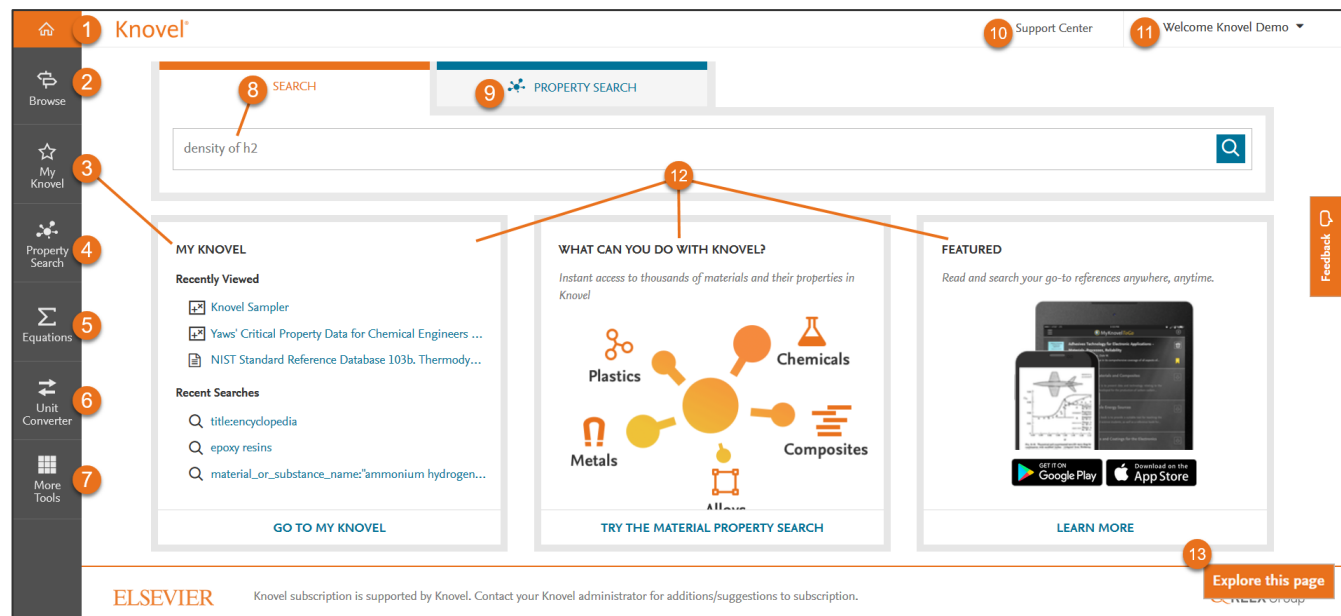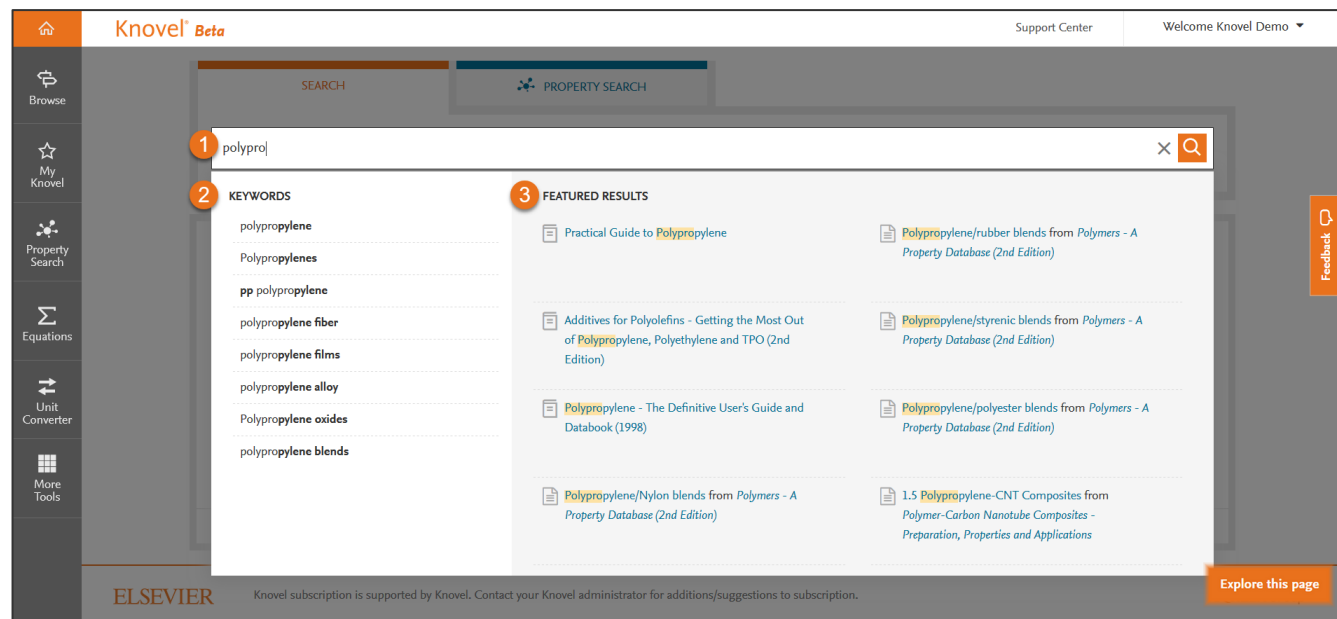# 1. Knovel's Home Page

