

A decorative vertical bar on the left side of the page, consisting of a long dark blue segment and a shorter light blue segment at the bottom.

# PRESIDIUM<sup>®</sup>

PGCG Software (Mac)

**User Guide**

## Table of Contents

1.	Using PGCG Software.....	2
1.1.	Decimal Separator.....	2
1.2.	Connecting the PGCG Unit.....	2
1.3.	Weight Estimator .....	4
1.3.1.	Using the Weight Estimator Function .....	5
1.3.2.	Measuring with the PGCG unit .....	9
1.4.	Gemstone Estimator .....	12
1.4.1.	Using the Gemstone Estimator Function .....	12
1.5.	Specific Gravity (S.G.) Dictionary .....	14
1.5.1.	Using the S.G. Dictionary .....	14
1.6.	Report .....	15
1.6.1.	Using the Report Function .....	15

# 1. Using PGCG Software

The PGCG Software has the same functionality as the PGCG unit with extended coverage of more gemstones. The functions are as follows:

- Weight Estimator
- Gemstone Estimator
- Specific Gravity (S.G.) Dictionary
- Report

A top navigation bar is provided in the software for you to navigate to the functions mentioned above.

## 1.1. Decimal Separator

The software will adapt to the decimal separator used in different countries which can be either a period (.) or a comma (,). Please use the supported decimal separator according to the system language of your computer.

## 1.2. Connecting the PGCG Unit

**Step 1:** Connect the PGCG Unit to your PC via the USB cable that comes in the package. Make sure that the device is turned on and displays the message “USB Connected”.



Figure 1

**Step 2:** Click “Connect” to establish the connection between the PGCG unit and PC. If the display shows other readings other than 0.00 after connecting, press the “C” button on the PGCG unit to zero it.

Presidium Gem Computer Gauge v2.0.1-M-12012022

Presidium Weight Estimator Gemstone Estimator Dictionary Report Tutorial Contact Us

Device Status ● Disconnected

**Connect** Disconnect Record

Gemstone Specification Clear All

Gemstone: Actinolite

Shape: Cushion

Length:  mm.

Width:  mm.

Depth:  mm.

Price/Carat:  0 \$

Weight Calculation

Weight:  ct

Price:  \$

**Calculate**

Measurements **0.00** Length  Enter Reset

SHAPE & DIMENSION PREVIEW

Length

Width

Depth

Figure 2

### 1.3. Weight Estimator

The weight estimator is used to estimate the weight and value of the gemstone based on the gemstone specifications such as shape and dimensions.

The weight estimator function is divided into five sections.

Section	Name	Description
A	USB Interface	To establish a connection between the PGCG unit and PC
B	Gemstone Specification	Select the gemstone and shape to enable the required fields to be filled in
C	Weight Calculation	Display the estimated weight and price of the gemstone based on the input from the Gemstone Specification Section
D	Measurement	Detect and display the reading from the PGCG unit in real-time
E	Shape & Dimension Preview	Display the values entered in the Gemstone Specification section

The screenshot shows the 'Presidium Gem Computer Gauge v2.0.1-M-12012022' application window. The top navigation bar includes links for 'Presidium', 'Weight Estimator' (active), 'Gemstone Estimator', 'Dictionary', 'Report', 'Tutorial', and 'Contact Us'. The main interface is divided into five sections:

- Section A (USB Interface):** Located at the top left, it shows 'Device Status' as 'Connected' with a green dot. Below this are three buttons: 'Connect' (blue), 'Disconnect' (red), and 'Record' (blue).
- Section B (Gemstone Specification):** Located below Section A, it features a 'Clear All' button and dropdown menus for 'Gemstone' (set to 'Actinolite') and 'Shape' (set to 'Cushion'). Below these are input fields for 'Length', 'Width', and 'Depth' (all in mm), and a 'Price/Carat' field set to '0'.
- Section C (Weight Calculation):** Located below Section B, it has input fields for 'Weight' (in ct) and 'Price' (in \$), with a 'Calculate' button below them.
- Section D (Measurements):** Located at the top right, it displays a large '0.00' reading under the 'Measurements' label, with 'Enter' and 'Reset' buttons.
- Section E (Shape & Dimension Preview):** A large central area showing two diamond diagrams. The top diagram is a 'Cushion' cut diamond with dimension lines for 'Length' and 'Width'. The bottom diagram is a 'Round' cut diamond with dimension lines for 'Depth'.

