

Chapter 6

Working with Patterns and Brushes

Objectives

- Use the Move command
- Create a pattern
- Design a repeating pattern
- Work with the Brushes panel
- Work with Scatter brushes
- Compare the Paintbrush tool to the Blob Brush tool
- Enhance artwork with brushes & the Width tool

Use the Move Command

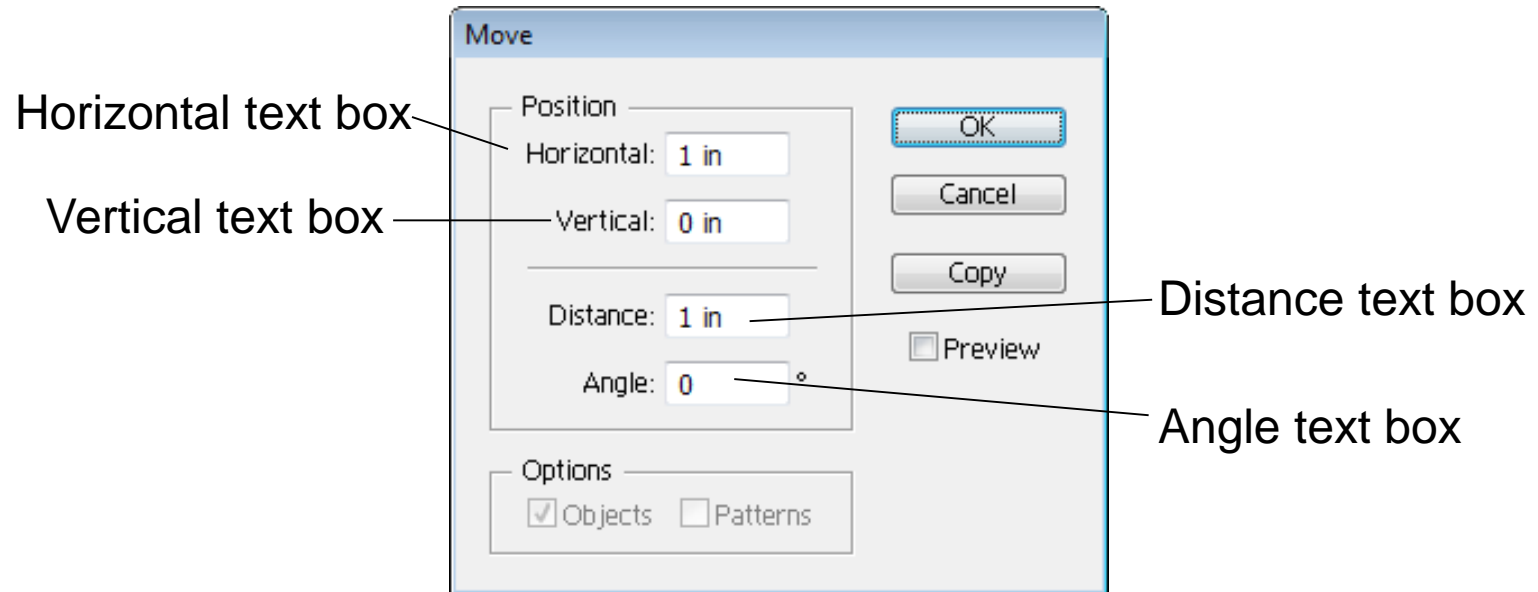
- **Offset** refers to the distance an object is moved or copied from a starting location to an end location.
- The **Move command** is the most effective method for moving an object at precise offsets.

Use the Move Command

- In the Move dialog box, enter horizontal and vertical distance you want object moved.
- An alternative method is to enter a value for the distance you want the object to move and the angle it should move.

Use the Move Command

Move dialog box

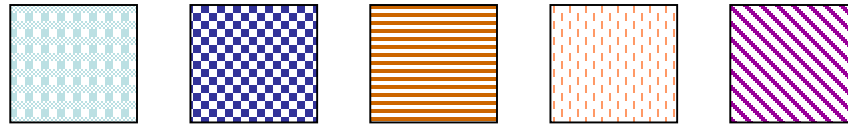


Use the Move Command



Use the Move command to
create a simple pattern.

Create a Pattern



Design patterns that can be used to fill objects or applied as outlines for objects.

Create a Pattern

- Patterns can be simple, complex, abstract, or specific.
- Save patterns for future use and applications in the Swatches panel.
 - The Swatches panel comes preloaded with patterns that you can modify

Create a Pattern

To create a pattern:

- Create artwork for the pattern.
- Drag artwork on to Swatches panel where it is defined as a pattern swatch.

Create a Pattern

The following cannot be used as artwork for a pattern:

- Gradients
- Blends
- Brush strokes
- Meshes
- Bitmap images
- Graphs
- Masks
- Other patterns

Create a Pattern

- A pattern fills an object by repeating an original pattern.
- This is called **tiling**.



