Managing Parts in Model Files

I-DEAS™ Tutorials: Fundamental Skills

Learn how to:

- create and name bins
- name and manage parts
- make copies of parts
- get information about parts
- delete a bin

Before you begin...

Prerequisite tutorials:

- Getting Started (I-DEAS™ Multimedia Training)
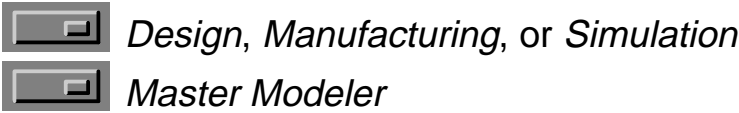
    –or–

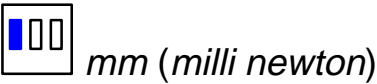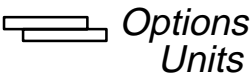   Quick Tips to Using I-DEAS
    –and–
    Creating Parts

If you didn't start I-DEAS with a new (empty) model file, open a new one now and give it a unique name.

      File
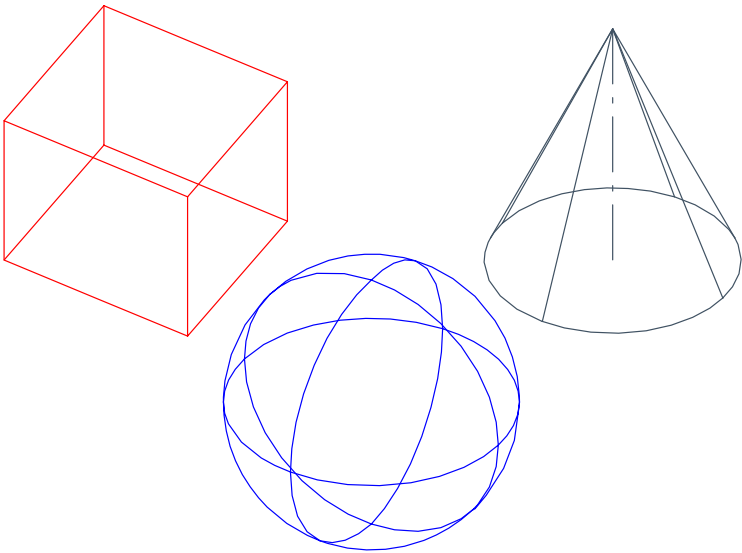   *Open*

Make sure you're in the following application and task:

        Design, *Manufacturing*, or *Simulation*

        Master Modeler

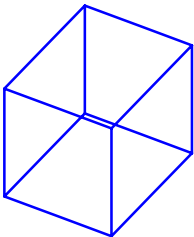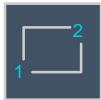Set your units to mm.

      Options
          Units
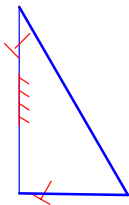
      mm (*milli newton*)

For this tutorial, you'll create a block, cone, and sphere similar to those shown below. To create these parts, follow the steps provided on the next few pages. Don't worry about dimensions for this tutorial.

Step 1. Create the block.

Step 2. Switch to front view. Create the cone by first sketching the triangular shape shown.
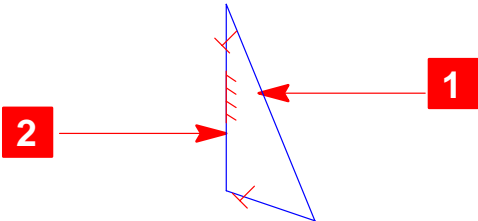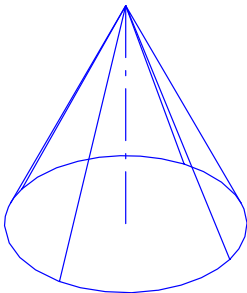
Switch to isometric view and revolve to form the cone.

1

2 pick axis

Revolve Section form

OK
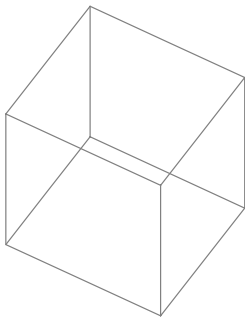
Step 3. Create the sphere by first sketching a line and creating an arc with the *Center Start End* icon.
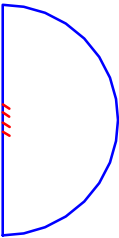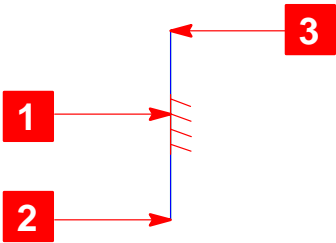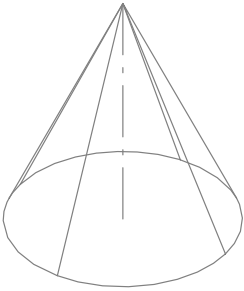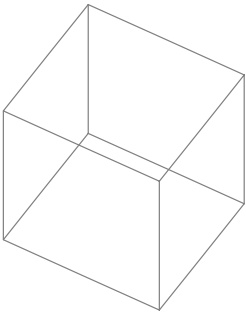
Revolve the shape to create the sphere.