Figure 3

### 1.3.1. Using the Weight Estimator Function

**Step 1:** Choose a gemstone from the drop-down menu displayed in alphabetical order.

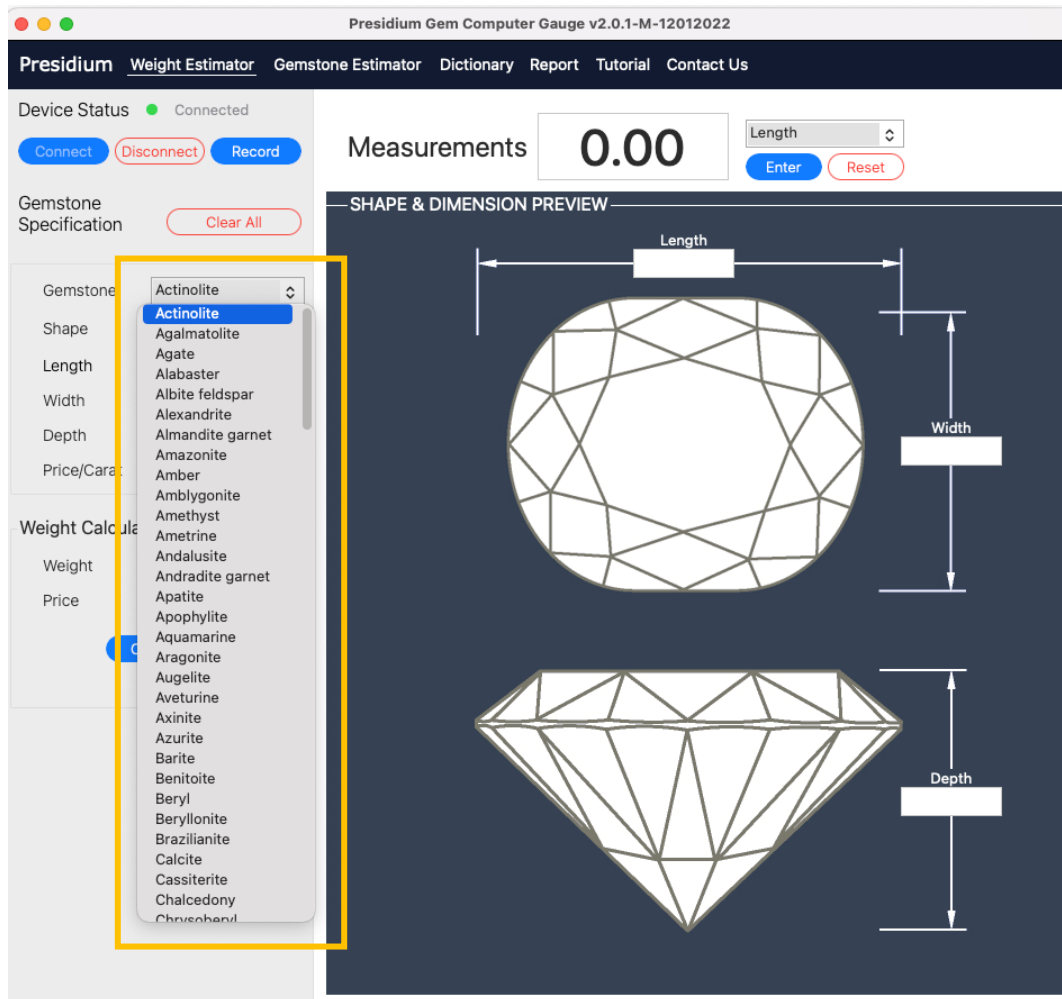


Figure 4

**Step 2:** Next, choose the shape of the gemstone from the drop-down menu.

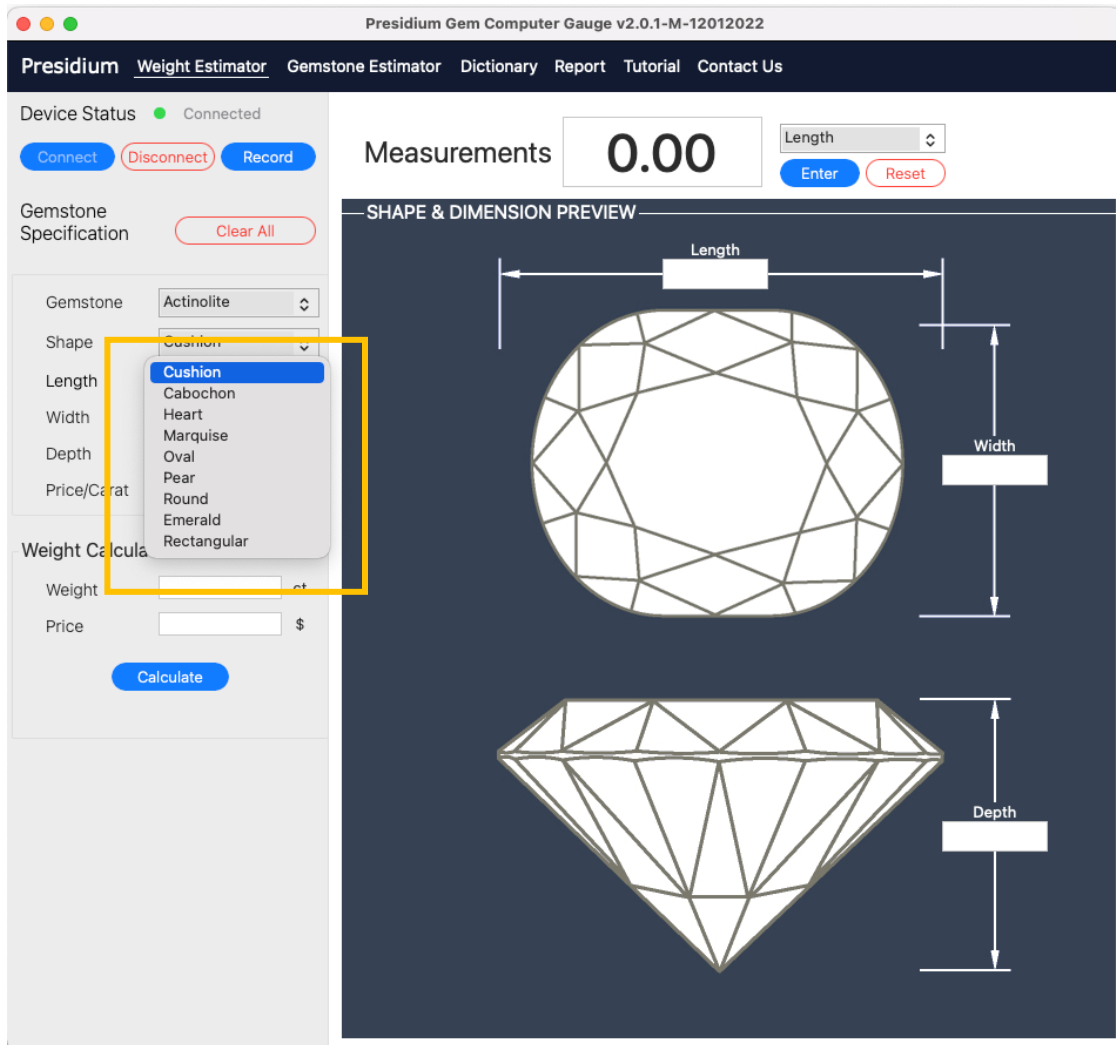


Figure 5

**Step 3:** As you select a shape, the required input fields for the dimensions will be enabled and the shape will appear in the Shape & Dimension Preview section accordingly. You may refer to the preview to see how the dimensions are measured for each shape.

Presidium Gem Computer Gauge v2.0.1-M-12012022

Presidium [Weight Estimator](#) [Gemstone Estimator](#) [Dictionary](#) [Report](#) [Tutorial](#) [Contact Us](#)

Device Status ● Connected

[Connect](#) [Disconnect](#) [Record](#)

Gemstone Specification [Clear All](#)

Gemstone Actinolite

Shape Cushion

Length  mm.

Width  mm.

Depth  mm.

Price/Carat  \$

Weight Calculation

Weight  ct

Price  \$

[Calculate](#)

Measurements **0.00** Length [Enter](#) [Reset](#)

SHAPE & DIMENSION PREVIEW

Length

Width

Depth

Figure 6



**Step 4:** Referring to Figure 7, fill in the required fields by entering the numbers manually or utilizing the measurement section to get the reading from the PGCG unit. Refer to [section 2.2.2](#) on how to use the measurement section.