Create a Pattern

Design fill patterns by designing one tile:

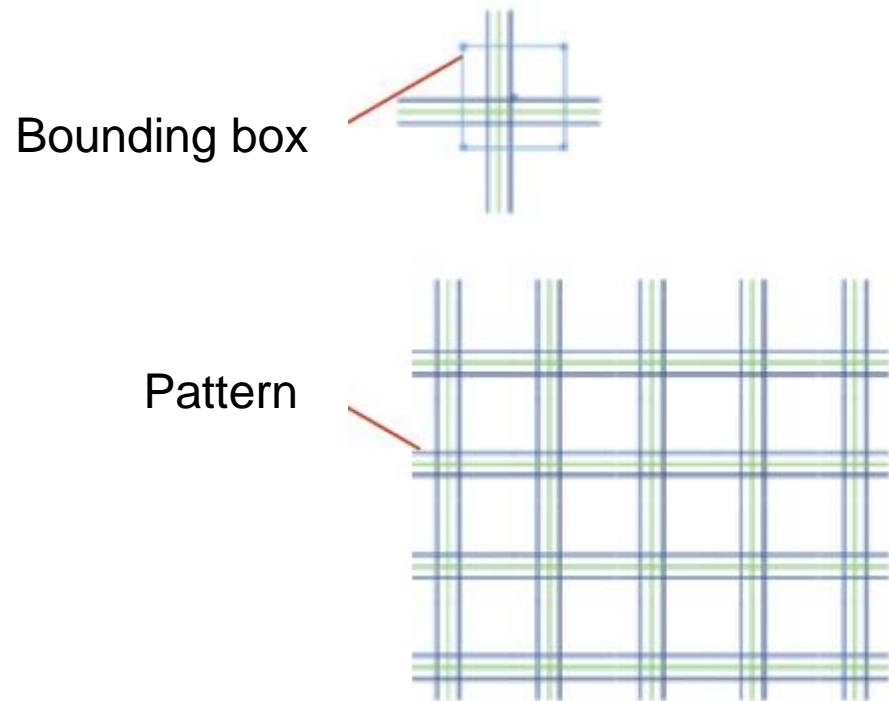
- For efficiency, tile should be $\frac{1}{2}$ " to 1" square.
- When applied as a fill, the tile will repeat to fill object.

Create a Pattern

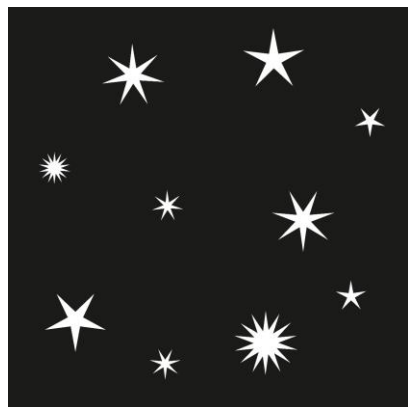
- Create a bounding box to define the perimeter of pattern that contains no rectangular objects.
- Position an un-filled, un-stroked rectangular object at back of stacking order to act as bounding box.
- All objects within bounding box will be repeated as part of pattern.

Create a Pattern

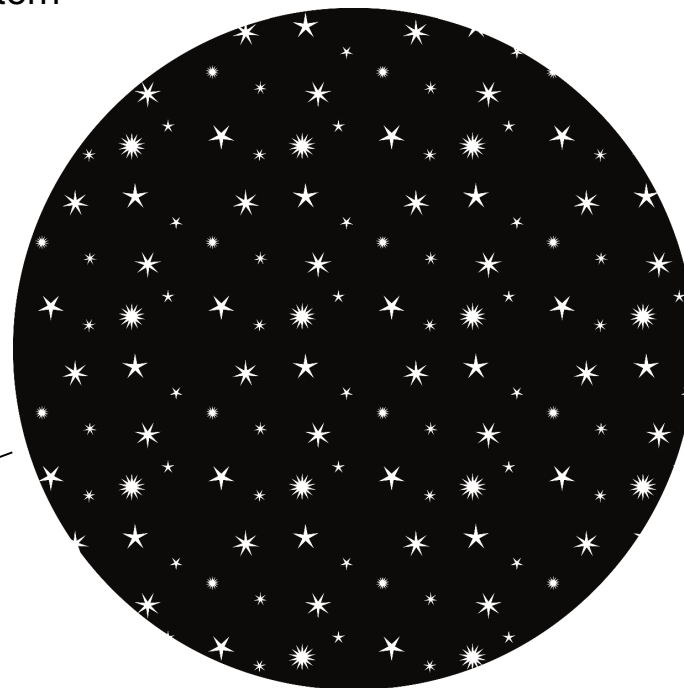
- The bounding box determines the perimeter of the pattern tile.



Create a Pattern



Artwork to be
used as a
pattern



Artwork
applied as
a pattern
fill

Create a Pattern

- By default, a pattern begins at bottom-left of artboard, not the bottom-left corner of the object.
- If you move an object, the pattern changes within object.