Legend:

1. **Home**: Returns you to this page.
2. **Browse**: Browse all Knovel content by Subject Areas.
3. **My Knovel**: Save, organize and share your favorite content, queries and data.
4. **Property Search**: Find material and Property data from interactive graphs and tables.
5. **Equations**: Find and use engineering equations and worked examples.
6. **Unit Converter**: Convert units of measure.
7. **More Tools**: Integration and other tools, including The Excel Add-In, Periodic Table, instructions for downloading the Mobile app: *My Knovel ToGo*, Add Knovel to the Search bar, Knovel Integrations and Promotional Tools.

8. **Search**: Search using keywords, title or author.
9. **Property Search**: Use Knovel query builder to find materials or substances and their properties.
10. **Support Center**: Visit Knovel's Support Center to find answers to your questions on using Knovel.
11. **Welcome**: Update profile details, change your password, access mobile authentication / license and log out.
12. **Information Panels**: Highlight your recent search activity, newly added content and other featured announcements from Knovel.
13. **Explore this page**: Explore new or updated features of the page you are on.
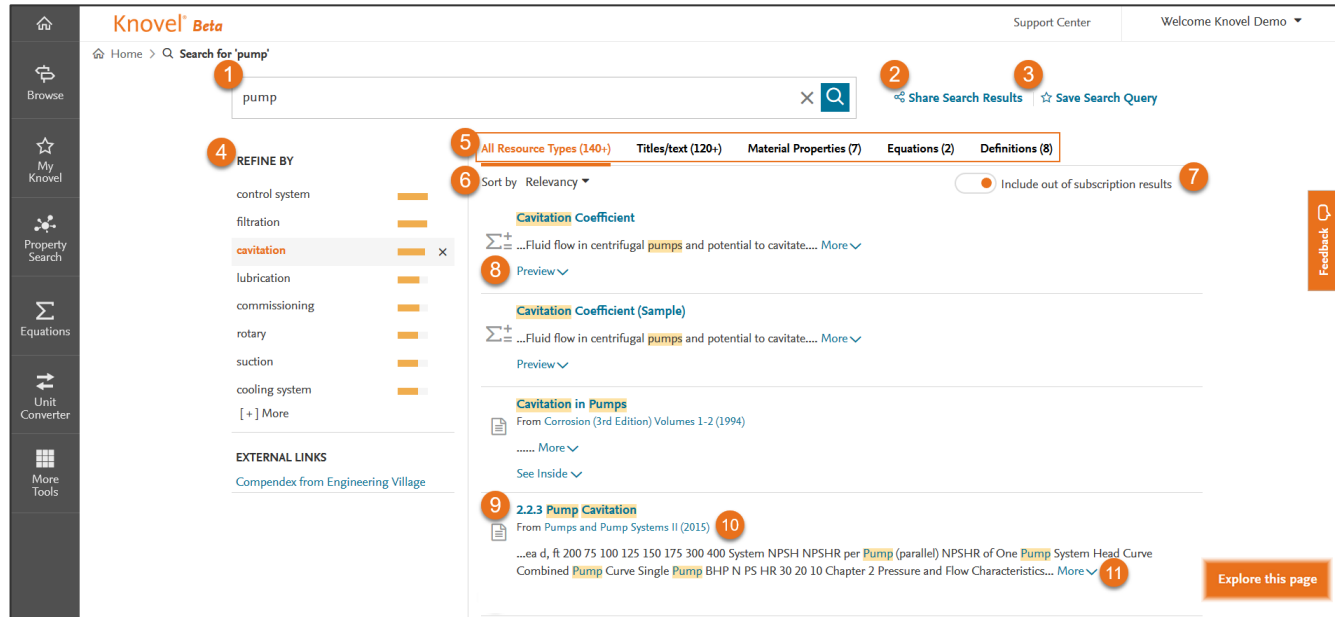
2. Search