**Step 5:** Once you are done, click “Calculate” to view the estimated weight in the Weight Calculation section.

Presidium Gem Computer Gauge v2.0.1-M-12012022

Presidium Weight Estimator Gemstone Estimator Dictionary Report Tutorial Contact Us

Device Status Connected

Connect Disconnect Record

Gemstone Specification Clear All

Gemstone Actinolite

Shape Round

Length mm.

Diameter 4.84 mm.

Depth 3.9 mm.

Price/Carat 0 \$

Weight Calculation

Weight 0.53 ct

Price 0.0 \$

Calculate

Measurements 0.00 Depth Enter Reset

SHAPE & DIMENSION PREVIEW

Diameter 4.84

Depth 3.9

Figure 7

**Step 6:** If you wish to estimate the price of the gemstone, enter a number in the price/carat field and click “Calculate” again to see its value in the Weight Calculation section.

Figure 8

After completing your estimation, you may click “Clear All” to restart the process.

### 1.3.2. Measuring with the PGCG unit

**Step 1:** Ensure that the reading is not showing other values other than 0.00. If not, press the “C” on the PGCG unit or the “reset” button in the software for zeroing.



Figure 9

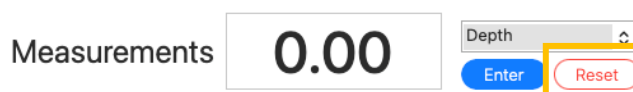


Figure 10

**Step 2:** Select the dimension to measure from the drop-down list located on the right side of the reading. The dimension in this menu corresponds to the shape that you are measuring for.

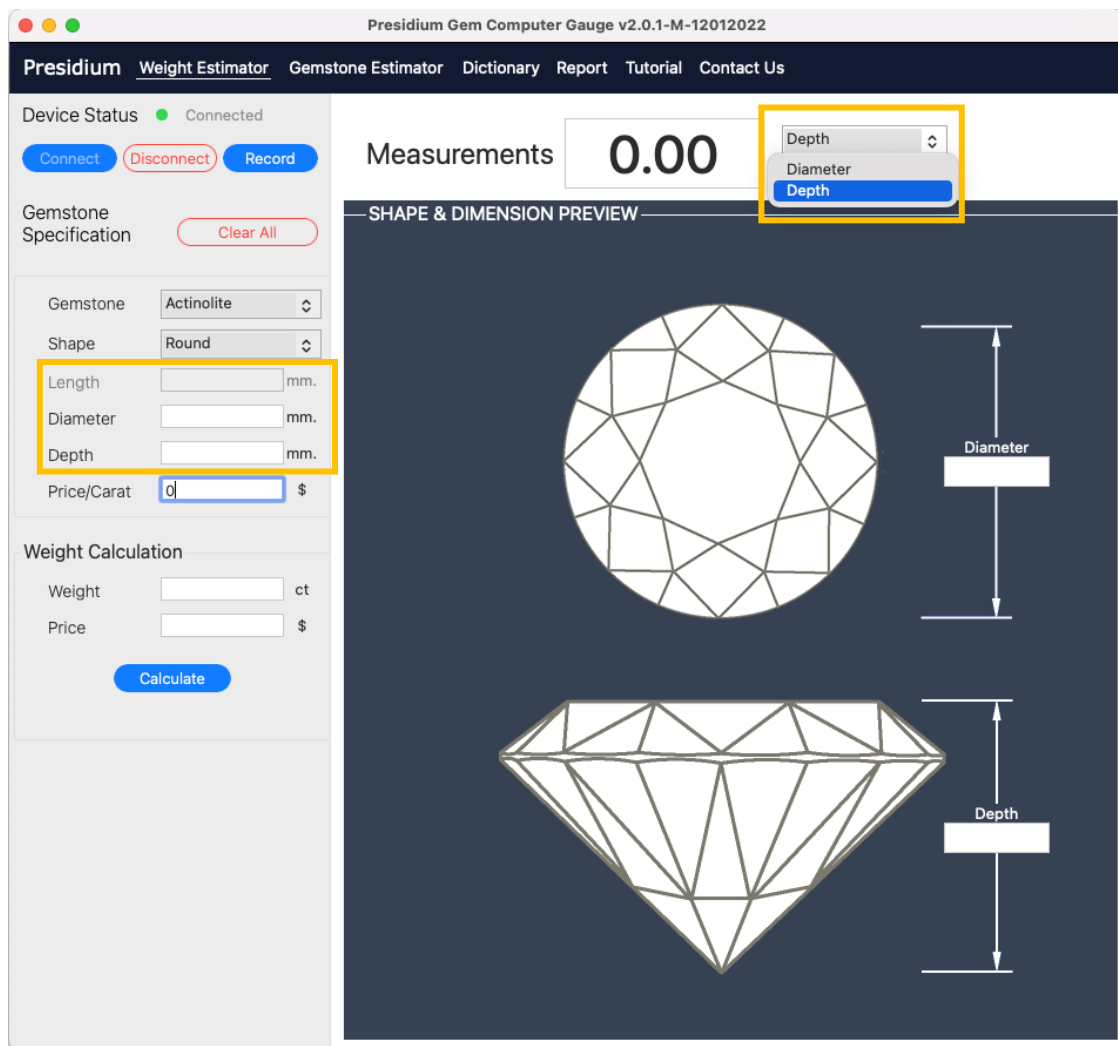


Figure 11

**Step 3:** Place the gemstone on the PGCG unit according to the dimension you want to measure

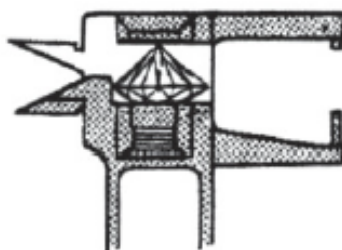


Figure 12

**Step 4:** Click “Enter” to confirm the measurement. The value will be displayed in the field and the Shape & Dimension Preview as well.

Presidium Gem Computer Gauge v2.0.1-M-12012022

Presidium Weight Estimator Gemstone Estimator Dictionary Report Tutorial Contact Us

Device Status Connected

Connect Disconnect Record

Gemstone Specification Clear All

Gemstone Actinolite

Shape Round

Length  mm.

Diameter 4.39 mm.

Depth 2.3 mm.

