

**Activity 2.1.2 Frame Generator Introduction**

Introduction

Frame construction is used throughout the aerospace industry in the creation of welded steel-tube fuselages, piston-engine motor mounts, ribs, and landing gear. In this activity, you will gain understanding of the frame generator function included in the Autodesk® Inventor® software.

Equipment

* Computer with Autodesk Inventor software
* Inventor Data Set Tutorial File from myPLTW LMS

Procedure

1. Start the Autodesk Inventor software.
2. In a convenient file location on your computer, create a new single-user project named **Activity\_2\_1\_2\_FrameGenerator** and set this as the default project.
3. Download and unzip the file named **2.1.2.A FrameGeneratorFile.zip** from the myPLTW LMS course.
4. Move the **frame\_generator.ipt** file unzipped in the previous step into the new project folder.
5. In the top-right corner, select the **Help** icon.



The Autodesk Inventor 2016 Help website opens.

1. In the Contents panel click the plus sign icon beside Tutorials, and then click **Tutorial Archive**. In the main view, click **Autodesk Inventor Tutorials** as shown below.



1. A new web page opens for Autodesk Inventor 2014 Help.
2. In the Contents pane, scroll down to Frame Generator and click the plus sign icon beside it. Click **Skeletal Model**.



Note: For more information about the Frame Generator tool, click the plus sign icon beside **Inventor Help Topics**, then click **Assemblies** and **Frame Generator**.



1. When you complete each step of the Frame Generator tutorial click **Next** to continue to the next step until you get to **Modify the Skeleton**. If necessary, you can use the folder structure in the Contents pane to go to a specific part of the tutorial.



1. Show to your teacher that you have completed the tutorial.

**Conclusion**

1. Describe the benefits of using the Frame Generator when creating frames.
2. Describe aircraft components that could be created using the Frame Generator.