

Chapter 3: Selecting Objects

Most operations you will do in Rhino require you to select one or more objects. Objects can be selected by clicking anywhere on the object. Click away from the object to deselect it. This method lets you select one object at a time.



To select additional objects

- ▶ Hold the **Shift** key while clicking the objects.



To remove objects from the selection

- ▶ Hold the **Ctrl** key and click the objects again.



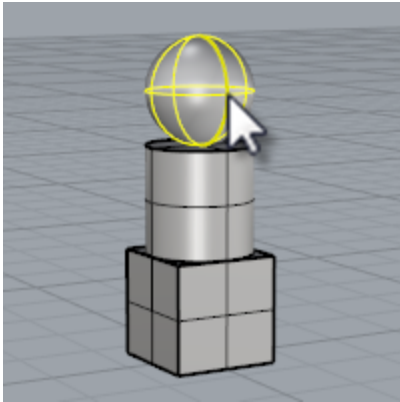
To cancel the selection

- ▶ Click away from the objects or press the **Esc** key.

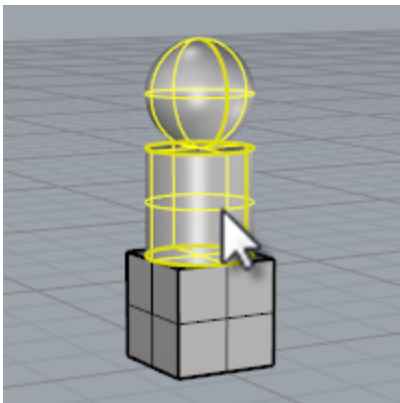


Practice selecting objects

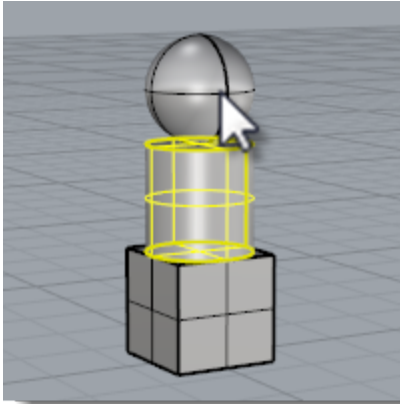
1. Open the tutorial model **Select Objects.3dm**.
2. In the **Perspective** viewport, click to select the sphere.



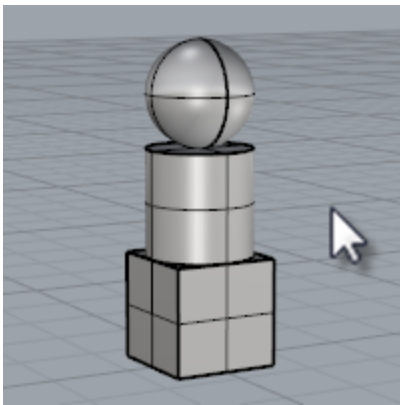
3. Hold the **Shift** key and select the cylinder. The cylinder is added to the selection.



4. Hold the **Ctrl** key and click the sphere again.
The sphere is removed from the selection.



5. Click away from the objects, or press the **Esc** key.
The selection is canceled.



Select objects with windows

Another method is to make a *window* selection or a *crossing* selection to select multiple objects in one operation.

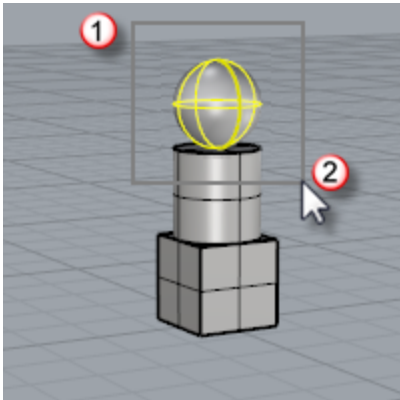
You can click in an open area of the screen and drag to create a selection window. To make a window selection click in an open area of the screen and drag to the right. To make a crossing selection click in an open area of the screen and drag to the left.

A window selection, selects all objects completely enclosed by the window. A crossing selection, selects all objects that are enclosed by the window or any object the window crosses.

To add objects, hold the **Shift** key while making a window or crossing selection. To remove objects, hold the **Ctrl** key while making a window or crossing selection.