Price/Carat 0 \$

Weight Calculation

Weight 0.26 ct

Price 0.0 \$

Calculate

Measurements 0.00 Depth Enter Reset

SHAPE & DIMENSION PREVIEW

Diameter 4.39

Depth 2.3

Figure 13

**Step 5:** Repeat steps 2 to 4 to fill in the rest of the required dimensions

## 1.4. Gemstone Estimator

As gemstones have similar sizes and shapes, the gemstone estimator is used to identify the possible stones based on the calculated Specific Gravity (S.G.) property from the dimensions provided.

### 1.4.1. Using the Gemstone Estimator Function

**Step 1:** Choose a shape from the drop-down menu.

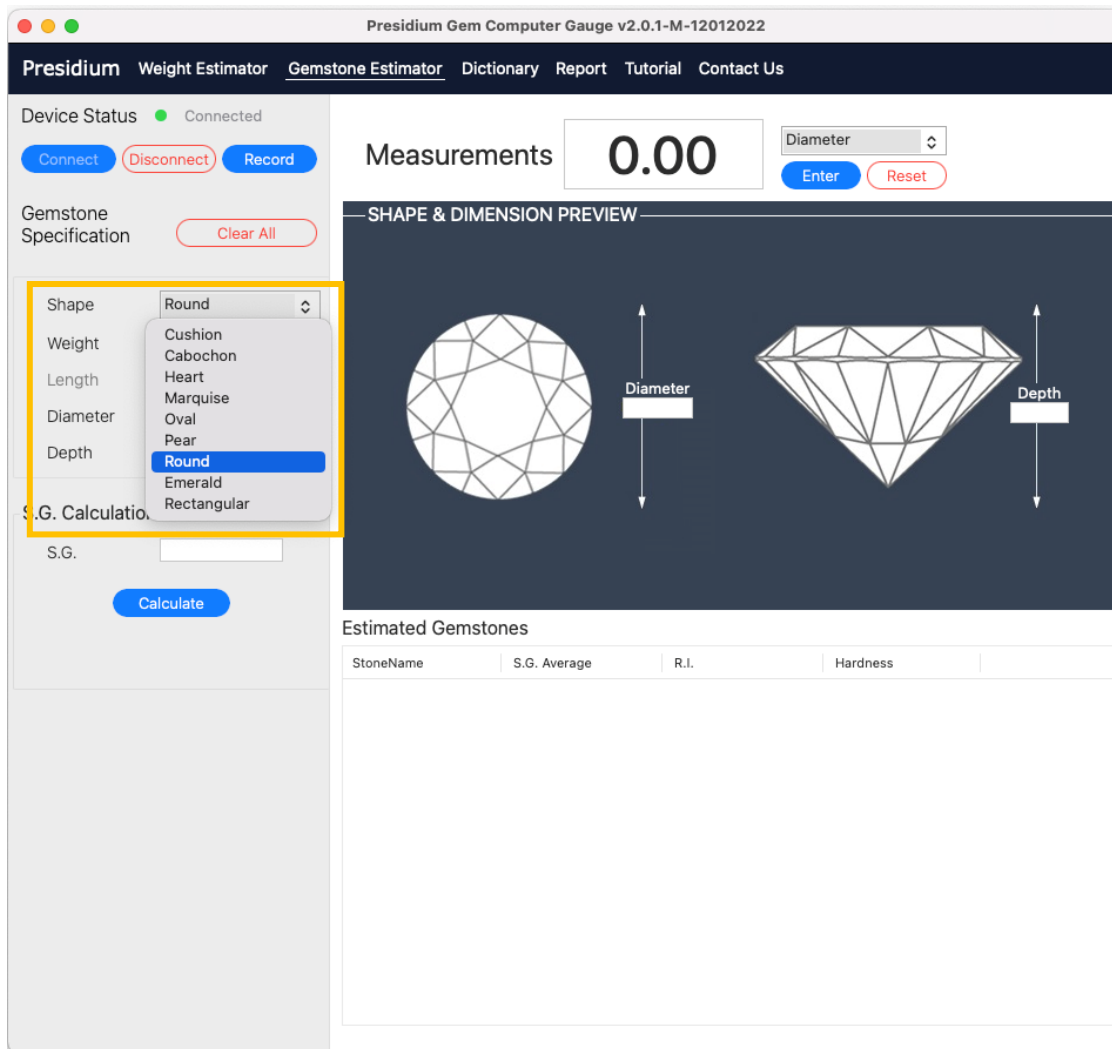
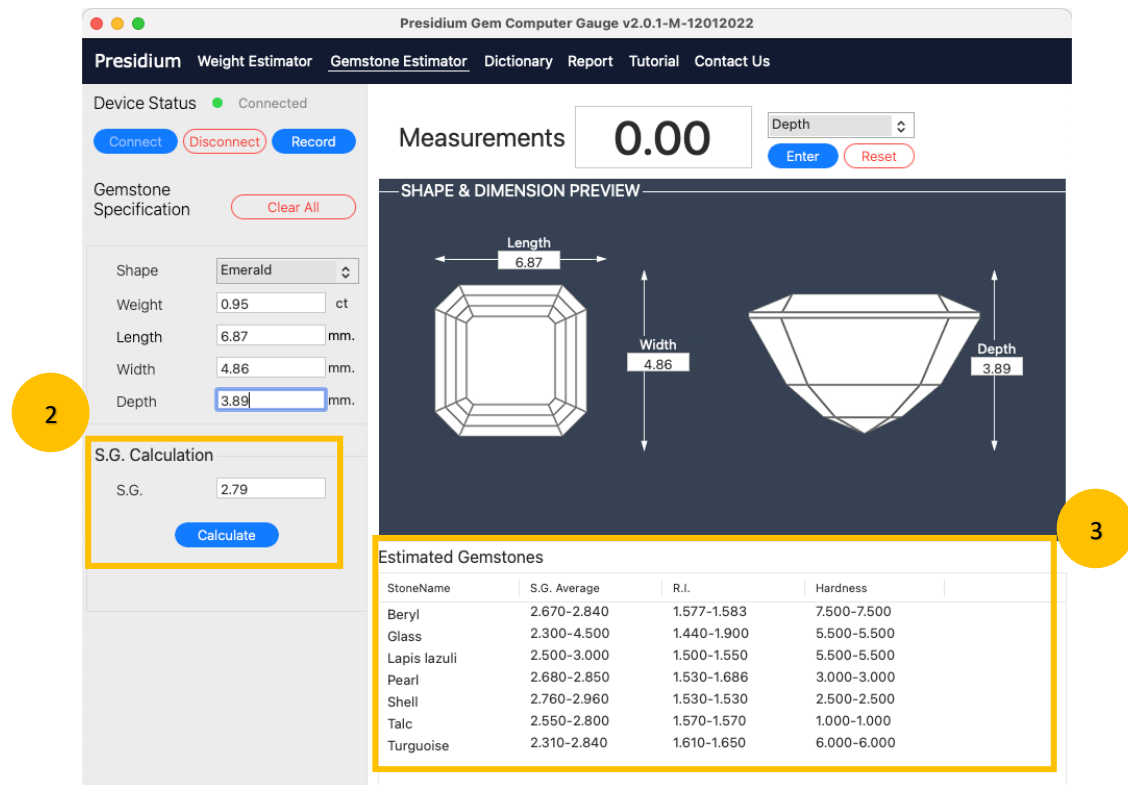