Create a Pattern

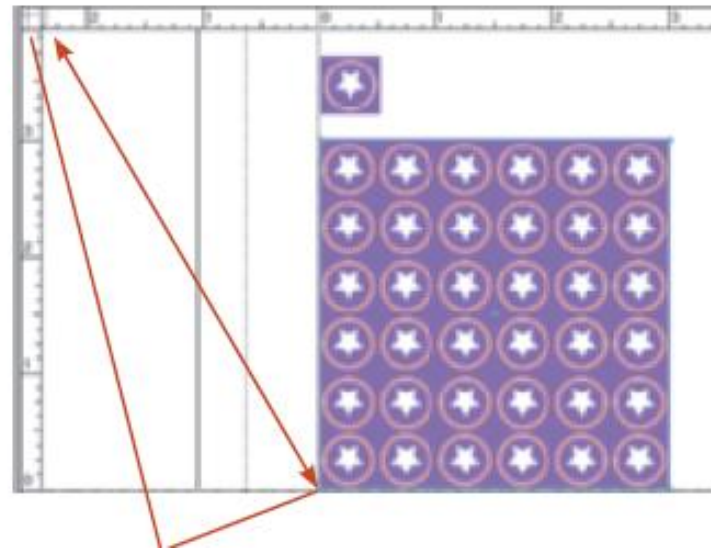
Best method for controlling pattern is to align ruler origin with the bottom-left corner of object.

1. Display rulers.
2. Position cursor at top-left corner of window where two rulers meet.
3. Drag cross hairs to bottom-left corner of filled object.

Create a Pattern

Align the ruler origin with the bottom-left corner of the filled object.

The pattern fills the object left to right, bottom to top.



Ruler Origin

Create a Pattern

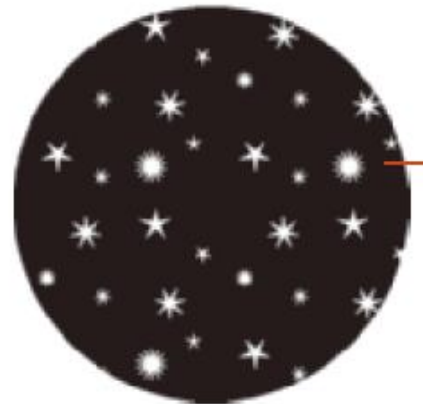
- You can choose to transform only the object, only the pattern, or both.
- When you transform a pattern, all subsequent objects created will be filled with the transformed pattern.

Create a Pattern

Patterns can be transformed independently of the objects that they fill.



Pattern is
scaled
200%



Object is
scaled
50%

Create a Pattern

- To return a pattern fill to its original appearance, fill an object with a different swatch, then reapply pattern.

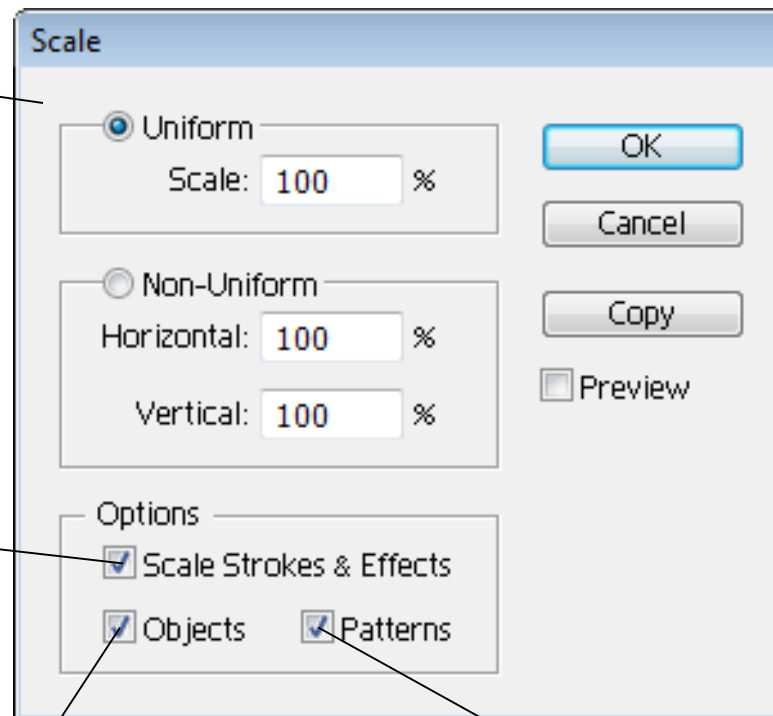
Create a Pattern

Options for patterns
in the Scale dialog box

Scale Strokes
& Effects check
box

Objects check box

Patterns check box



Design a Repeating Pattern

- You need to understand how patterns tile to achieve desired effect.
- Precision is important when creating a pattern.
 - Check alignment
 - Use dialog boxes to move and transform objects; don't try to do it by hand

Design a Repeating Pattern

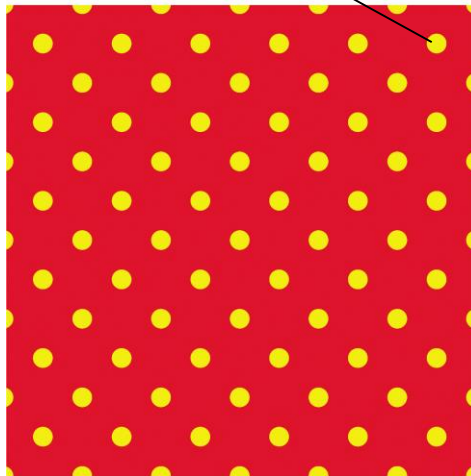
- Modify a pattern by editing artwork in pattern tile then replacing old pattern in Swatches panel.
- Any existing objects on artboard will be updated with new pattern.
- You can save the old pattern by saving new pattern as a new swatch.