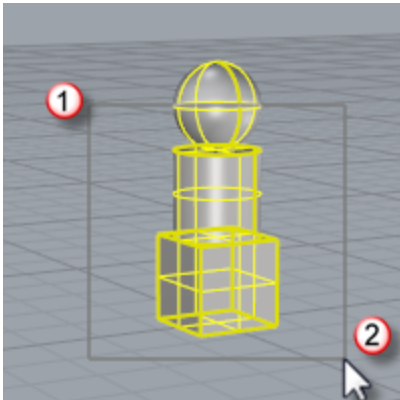
Practice window and crossing select

1. In the **Perspective** viewport, click and drag a window around the sphere.



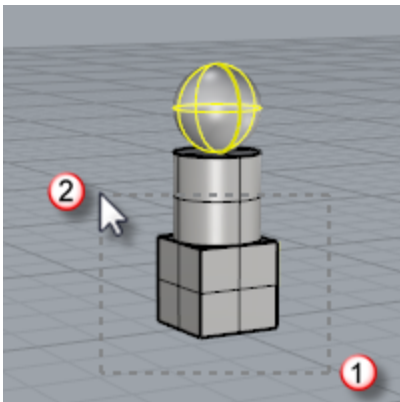
2. In the **Perspective** viewport, hold the **Shift** key then click and drag a window around the box and the cylinder.

The cylinder and box are added to the selection.



3. In the **Perspective** viewport, hold the **Ctrl** key then click and drag a crossing over the box and cylinder.

The cylinder and box are removed from the selection.

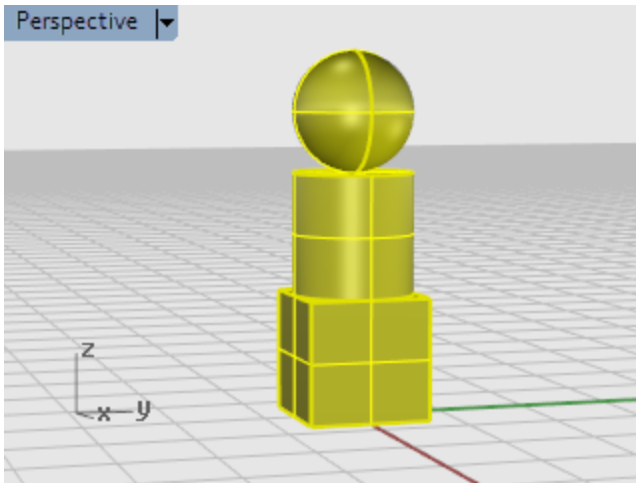


Other ways of selecting

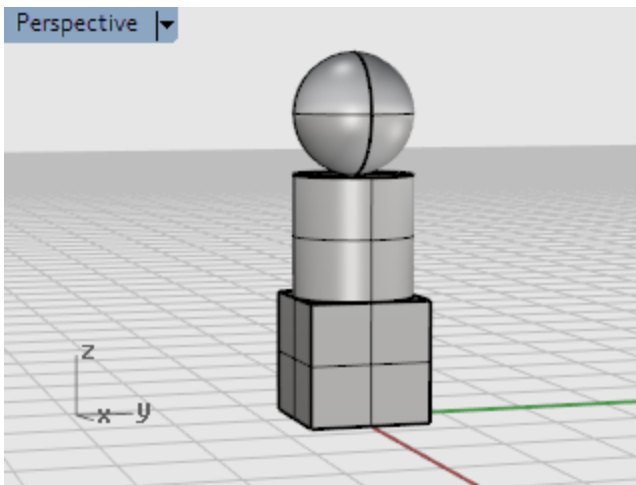
Rhino has many commands and methods for selecting objects. You can select object by name, layer, color, type; by capturing with boundaries or crossing fences; by volume shapes, by group name and many others. Review the help topic [Selection commands](#).