Figure 14

**Step 2:** Fill in the required dimensions and weight value. This step is the same as the weight estimator function section. If you still need help with measuring using the PGCG unit, refer to [section 2.2.2](#)

**Step 3:** Click “Calculate” to see the S.G. value at the S.G. Calculation section and a list of possible stones will appear in the Estimated Gemstones section simultaneously.



Presidium Gem Computer Gauge v2.0.1-M-12012022

Presidium Weight Estimator **Gemstone Estimator** Dictionary Report Tutorial Contact Us

Device Status ● Connected

[Connect](#) [Disconnect](#) [Record](#)

Gemstone Specification [Clear All](#)

Shape: Emerald

Weight: 0.95 ct

Length: 6.87 mm

Width: 4.86 mm

Depth: 3.89 mm

S.G. Calculation

S.G.: 2.79

[Calculate](#)

Measurements: 0.00

Depth: [Enter](#) [Reset](#)

SHAPE & DIMENSION PREVIEW

Length: 6.87

Width: 4.86

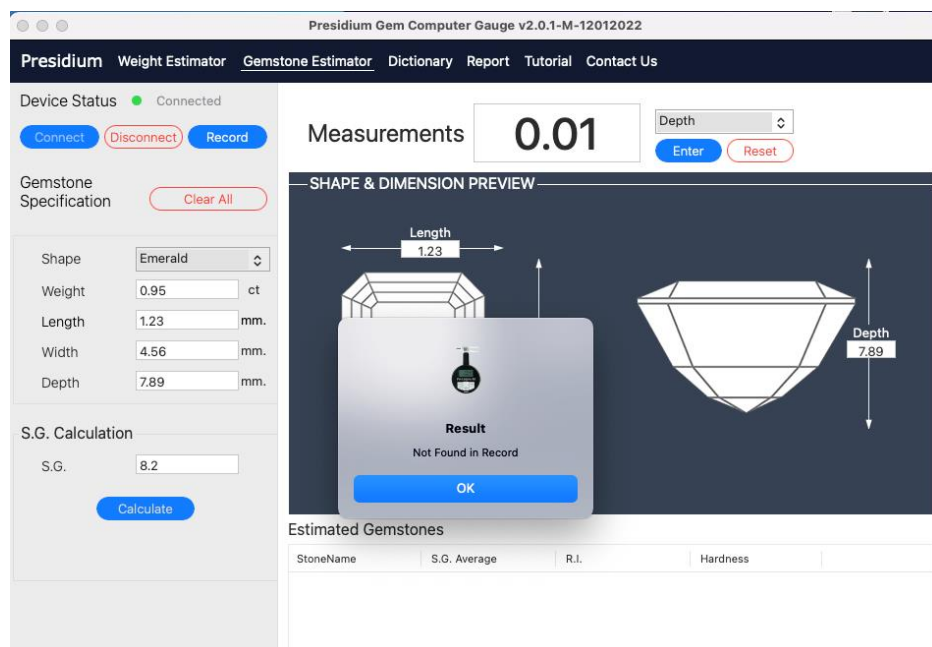
Depth: 3.89

Estimated Gemstones

StoneName	S.G. Average	R.I.	Hardness
Beryl	2.670-2.840	1.577-1.583	7.500-7.500
Glass	2.300-4.500	1.440-1.900	5.500-5.500
Lapis lazuli	2.500-3.000	1.500-1.550	5.500-5.500
Pearl	2.680-2.850	1.530-1.686	3.000-3.000
Shell	2.760-2.960	1.530-1.530	2.500-2.500
Talc	2.550-2.800	1.570-1.570	1.000-1.000
Turquoise	2.310-2.840	1.610-1.650	6.000-6.000

Figure 15

If the calculated S.G. value does not match any of the gemstones in the database, a dialog box will appear displaying “Not Found in Record”.



Presidium Gem Computer Gauge v2.0.1-M-12012022

Presidium Weight Estimator **Gemstone Estimator** Dictionary Report Tutorial Contact Us

Device Status ● Connected

[Connect](#) [Disconnect](#) [Record](#)

Gemstone Specification [Clear All](#)

Shape: Emerald

Weight: 0.95 ct

Length: 1.23 mm

Width: 4.56 mm

Depth: 7.89 mm

S.G. Calculation

S.G.: 8.2

[Calculate](#)

Measurements: 0.01

Depth: [Enter](#) [Reset](#)

SHAPE & DIMENSION PREVIEW

Length: 1.23

Width: 4.56

Depth: 7.89

Result

Not Found in Record

[OK](#)

Estimated Gemstones

StoneName	S.G. Average	R.I.	Hardness
-----------	--------------	------	----------

Figure 16

## 1.5. Specific Gravity (S.G.) Dictionary

The S.G. Dictionary displays the gemstones database and can be used to look for specific gemstones by filtering.

Filtering of the gemstone database can be done in four different methods:

- a) Gemstone name
- b) The S.G. value
- c) The Refractive Index (R.I.) value
- d) The Hardness values