1

□▐□ (Done)

2

1

2
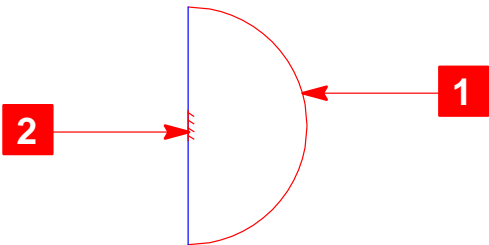
Revolve Section form

▭ *OK*
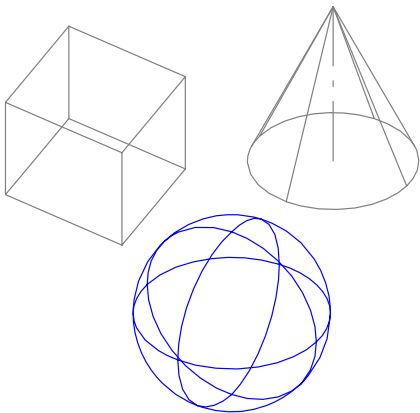
Things to notice

Don't worry if your parts, specifically the sphere, do not look exactly like those shown above. You may use any display you like (line, hidden, or shaded).

Save your model file.

⬜ *File*
      Save

Warning!

If you are prompted by I-DEAS to save your model file, respond:

⬜ *No*

Save only when the tutorial instructions tell you to–not when I-DEAS prompts for a save.

If you make a mistake at any time between saves and can't recover, you can reopen your model file to the last save and start over from that point.

Hint

To reopen your model file to the previous save, press Control-z.
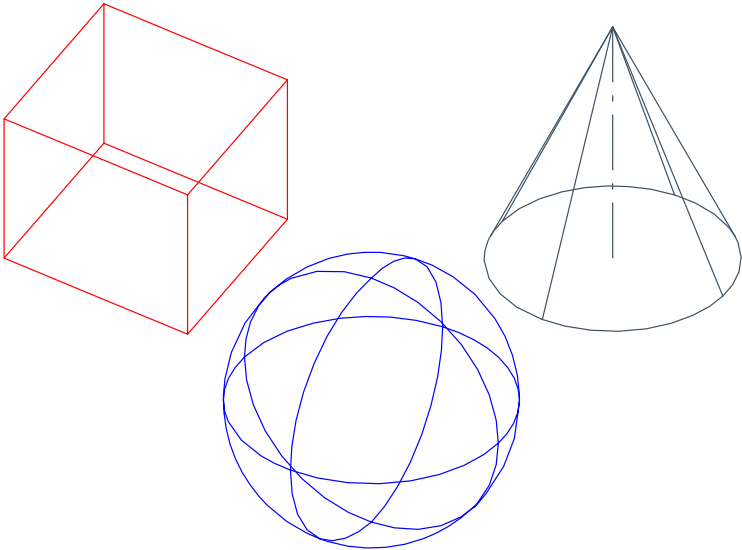
Bins are storage containers similar to drawers in a desk. They're valuable tools that help you organize and manage your parts.

When you open a new model file, there is only one bin, the default, or "main" bin. If you want more bins, you can add them to your work area.

In this section you will learn how to create and name bins.
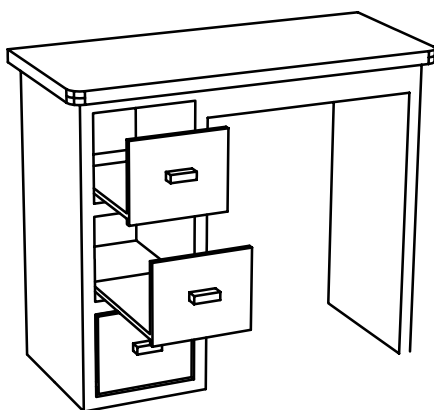
Create two new bins in your model file using the *Manage Bins* icon.
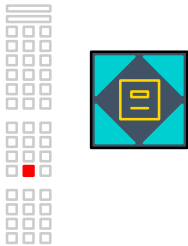
Manage form

Create Bin form

Enter Name: Extruded Parts

Apply

Enter Name: Revolved Parts

OK

Manage form

Dismiss

Naming parts and designating bins are very important data management tools.