Design a Repeating Pattern

This tile could
not create a
pattern



Note the four
quarter circles
in each corner



Work with the Brushes Panel

The Brushes panel offers sample brushes and brush libraries.

- Calligraphic
- Scatter
- Art
- Bristle
- Pattern

Work with the Brushes Panel

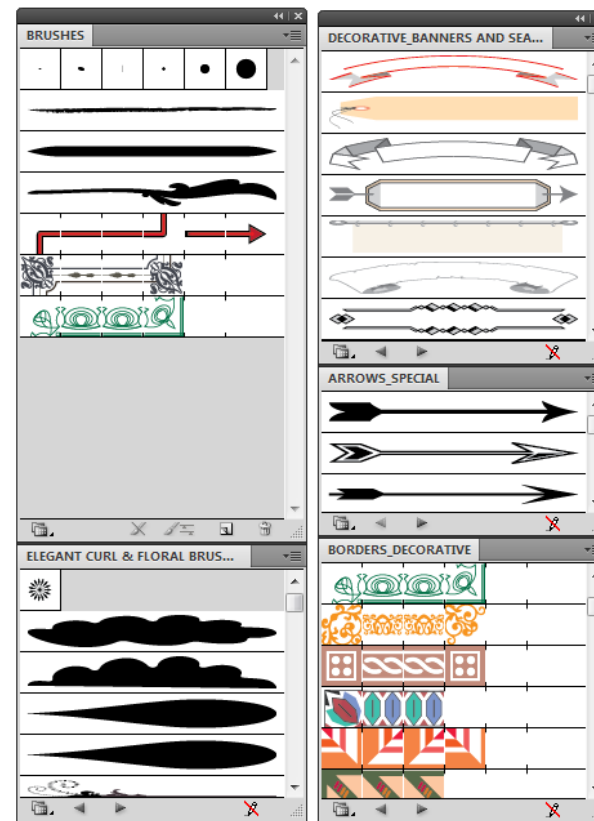
- **Calligraphic** – apply strokes that resemble a calligraphic pen
- **Scatter** – disperse copies of an object along a path
- **Art** – stretch an object along the length of path
- **Bristle** – create appearance of natural brush strokes
- **Pattern** – repeat a pattern along a path

Work with the Brushes Panel

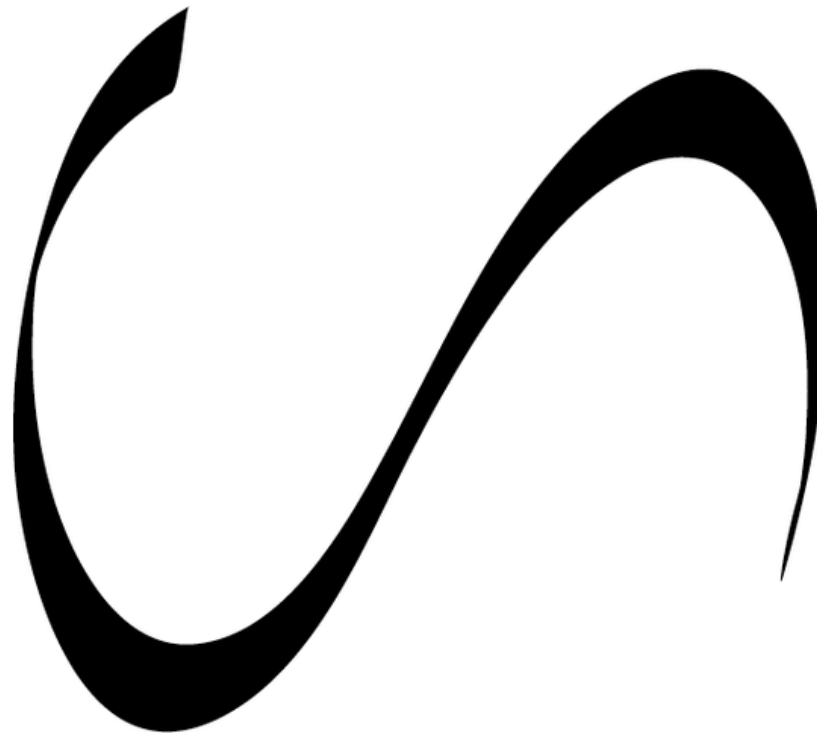
- Artwork for brushes must be composed of simple paths – no gradients.
- Art and pattern brushes cannot include text.
- You must convert text to outlines before it can be used as artwork.

