✓ **Congratulations! You passed!**

| **Grade received** 100% | **Latest Submission Grade** 100% | **To pass** 70% or higher | [Go to next item] |

1. Matplotlib was created by: 1 / 1 point

   ○ Daniel Johnson, a German physicist

   ○ James Gosling, a Canadian computer scientist

   ○ Cleve Moler, an American mathematician and computer programmer

   ⦿ John Hunter, an American neurobiologist

   ✓ **Correct**
   Correct! The creator of Matplotlib was John Hunter, an American neurobiologist.

2. True or False. Using the inline backend, you can modify a figure after it is rendered.   1 / 1 point

   ⦿ False

   ○ True

   ✓ **Correct**
   Correct! One limitation of this backend is that you cannot modify a figure once it's rendered. So, after rendering the figure, we cannot add, for example, a figure title or labels to its axes.

3. Which two of the following are not examples of Matplotlib magic functions?   1 / 1 point

   ☑ $matplotlib outline

   ✓ **Correct**
   Correct! The command starts with "%matplotlib," and notebook is one of the Matplotlib backends. A sign of a magic function is that it starts with "%matplotlib."

   ☐ %matplotlib inline

   ☐ %matplotlib notebook

   ☑ #matplotlib inline

   ✓ **Correct**
   Correct! The command starts with "%matplotlib," and notebook is one of the Matplotlib backends. A sign of a magic function is that it starts with "%matplotlib."

4. True or False. A line plot displays information as a series of data points connected by straight lines.   1 / 1 point

   ⦿ True

   ○ False

   ✓ **Correct**
   Correct! Line plots display information as a series of data points connected by straight lines.

5. True or False. Matplotlibs three main layers are: Backend, Artist, and Scripting.   1 / 1 point

   ○ False

   ⦿ True

   ✓ **Correct**
   Correct! Matplotlib's three main layers are Backend Layer, Artist Layer, and Scripting Layer.

6. What is Jupyter Notebook used for?   1 / 1 point

   ○ It is a tool used for creating conventional visualization tools using the plot function

○ A Python library with a number of different backends available

◉ An open-source web application that allows you to create and share documents that contain live code, visualizations, and some explanatory text as well

○ A well-established data visualization library that can be integrated into different environments

⊘ **Correct**
Correct! Jupyter Notebook is an open-source web application that allows you to create and share documents that contain live code, visualizations, and some explanatory text as well.

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7. Matplotlib was initially developed as what kind of tool?   **1 / 1 point**

○ Chart creation

○ Graphing

◉ Visualization

○ Data analyzer

⊘ **Correct**
Correct! Matplotlib was initially developed as an EEG and ECoG visualization tool.

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8. Which of the following are the backend layers three built-in interface classes? Select three.   **1 / 1 point**

☑ Renderer

⊘ **Correct**
Correct! Renderer is apart of the backend layers three built-in interface classes.

☑ FigureCanvas

⊘ **Correct**
Correct! FigureCanvas is apart of the backend layers three built-in interface classes.

☐ Canvas

☑ Event

⊘ **Correct**
Correct! Event is apart of the backend layers three built-in interface classes.

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9. True or False. Line plots capture trends and changes over time, allowing us to see patterns and fluctuations.   **1 / 1 point**

○ False

◉ True

⊘ **Correct**
Correct! Line plots can be misleading if the scales on the axes are not carefully chosen to reflect the data accurately. Line plots capture trends and changes over time, allowing us to see patterns and fluctuations.

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10. Which of the following plots is not ideal for comparing different categories or groups? Select all that apply.   **1 / 1 point**

☑ Scatter plots

⊘ **Correct**
Correct! scatter plots are not ideal for comparing different categories or groups.

☐ Bar plots

☑ Line plots

⊘ **Correct**
Correct! line plots are not ideal for comparing different categories or groups.

☑ Pie plots

⊘ **Correct**
Correct! pie plots are not ideal for comparing different categories or groups.