### 1.5.1. Using the S.G. Dictionary

**Step 1:** Choose the filtering method (Name, S.G., R.I., Hardness) from the drop-down menu.

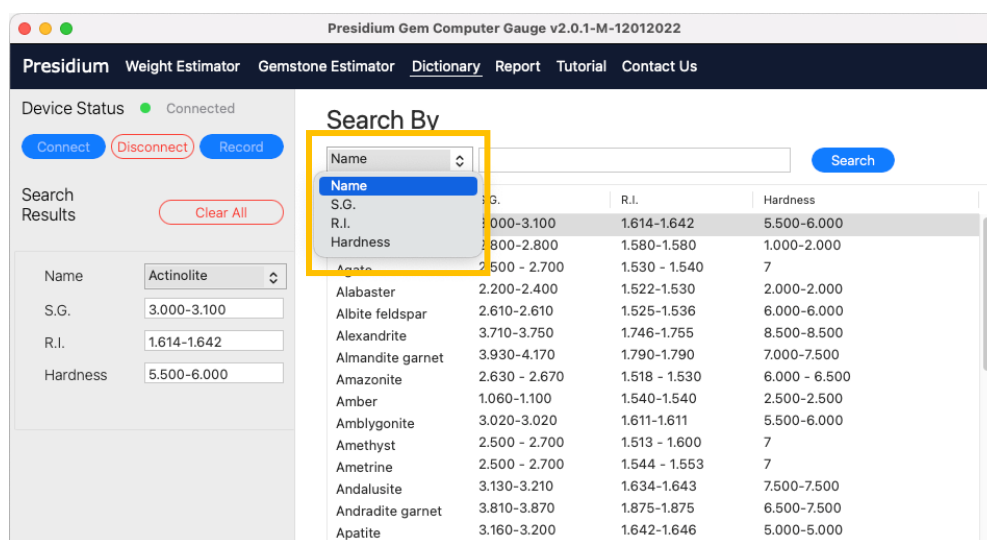


Figure 17

**Step 2:** Enter the value according to the chosen filter and click “Search” to see the filtered results.

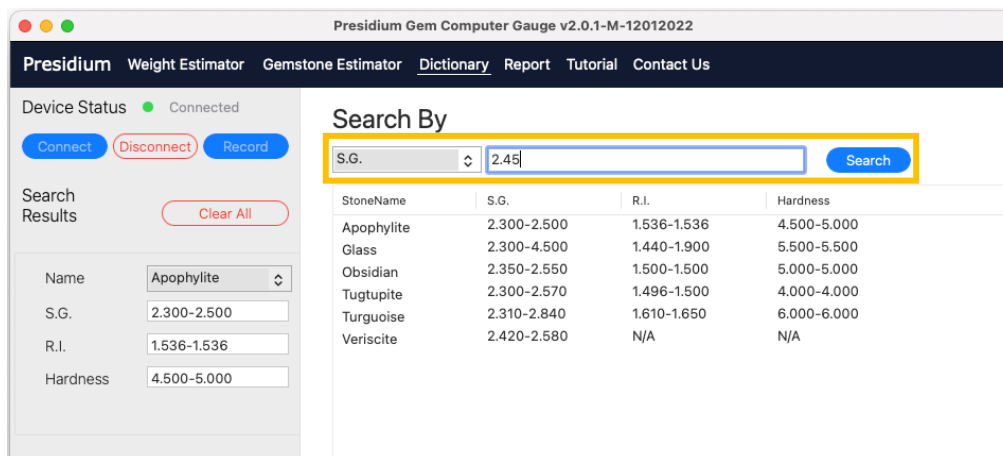


Figure 18

## 1.6. Report

In the report function, it has the following features:

- a) Load and view report
- b) Create a new report
- c) Manage data in the report
- d) Save the report as an Excel file
- e) Print out a hardcopy of the report
- f) View the report in Excel

### 1.6.1. Using the Report Function

#### 1.6.1.1. Load and View Report

**Step1:** Click “Open” and browse for the report that has been saved previously



*Figure 19*

**Step 2:** The report will be loaded and can be viewed in the table

#### 1.6.1.2. Create a new report

**Step 1:** Click “New” to clear your previous data and start a new report



*Figure 20*



### 1.6.1.3. Manage data in the Report

#### a) Add data into the report

**Step 1:** Choose the gemstone and shape from their respective drop-down menu and fill in the required dimensions. This step is the same as the weight estimator function.

Presidium Gem Computer Gauge v2.0.1-M-12012022

Presidium Weight Estimator Gemstone Estimator Dictionary **Report** Tutorial Contact Us

Device Status ● Connected

[Connect](#) [Disconnect](#) [Record](#)

Gemstone Specification [Clear All](#)

Gemstone: Emerald  
Shape: Round  
Length: mm.  
Diameter: 4.58 mm.  
Depth: 4.23 mm.  
Price/Carat: 0 \$

Weight Calculation

Weight: ct  
Price: \$

[Calculate](#) [Add](#) [Remove](#)

Measurements: 0.00

Depth: [Enter](#) [Reset](#)

Reports

[New](#) [Open](#) [Save](#) [Print](#) [Excel](#)

Page Heading

StoneID	StoneName	Shape	Length(mm.)	Width(mm.)	Diameter(mm.)	MaxDia(mm.)
---------	-----------	-------	-------------	------------	---------------	-------------

Figure 21

**Step 3:** Click “Calculate” to get the results in the Weight Calculation section.

Presidium Gem Computer Gauge v2.0.1-M-12012022

Presidium Weight Estimator Gemstone Estimator Dictionary **Report** Tutorial Contact Us

Device Status ● Connected

[Connect](#) [Disconnect](#) [Record](#)

Gemstone Specification [Clear All](#)

Gemstone: Emerald  
Shape: Round  
Length: mm.  
Diameter: 4.58 mm.  
Depth: 4.23 mm.  
Price/Carat: 0 \$

Weight Calculation

Weight: 0.45 ct  
Price: 0.0 \$

[Calculate](#) [Add](#) [Remove](#)

Measurements: 0.00

Depth: [Enter](#) [Reset](#)

Reports

[New](#) [Open](#) [Save](#) [Print](#) [Excel](#)

Page Heading

StoneID	StoneName	Shape	Length(mm.)	Width(mm.)	Diameter(mm.)	MaxDia(mm.)
---------	-----------	-------	-------------	------------	---------------	-------------

Figure 22

**Step 4:** Once done, click “Add” and the data will be displayed in the report table.

Presidium Gem Computer Gauge v2.0.1-M-12012022

Presidium Weight Estimator Gemstone Estimator Dictionary Report Tutorial Contact Us

Device Status ● Connected

[Connect](#) [Disconnect](#) [Record](#)

Gemstone Specification [Clear All](#)

Gemstone: Emerald

Shape: Round

Length: mm.

Diameter: 4.58 mm.

Depth: 4.23 mm.