Practice selection by object type

1. At the command prompt, type **SelAll**.

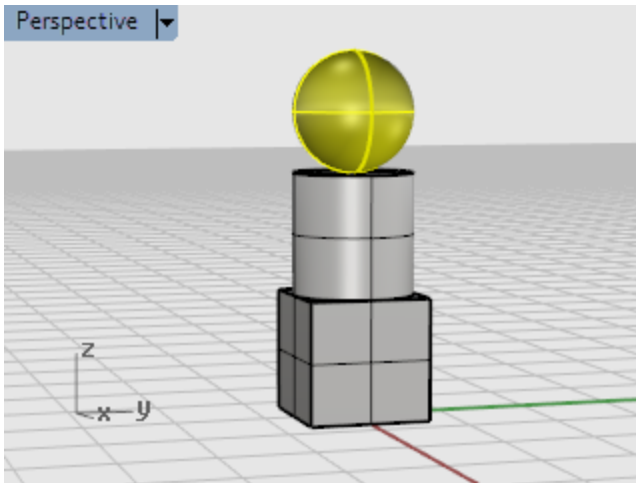


2. Type **SelNone**.
This clears the objects from the selection.

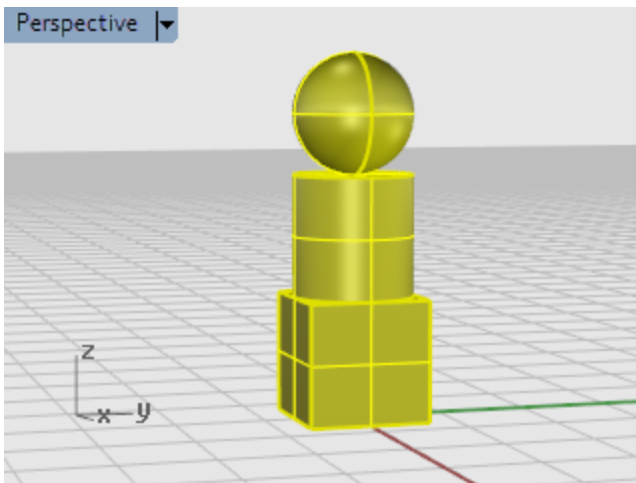


3. Type **SelSrf**.

This selects all surfaces. In this case, only the sphere is a surface.

**4.** Type **SelPolysurface**.

This adds all polysurfaces to the selection. In this case, the cylinder and box are polysurfaces.

**5.** Press the **Esc** key.

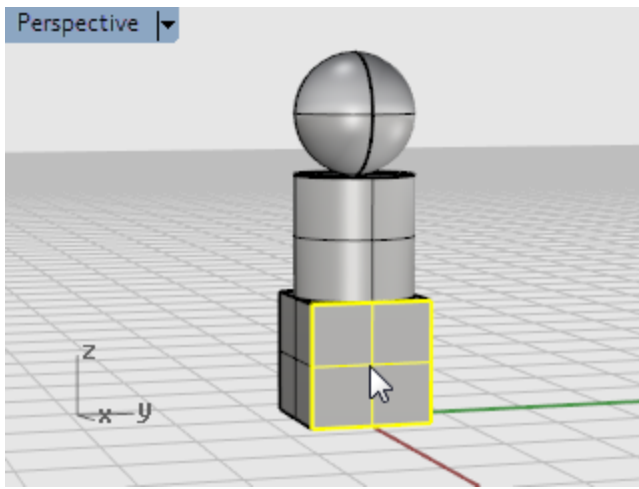
This also clears the selection.

Sub-object selection

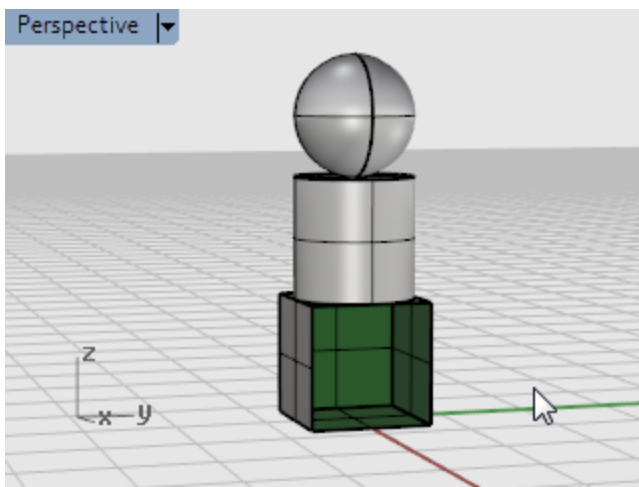
To select parts of objects for use with other commands, press and hold both the **Ctrl** and **Shift** keys at the same time and click an object part. The available parts include polysurface faces; surface and polysurface edge curves; control points; mesh vertices, faces, boundaries, and edges; and objects within a group. Review the help topic for [Sub-object selection](#).

Practice sub-object selection

1. In the **Perspective** viewport, press the **Ctrl** and **Shift** keys and click a face of the box. The face you select highlights.



2. Press the **Delete** key.



The face of the box is separated from the box solid and deleted.