Legend:
1. **Search**: Enter your search query using keywords, phrases, or syntax like Boolean operators, 'title:' or 'author:'.
2. **Keyword Suggestions**: Select from autosuggest terms based on engineering concepts.
3. **Featured Results**: Select from Featured text sections and titles.

Search Examples:
- To search for a **phrase** or **exact match**, use quotation marks (e.g. "tool steels").
- Knovel supports the **Boolean operators** "AND', 'OR' and "NOT'. When using multiple Boolean operators, they are processed left to right. To change the order in which terms are processed, enclose the term(s) in parentheses. Operations in parentheses are evaluated first.
- To search by **author** or **title**, use 'author: xxxx' or 'title: xxxx' e.g, 'title:mining'.
- Search by CAS Registry No. (71-43-2), Molecular Formulas (c6h6) or UNS numbers (R56400).

3. Search Results Page

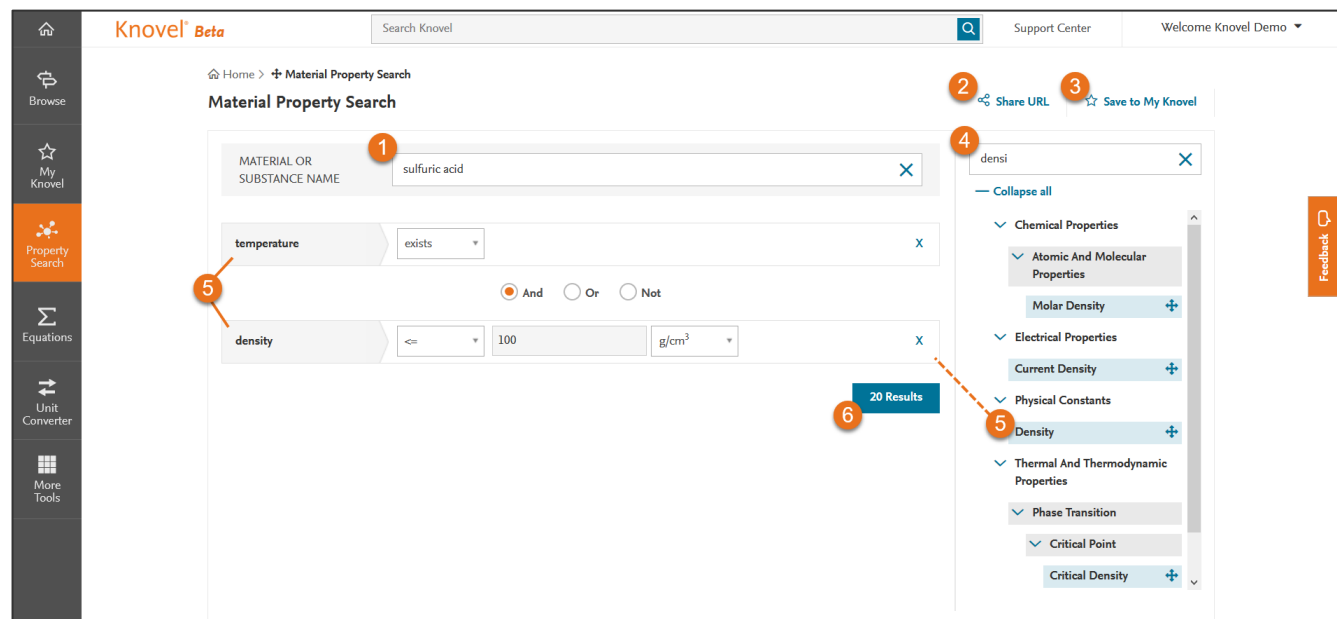After executing a Search, Knovel's results page is displayed:

Legend:

1. **Search query term(s)**
2. **Share Search Results**: Share results via email.
3. **Save Search Query**: Save query to My Knovel.
4. **REFINE BY**: narrow the result set by applying a controlled vocabulary of engineering concepts from Knovel's content.
5. **Content types**: refine your results by content / reference type:
   - **All Resources Types**: default filter showing all content types.
   - **Titles / text**: for titles and chapters / text sections.
   - **Material Properties**: for material or property data contained in Knovel interactive tables and graphs.
   - **Equations**: to find and use interactive worksheets featuring engineering equations and worked examples.
   - **Definitions**: definitions from dictionaries and encyclopedias.
6. **Sort by:** Sort results list by Relevancy or Date.
7. **Include out of subscription results**: Toggles between content reflecting your subscription and All Content available in Knovel.
8. **Preview**: views the Equation, resource's TOC, table or text section.
9. **Section name**: view the result in Knovel's content viewer, Equation viewer, or Table Viewer.
10. **Resource Title**: link to the resource's Table of Contents.
11. **More:** expand the snippet to view additional information.

4. Property Search

Property Search provides a query builder to help you locate information that may be hidden in large complex tables. You can search for a material or substance; properties or a combination of both.

Legend:

1. **Material or Substance Name**: Enter a specific material or substance name, or select from auto-suggest terms.
2. **Share URL**: Share this search query via an email.
3. **Save to My Knovel**: Save this search query to My Knovel.
4. **Filter by Property Name**: Start typing a property name e.g. density; or browse the Property tree and select a property by dragging and dropping onto the query builder or double-clicking it.
5. **Drag & Drop** desired property onto the Query builder.
6. **Results**: As you build your query, the number of Results is dynamically updated. Click to review results.
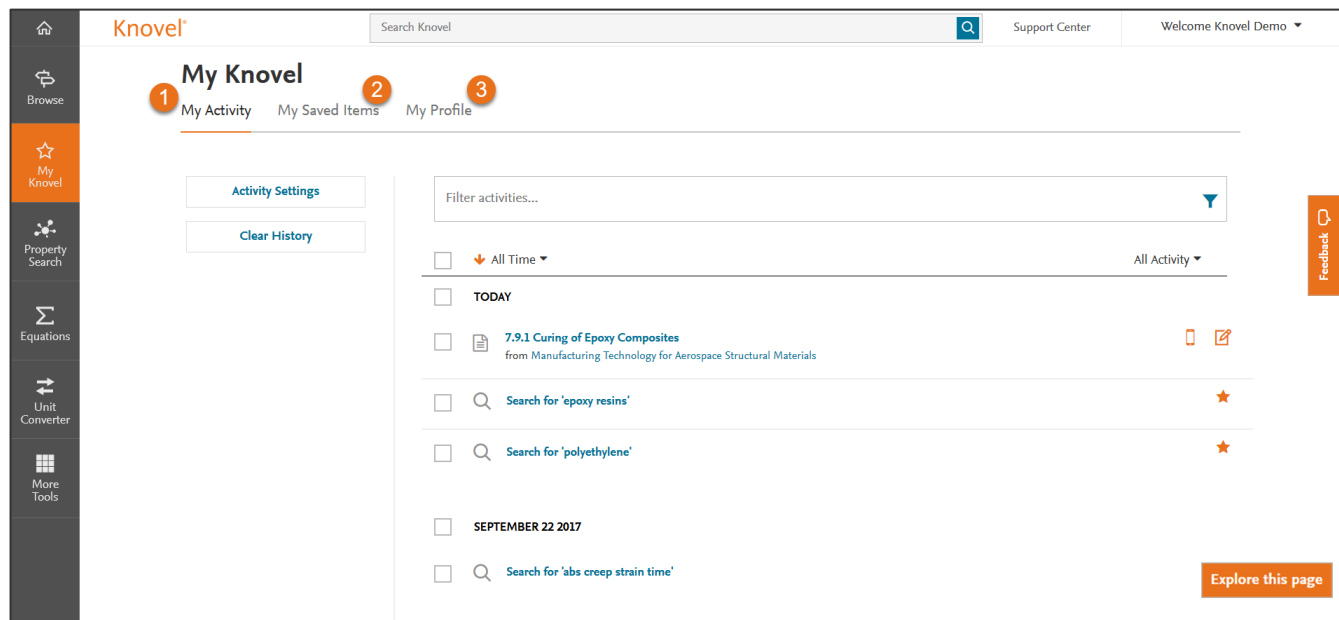
Material or Substance Name can be:

- Name: titanium, carbon, sulfuric acid, etc.
- CAS Registry No.: 71-43-2, 7440-38-3, etc.
- Molecular Formula: c6h6, h2s04, etc.
- UNS number: R56400, H40270, etc.
- ASTM Spec.: SA-182, SA-387, etc.

Properties:

- You can combine up to three properties in the query builder using 'AND', 'OR' and "NOT" operators.
- Knovel supports the following numeric operators: **exists**, **=**, **<=**, **>=** and **is between**, enabling you to enter numeric values or numeric ranges.
- For relevant properties, you can select units of measurement using the drop down menu; e.g., temperature units (F, C, K, etc.).

5. My Knovel

My Knovel is a personal space where you can organize your favorite titles, frequently used search queries and the content you need to complete your projects. You can also create shared folders for workgroup collaboration with other Knovel users.
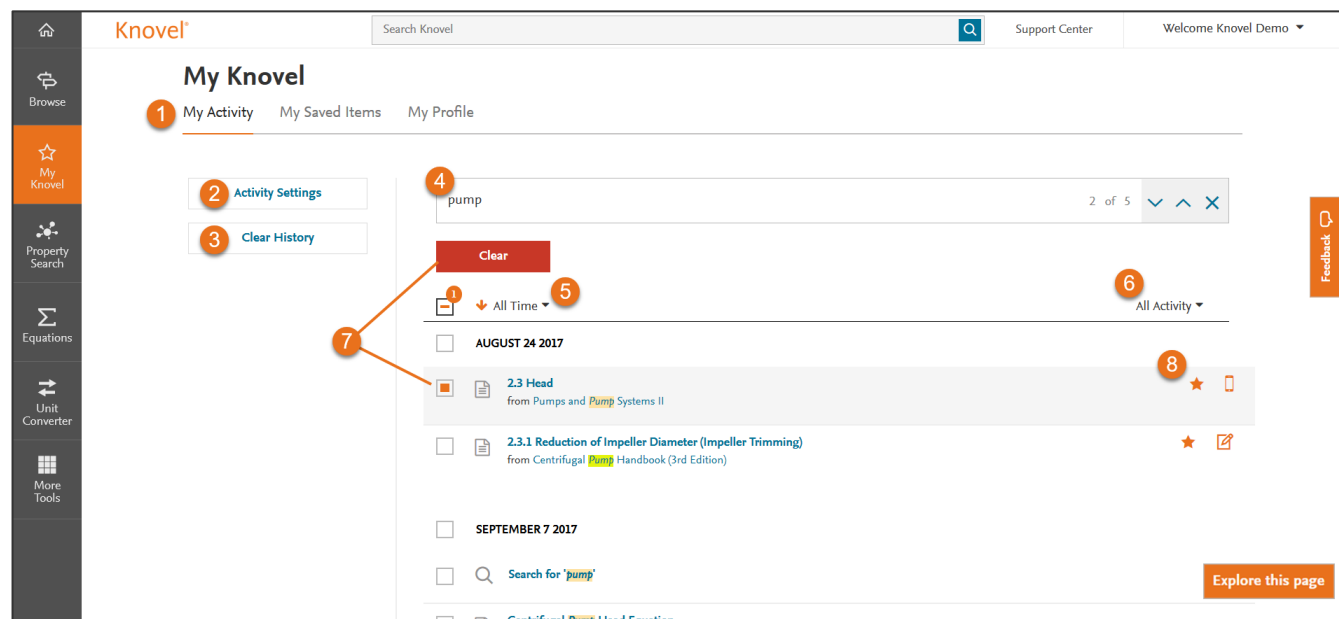

