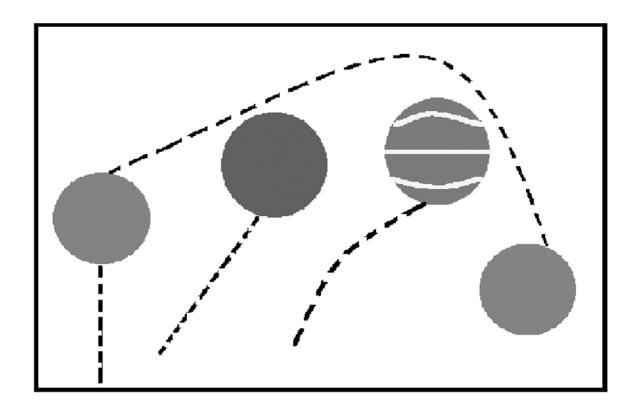
Objective: To practice using the Line and Fill With Color buttons in the Paint Tool Box and to recognize shapes as an art form



- 1. Click on the Line button and choose the size of the line at the bottom of the Tool Box. Click on any color in the Color Box and drag a line on the page. (To drag a line, hold down the left button on the mouse and let go when you want the line to end.)
- **2.** Create a line design by dragging different sizes and colors of lines in different directions.
- **3.** You may choose the Fill With Color button to highlight your design. When using this button, remember that the area being colored must be completely closed.
- **4.** Discuss some of the properties of your design. (What shapes do you see?)

The Bouncing Ball

Objective: To learn to use the Select button and the Ellipse button in the Paint Tool Box, and the foreground and background options of the Paint Color Box



- A *circle* is the set of all points in a plane at a fixed distance, called the *radius*, from a fixed point, called the *center*.
- 1. Left click on red, then right click on red in the Color Box.
- **2.** Click on the Ellipse button and choose the opaque symbol from the section at the bottom of the Tool Box.
- **3.** While holding down the Shift key, drag a red circle on the screen. Release the mouse, then release the Shift key. (This creates a perfect circle.)

The Bouncing Ball (continued)

- **4.** Left click on blue and right click on white in the Color Box.
- **5.** Choose the transparent symbol from the section at the bottom of the Tool Box. While holding down the Shift key, click and drag a circle with a blue outline.
- **6.** Click on the Fill With Color button and click inside the circle to color it blue.
- **7.** Click on the Select button and choose the transparent symbol at the bottom of the Tool Box. Use the left mouse button to drag a box around the red circle. (The Select button is used to copy and paste and to move images or text.)
- **8.** Go to Edit and choose Copy.
- **9.** Go to Edit and choose Paste.
- **10.** Click on the pasted circle and hold down the left button on the mouse to move the pasted circle anywhere on the page. Release the mouse button when the circle is where you want it.
- **11.** Left click outside the box.
- **12.** Click on the Fill With Color button, choose green from the Color Box, and click on the pasted circle to color it green.
- **13.** Color any of the other balls as you wish.
- **14.** Click on the Select button and choose the transparent symbol at the bottom of the Tool Box. Click on any of the circles and bounce them on the screen like a ball.