In order to be tracked by the data management system, parts need:

- a name
- a designated storage bin

In this section, you will learn how to remove your parts from the workbench and put them away into bins.
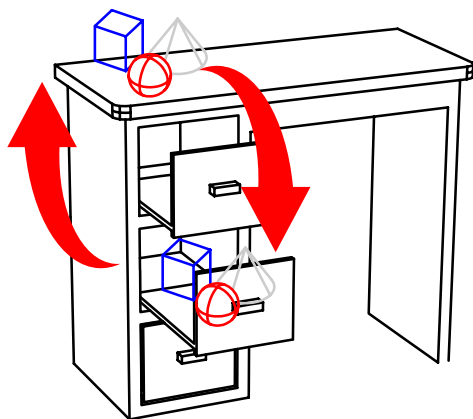
Name and number the parts on your workbench and pick a bin to store them in.
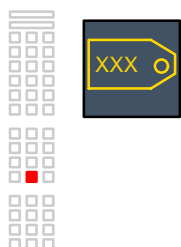
1 pick anywhere on the block part
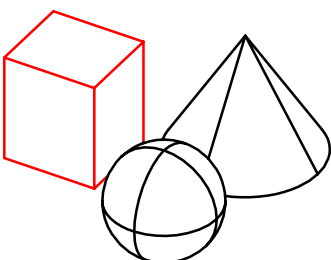
Name form

Pick the ? next to the *Bin* field to get a list of all existing bins.

Bin

☐ **?**

Bins form

Extruded Parts (select)

☐ *OK*

Name form

☐ *Name:* Block

☐ *Part #*: E1

☐ *OK*

XXX o

1 pick anywhere on the cone part
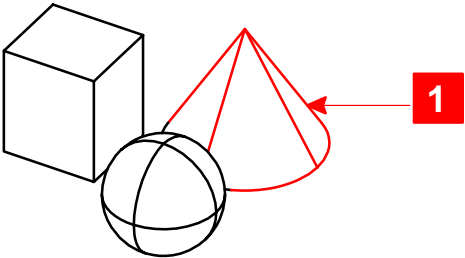
Name form

Bin

[   ] **?**

Bins form

Revolved Parts

[▬] *OK*

Name form

[   ] *Name:* Cone

[   ] *Part #*: R1

[▬] *OK*

1 pick anywhere on the sphere part
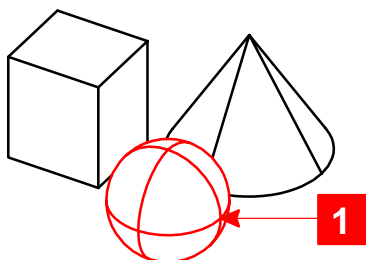
Things to notice

Always pay attention to the *Bin* field because I-DEAS will default to the last selected bin.

Name form

Bin

? (if necessary)

Bins form

Revolved Parts

OK

Name form

Name: Sphere

Part #: R2

OK

 (Done)

Remove all your parts from the workbench by putting them away into their assigned storage bins.

To do this, use the *Put Away* icon.

1

3

2
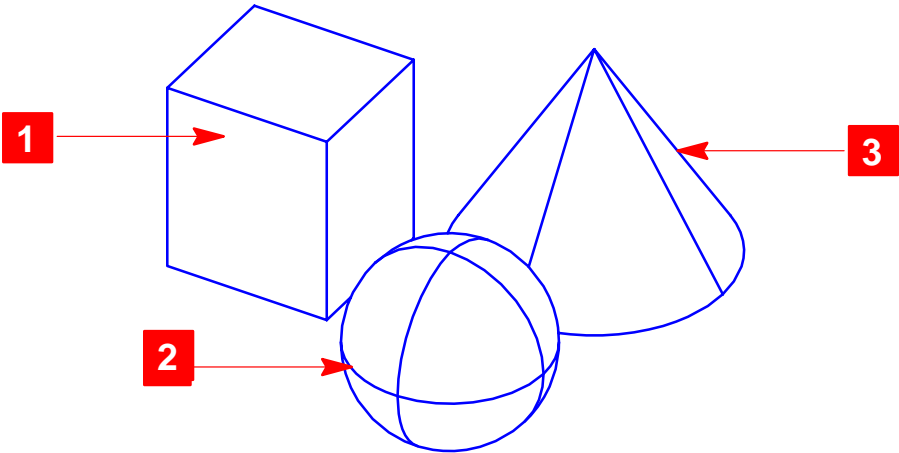
(Done)

If you attempt to put away a part that is not named, I-DEAS will prompt you to name the part first.

