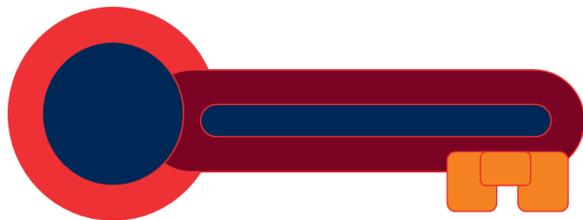# Application: PowerPoint - How to create custom shapes

PowerPoint provides many default shapes, but sometimes what you really need is a custom shape tailored-made for your diagram/graphic. PowerPoint has a great feature called **Merge Shapes** to allow you to create shapes by combining multiple shapes in one of five ways: **Union**, **Combine**, **Fragment**, **Intersect**, or **Subtract**.

1. Insert a **New Slide** > **Blank** from the **Home** tab.

2. From the **Insert** tab, choose **Shapes** to select from a wide collection of predefined shapes.
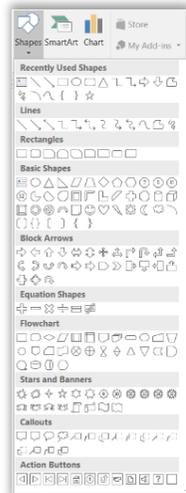
Tip: Did you know that if you right click on any shape and choose **Lock Drawing Mode**, the shape remains selected allowing you to continue adding this shape to the slide? Select **Esc** key to cancel the selection.

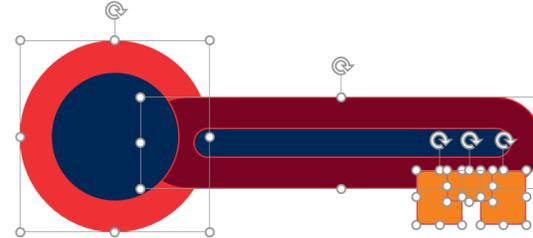3. Combine the different shapes required to build your required custom shape.

Tip: Apply different colours to see how the different shapes are placed together which will help you isolate shapes when combining or subtracting.

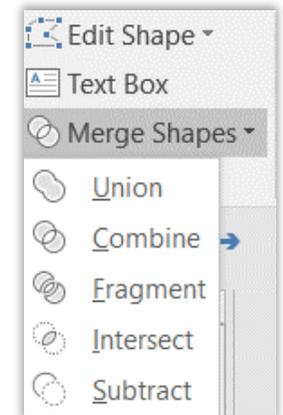4. Select all shapes on the slide by selecting **Ctrl+A (Select All)** on the keyboard.

5. With the **Ctrl** key still selected, choose the shape that should not be combined in your custom shape, in this example I have unselected the navy blue shapes.

6. When you have shapes selected on a slide, the **Drawing Tools** contextual tab will become activated. Select **Format.**

7. From the **Insert Shapes** group, click on the **Merge Shapes** drop-down menu to access the following features.
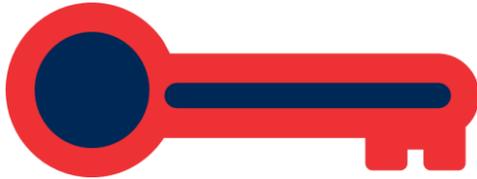
- **Union:** turns selected shapes into a single object.

- **Combine:** turns the selected shapes into a single object and removes the overlaying portion.

- **Fragment:** breaks up larger objects into individual shapes based on how they overlap.

- **Intersect:** trims portions of larger objects to leaves only the portion that overlays each object.

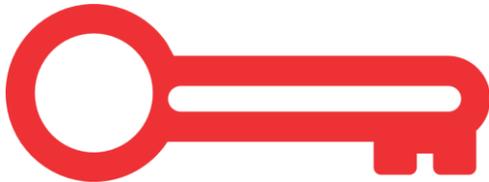- **Subtract:** removes the last selected object that does not overlap.

Tip: Hover over each of the options to see an example on screen of how each feature will affect the shape.

8. Select **Union** to join the selected shapes as a single object.

9. With the shape still selected, choose **Subtract** to cut out the navy blue shapes from the red object.

Tip: Subtract cuts away the shapes, allowing this to be placed over objects and background without any fill.

10. Your custom shape may be recoloured from the **Shape Fill** drop-down on the **Format** tab and you can choose to include a **Shape Outline** and **Shape Effects** as required.