Work with the Brushes Panel

The Brushes panel has pre-loaded brush libraries.

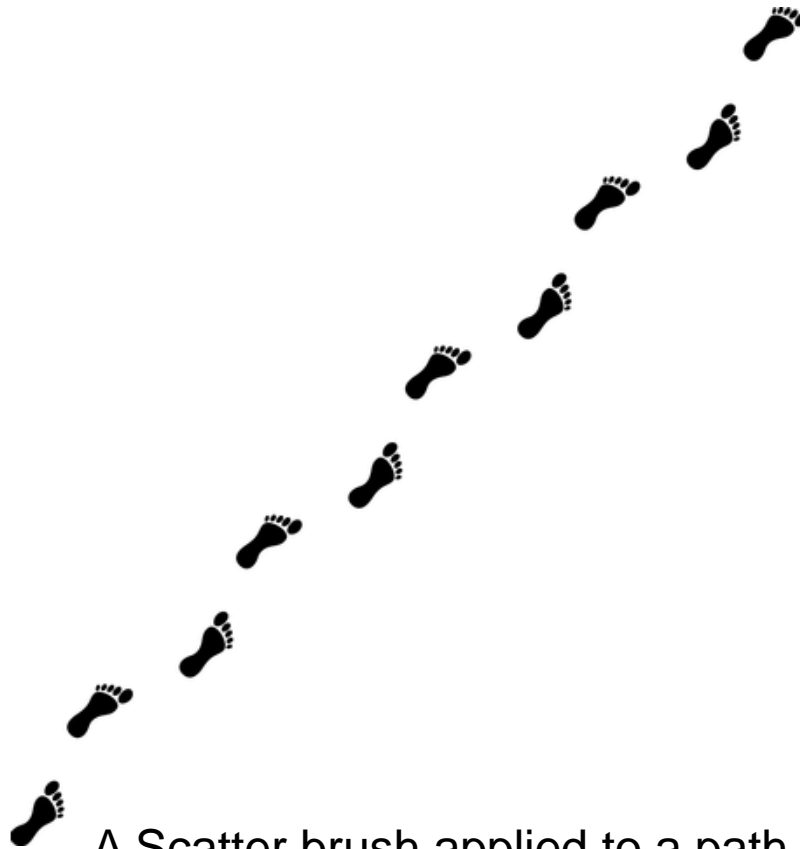


Work with the Brushes Panel



A Calligraphic brush applied to a path

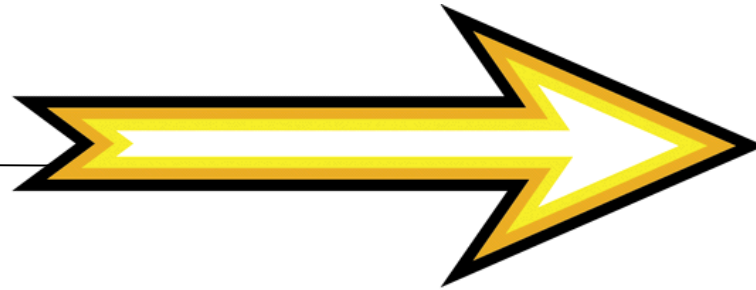
Work with the Brushes Panel



A Scatter brush applied to a path

Work with the Brushes Panel

Artwork
created to use
as an art brush



Art brush
applied to a
path



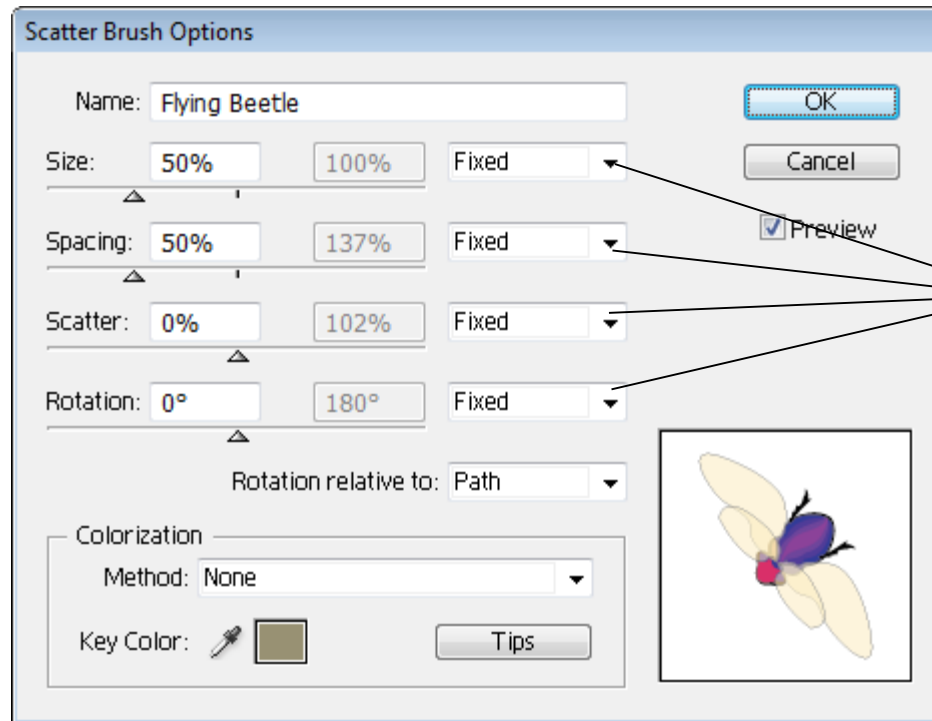
Work with Scatter Brushes

- Scatter brushes allow you to manipulate a path endlessly.
- Precise control of size, spacing, and rotation of elements along path.
- Input scatter value, which determines how far objects can be positioned from path.