Legend:
1. **My Activity**: Where you can access your recent searches, viewed content and other activities arranged in chronological order.
2. **My Saved Items**: Where you can manage your saved interactive tables, search queries, titles, annotated sections, etc.
3. **My Profile**: Where you can change your personal details and password, as well as retrieve a mobile authentication code for the *My Knovel to Go* app and license codes for Knovel plug-ins.

My Knovel – My Activity

Access your recent searches, content views and other activities with **My Activity**.
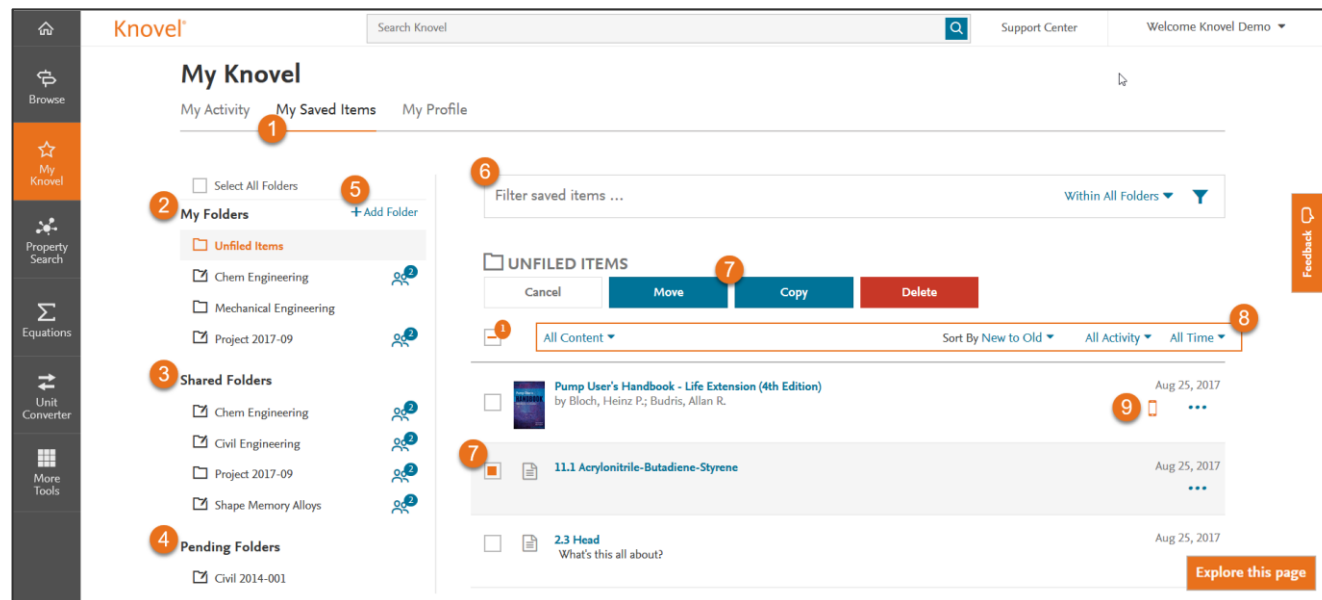

Legend:

1. **My Activity**
2. **Activity Settings**: Define which activities are to my tracked: *Search History* and *Viewed Items*.
3. **Clear History**: Clear your entire activity history, but keep in mind that it cannot be undone.
4. **Filter activities**: Filter activity by search term(s).
5. **All Time**: Filter your activities by Time: All Time, Today, Yesterday, Last 7 Days, and Last 30 Days.
6. **All Activity**: Filter your activities by Type: All Activity, Notes, Saved to Mobile, Saved, Printed and Downloaded.
7. **Clear**: Clear individual items or by an entire day.