Price/Carat: 0 \$

Weight Calculation

Weight: 0.45 ct

Price: 0.0 \$

[Calculate](#)

[Add](#) [Remove](#)

Measurements 0.00 Depth:   [Enter](#) [Reset](#)

Reports

[New](#) [Open](#) [Save](#) [Print](#) [Excel](#)

Page Heading  

StoneID	StoneName	Shape	Length(mm.)	Width(mm.)	Diameter(mm.)	MaxDia(mm.)
1	Emerald	Round			4.58	

Figure 23

b) Remove data from the report

**Step 1:** Select the data to be removed from the report table.

**Step 2:** Click “Remove” and the data in the corresponding row will be removed.

Presidium Gem Computer Gauge v2.0.1-M-12012022

Presidium Weight Estimator Gemstone Estimator Dictionary Report Tutorial Contact Us

Device Status ● Connected

[Connect](#) [Disconnect](#) [Record](#)

Gemstone Specification [Clear All](#)

Gemstone: Citrine

Shape: Round

Length: mm.

Diameter: 3.2 mm.

Depth: 2.31 mm.

Price/Carat: 0 \$

Weight Calculation

Weight: 0.12 ct

Price: 0.0 \$

[Calculate](#)

[Add](#) [Remove](#)

Measurements 0.00 Depth:   [Enter](#) [Reset](#)

Reports

[New](#) [Open](#) [Save](#) [Print](#) [Excel](#)

Page Heading  

StoneID	StoneName	Shape	Length(mm.)	Width(mm.)	Diameter(mm.)	MaxDia(mm.)
1	Emerald	Round			4.58	
2	Amethyst	Oval			4.75	
3	Beryl	Oval			4.34	
4	Citrine	Round			3.2	

Figure 24

#### 1.6.1.4. Save the Report

**Step 1:** After modifying the report, click “Save” to save the report onto your PC.



Figure 25

**Step 2:** Enter a file name and browse the preferred location for the report to be saved. Then, the report will be saved locally to your PC as a CSV file.

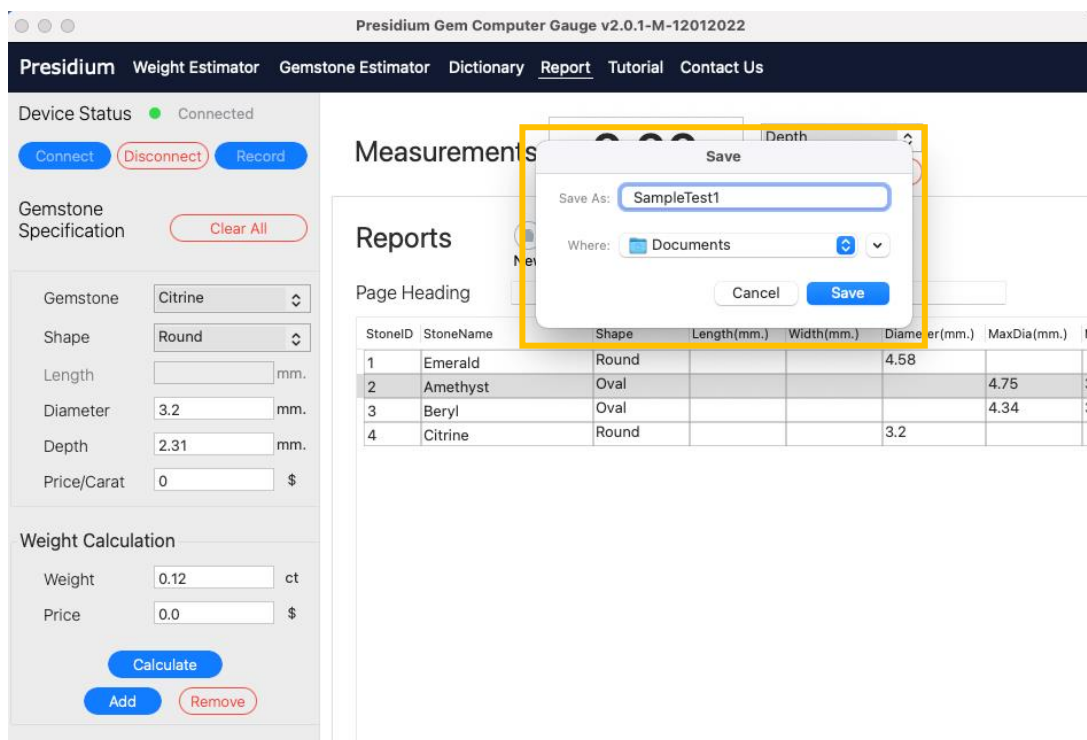


Figure 26

StoneID	StoneName	Shape	Length(mm.)	Width(mm.)	Diameter(mm.)	MaxDia(mm.)	MinDia(mm.)	Depth(mm.)	Weight(ct.)
1	Emerald	Round			4.58			4.23	0.45
2	Amethyst	Oval				4.75	3.23	2.93	0.25
3	Beryl	Oval				4.34	3.24	3.12	0.26
4	Citrine	Round			3.2			2.31	0.12

Figure 27

#### 1.6.1.5. Print the Report

**Step 1:** Enter a page heading and click “Print” to print a hard copy of the report.

Presidium Gem Computer Gauge v2.0.1-M-12012022

Presidium Weight Estimator Gemstone Estimator Dictionary **Report** Tutorial Contact Us

Device Status ● Connected

Connect Disconnect Record

Gemstone Specification Clear All

Gemstone: Citrine

Shape: Round

Length: mm.

Diameter: 3.2 mm.

Depth: 2.31 mm.

Price/Carat: 0 \$

Weight Calculation

Weight: 0.12 ct

Price: 0.0 \$

Calculate Add Remove

Measurements **0.00** Depth Enter Reset

Reports New Open Save **Print** Excel

Page Heading Sample-Test-1

StoneID	StoneName	Shape	Length(mm.)	Width(mm.)	Diameter(mm.)	MaxDia(mm.)
1	Emerald	Round			4.58	
2	Amethyst	Oval				4.75
3	Beryl	Oval				4.34
4	Citrine	Round			3.2	

Figure 28

**Step 2:** Choose the preferred settings in the Page Setup such as paper size and orientation. A preview is available for you to see the page layout. Once you are done, click “Print” to start printing

Presidium Gem Computer Gauge v2.0.1-M-12012022

Presidium Weight Estimator Gemstone Estimator Dictionary **Report** Tutorial Contact Us

Device Status ● Connected

Connect Disconnect Record

Gemstone Specification Clear All

Gemstone: Citrine

Shape: Round

Length: mm.

Diameter: 3.2 mm.

Depth: 2.31 mm.