Work with Scatter Brushes

- Scatter brushes are powerful for creating randomness.
- Apply a fixed or random range in the Brush Options dialog box.
- When you apply random settings, the positioning of objects on a path will be different every time you apply the brush.

Working with Scatter Brushes

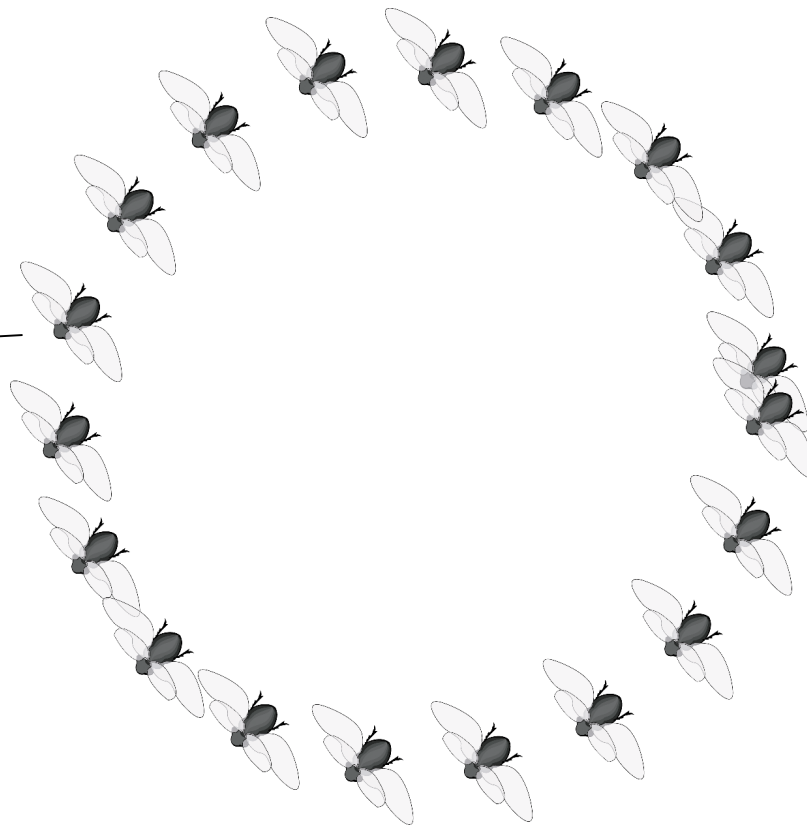


Settings
can be
fixed or
random

Scatter Brush Options dialog box

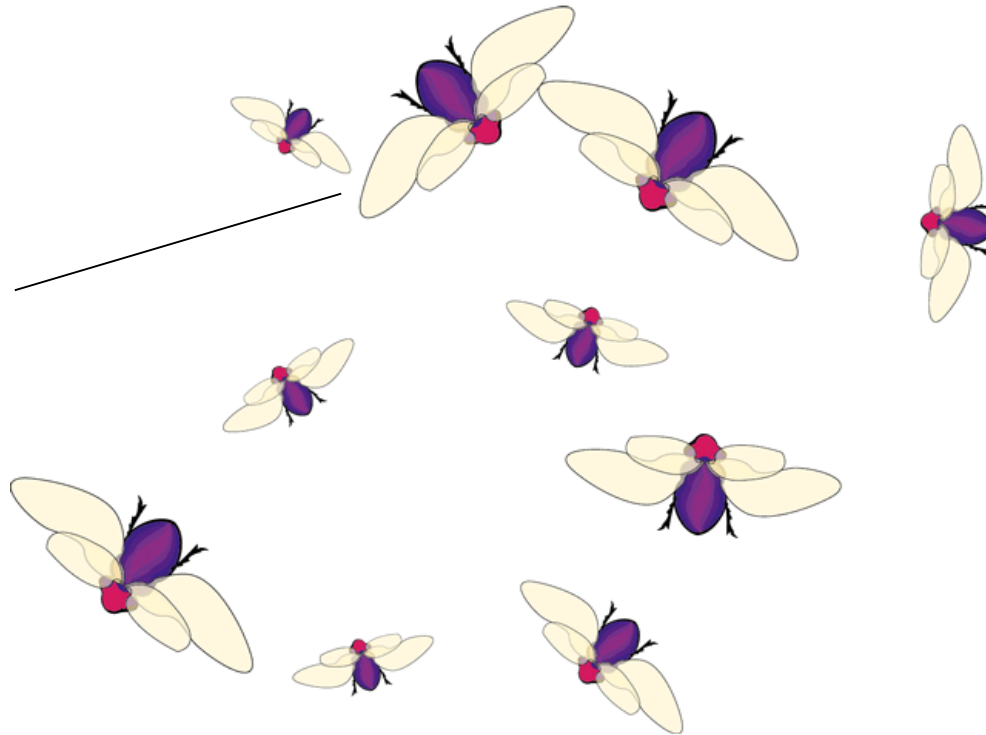
Work with Scatter Brushes

Scatter
brush
applied to
path with
fixed
settings



Work with Scatter Brushes

Scatter
brush
applied to
path with
random
settings



Compare the Paintbrush Tool to the Blob Brush Tool

- The Paintbrush tool offers a “freehand” approach to drawing.
- You can use the Paintbrush tool to sketch out a drawing and create artwork that is more spontaneous and “hand-drawn.”