Use the *Get*... icon to get the sphere out of the bin and back onto your workbench.

Get form

Sphere

OK
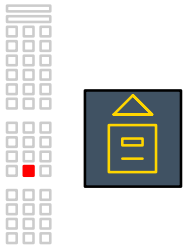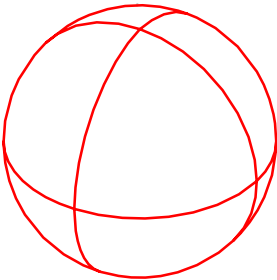
The *Get*... icon is the same as using the *Get* button on the Manage form.

In this section you will learn two ways to make a copy of
a part in the bins.
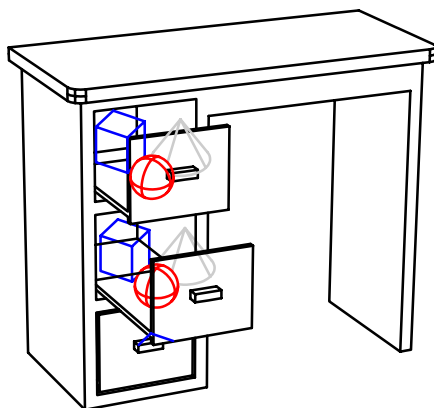
A third way to make a copy of a part on the
workbench is covered in the tutorial "Adding
Features with Associativity."

One method is to make a copy of a part inside the same bin using the *Manage Bins* icon.

Manage form

 Block

Copy form

 Name: Block2

 Part# E2

 OK

Things to notice
Look at the Manage form before you dismiss it. Notice that the copied part is listed on the form.

Manage form

 Dismiss
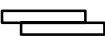
Recovery Point
 File
        Save

Another method is to make a copy of your part from one bin to another.

Manage form

 Block2

Copy form

Bin

[　　　] **?**

Bins form

 Main

 OK

Copy form

[　　　] *Name:* BlockC

[　　　] *Part #*: 1C

 OK

Things to notice
Look at the Manage form before you dismiss it. Notice that the new copy of your part is listed on the form.

Manage form

 Dismiss

A part's data management attributes are different from other attributes. These attributes are "metadata," or data about data.

These attributes include the:

- part name
- part number
- creation date
- name of the creator

One way to access information about your parts is to use the *Manage Bins* icon. This icon enables you to browse and/or modify a part's metadata.

You can use the *Manage Bins* icon to enter text into the *Change History* field.

Manage form

 Cone

 Details
History...

Item Details form

 Change History: I modified this part
because....

 OK

 Entering information about part changes in the *Change History* field can be useful to other members of your work group.

 Do not dismiss the Manage form.

You can also rename or renumber a part.

Manage form

 Block2

Rename/Renumber form

Name: Block2a

Part #: E2a

OK

Manage form

Things to notice
Notice that the part "Block2" is now listed as Block2a.

Dismiss

Recovery Point
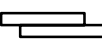
File
   Save

In this section you will learn how to delete a bin and its contents.
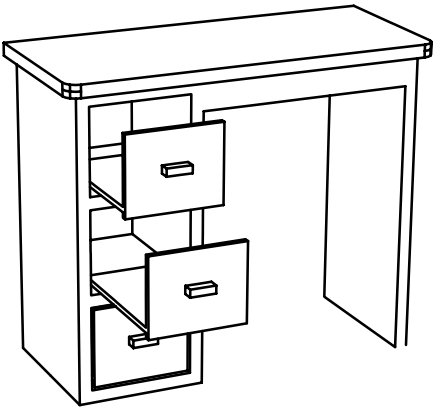
You must delete all of the parts in the bin before you can delete the bin.

Delete the parts stored in the Extruded Parts bin.

Manage form

 Block

 Block2a

Delete the bin.

 Extruded Parts

 Dismiss

Things to notice
When you deleted items in the bin, I-DEAS did not prompt you to confirm your action.

Tutorial wrap-up

You have completed the Managing Parts in Model Files tutorial.
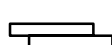
Put all your parts away and save your model file. These parts are used in later tutorials.

See also...

For additional information on many of the concepts covered in this tutorial, see the following in the I-DEAS Help facility:

⬜ *Help, Manuals, Table of Contents*

Data Management User's Guide
   Working with Model Files and Bins

⬜ *Help, On Context*

What's next?

After exiting, choose the Fundamental Skills tutorial that is next in the learning path you are following.

To exit this tutorial, select:

⬜ *File*
      Exit

Warning!

Do not use the menu in the *I-DEAS Icons* window to exit. Use the menu in the Acrobat Reader window.

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