Price/Carat: 0 \$

Weight Calculation

Weight: 0.12 ct

Price: 0.0 \$

Calculate Add Remove

Measurements **0.00** Depth Enter Reset

Reports New Open Save **Print** Excel

Page Heading Sample-Test-1

Print

Printer: TOSHIBA 203 AirPrint

Presets: Last Used Settings

Copies: 1

☒ Black & White

☒ Two-Sided

Pages: ☒ All

☐ From: 1 to: 1

PDF Cancel **Print**

Figure 29

#### 1.6.1.6. View Report in Excel

**Step 1:** After adding data into the report, click “Excel” to view the report in an Excel file. You may make additional modifications to the report in excel and save a copy.



Figure 30

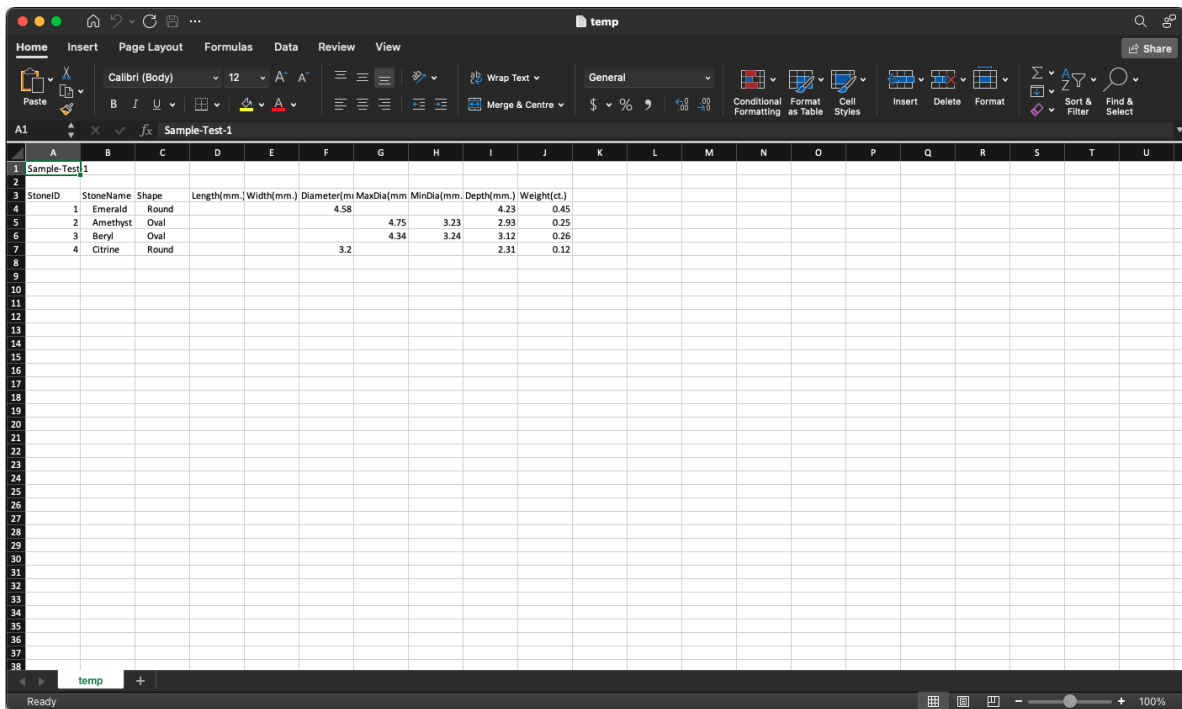
The image is a screenshot of a Microsoft Excel spreadsheet. The title bar at the top says 'temp'. The ribbon at the top includes tabs for Home, Insert, Page Layout, Formulas, Data, Review, and View. The 'Home' tab is active, showing various formatting options like font face (Calibri), size (12), bold, italic, underline, text color, fill color, and alignment. The spreadsheet itself has a grid with columns labeled A through U and rows numbered 1 through 38. The first row (row 1) is highlighted in black and contains the text 'Sample-Test-1' in cell A1. The second row (row 2) is empty. The third row (row 3) contains the following data: StoneID (A3), StoneName (B3), Shape (C3), Length(mm.) (D3), Width(mm.) (E3), Diameter(mm) (F3), MaxDia(mm) (G3), MinDia(mm) (H3), Depth(mm.) (I3), and Weight(ct.) (J3). The fourth row (row 4) contains the following data: 1 (A4), Emerald (B4), Round (C4), 4.58 (D4), 4.23 (E4), 0.45 (F4), 4.75 (G4), 3.23 (H4), 2.93 (I4), and 0.25 (J4). The fifth row (row 5) contains the following data: 2 (A5), Amethyst (B5), Oval (C5), 4.34 (D5), 3.12 (E5), 0.26 (F5), 4.34 (G5), 3.24 (H5), 2.31 (I5), and 0.12 (J5). The sixth row (row 6) contains the following data: 3 (A6), Beryl (B6), Oval (C6), 3.2 (D6), 4.34 (E6), 3.12 (F6), 4.34 (G6), 3.24 (H6), 2.31 (I6), and 0.12 (J6). The seventh row (row 7) contains the following data: 4 (A7), Citrine (B7), Round (C7), 3.2 (D7), 4.34 (E7), 3.12 (F7), 4.34 (G7), 3.24 (H7), 2.31 (I7), and 0.12 (J7). The eighth row (row 8) is empty. The ninth row (row 9) is empty. The tenth row (row 10) is empty. The eleventh row (row 11) is empty. The twelfth row (row 12) is empty. The thirteenth row (row 13) is empty. The fourteenth row (row 14) is empty. The fifteenth row (row 15) is empty. The sixteenth row (row 16) is empty. The seventeenth row (row 17) is empty. The eighteenth row (row 18) is empty. The nineteenth row (row 19) is empty. The twentieth row (row 20) is empty. The twenty-first row (row 21) is empty. The twenty-second row (row 22) is empty. The twenty-third row (row 23) is empty. The twenty-fourth row (row 24) is empty. The twenty-fifth row (row 25) is empty. The twenty-sixth row (row 26) is empty. The twenty-seventh row (row 27) is empty. The twenty-eighth row (row 28) is empty. The twenty-ninth row (row 29) is empty. The thirtieth row (row 30) is empty. The thirty-first row (row 31) is empty. The thirty-second row (row 32) is empty. The thirty-third row (row 33) is empty. The thirty-fourth row (row 34) is empty. The thirty-fifth row (row 35) is empty. The thirty-sixth row (row 36) is empty. The thirty-seventh row (row 37) is empty. The thirty-eighth row (row 38) is empty. The status bar at the bottom left says 'Ready'. The status bar at the bottom right shows a zoom level of 100%.

Figure 31

End of Document