Compare the Paintbrush Tool to the Blob Brush Tool

- The essential difference between the Paintbrush tool and the Blob Brush tool is that the Paintbrush tool creates a stroked path and the Blob Brush tool creates a closed filled object.

Compare the Paintbrush Tool to the Blob Brush Tool

Paintbrush tool

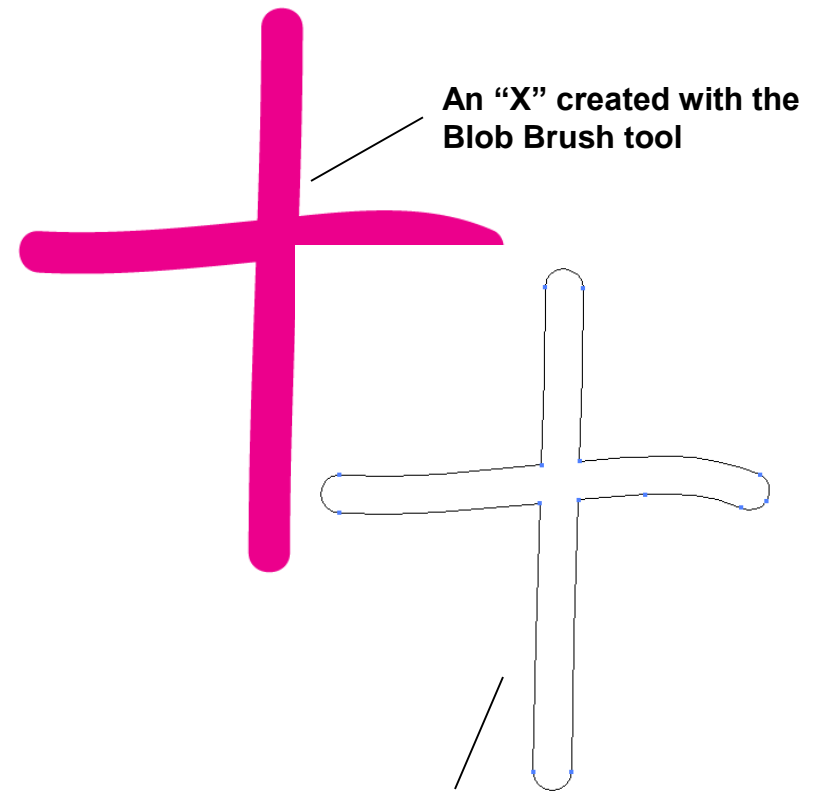


Blob Brush tool



Compare the Paintbrush Tool to the Blob Brush Tool

- The difference is very noticeable when you create outlines.
- The Blob brush creates closed paths.



The "X" revealed as a single object

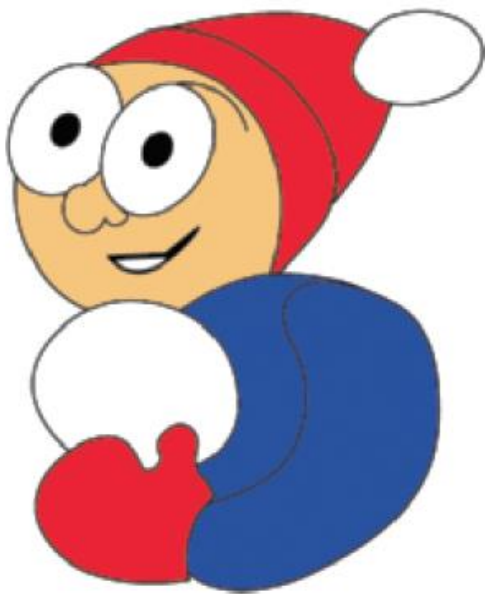
Compare the Paintbrush Tool to the Blob Brush Tool

- The Paintbrush tool always creates individual, non-connected paths with every stroke of the tool.
- With the Blob Brush tool, if you overlap one stroke with a second stroke of the same color, the two strokes will be united as one object.

Enhance Artwork with Brushes and the Width Tool

- Bristle brushes create a natural brush stroke with the streaks and variations you find in an actual paint brush.
- You can mimic the look and feel of disciplines like watercolor or paint.

Enhance Artwork with Brushes and the Width Tool



Object before brush stroke applied.



Brush stroke



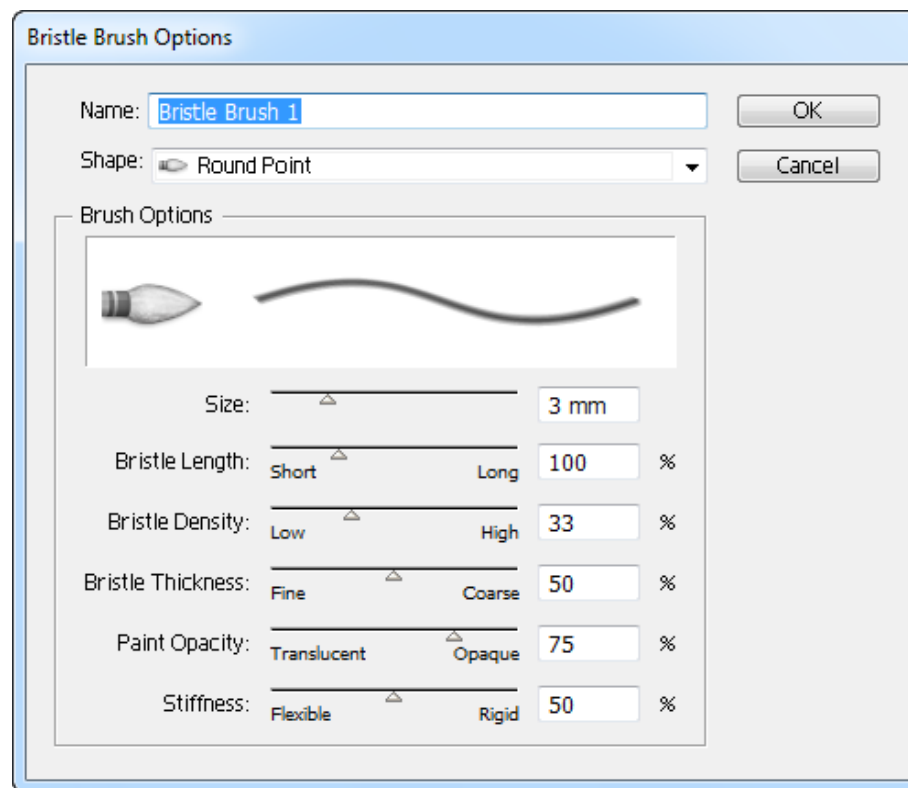
Object after brush stroke applied.

Enhance Artwork with Brushes and the Width Tool

- You can use brushes to enhance artwork you created in Illustrator.
- You can place a bitmap graphic of an actual pencil stroke, trace it, then save it as a brush.

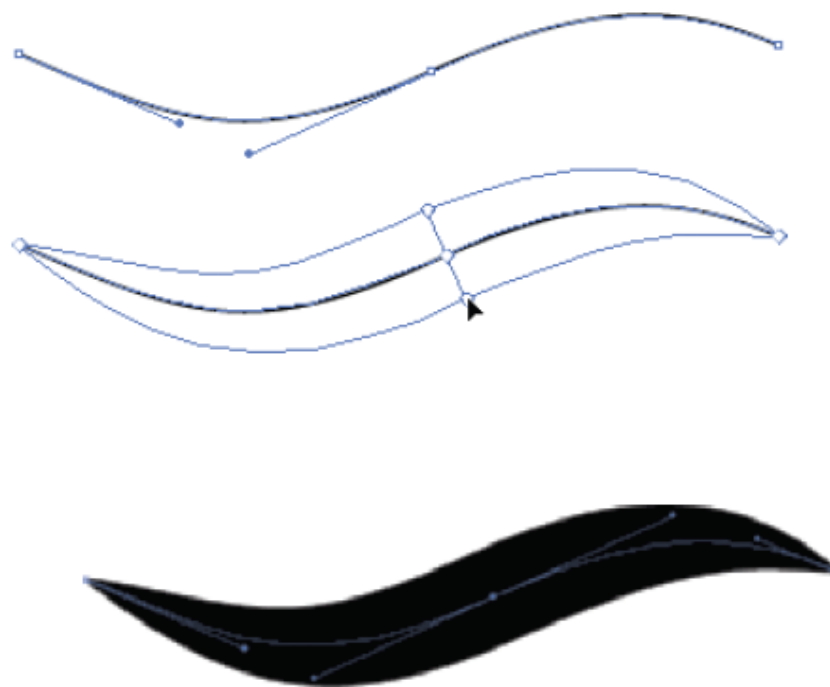
Enhance Artwork with Brushes and the Width Tool

Set options in the Bristle Brush Options dialog box.



Enhance Artwork with Brushes and the Width Tool

The Width tool allows you to modify the path of a stroke.



Enhance Artwork with Brushes and the Width Tool

Snowball
illustration
with altered
stroke
widths.