8. **Icon Legend**:
   - ★ Saved to *My Knovel.*
   - ☐ Saved to *My Knovel ToGo* .
   - ✎ Item contains a *Note.*
   - 🔔 Search query include an *Alert.*

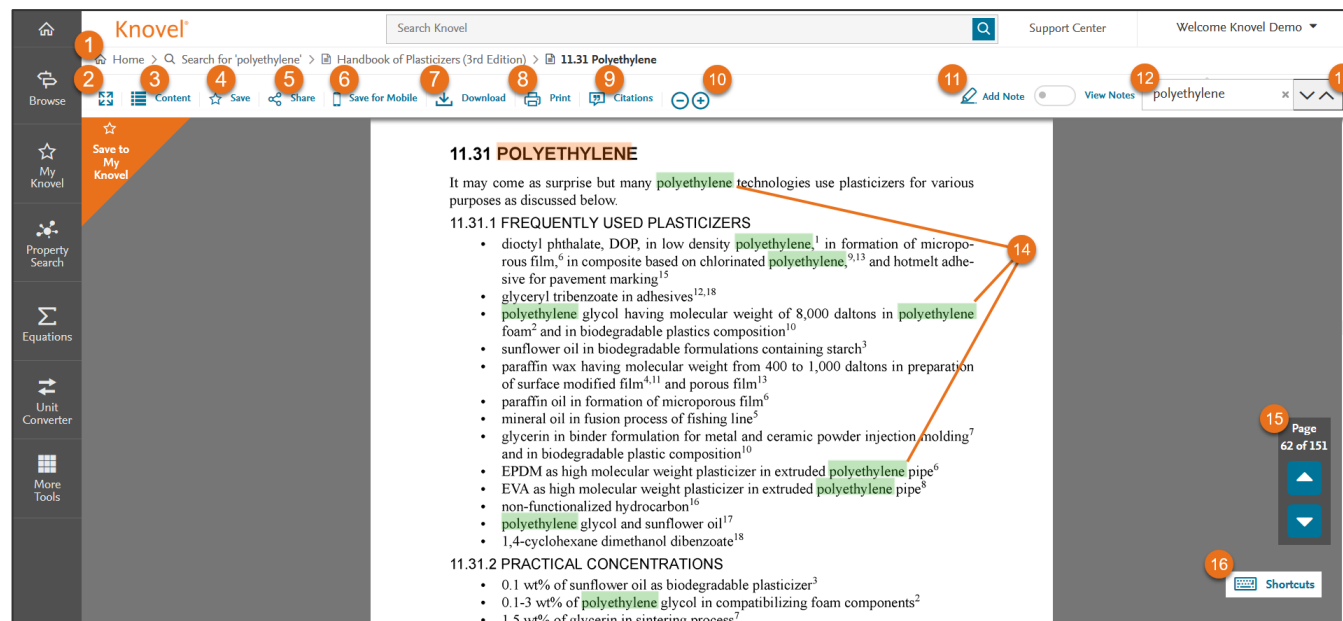## My Knovel – My Saved Items

The searches, content and other activities you save can be managed with My Saved Items.

Legend:

1. **My Saved Items**
2. **My Folders**: Folders you created to organize your saved items.
3. **Shared Folders**: Folders created by another Knovel user and shared with you.
4. **Pending Folders**: Folders created by another Knovel user that you have been invited to share, but you have not yet accepted the invitation.
5. **Add Folder**: create a new folder.
6. **Filter saved items**: Filter by keyword(s) **Within All Folders** or **Within This Folder**.
7. **Move**, **Copy**, **Delete**: Select items to Move or Copy to a folder, or Delete them.

8. **Filters:**
   - **All Content**: Filter by All Content, Books & Databases, Search Queries, Property Search, Sections, Interactive Content or Material Properties.
   - **Sort By New to Old**: Sort chronologically or alphabetically.
   - **All Activity**: Filter by All Activity, Notes or Saved to Mobile.
   - **All Time**: Filter by All Time, Today, Yesterday, Last 7 Days, Last 30 Days.
9. **Icon Legend**:
   - Saved to *My Knovel.*
   - Saved to *My Knovel ToGo* .
   - Item contains a *Note.*
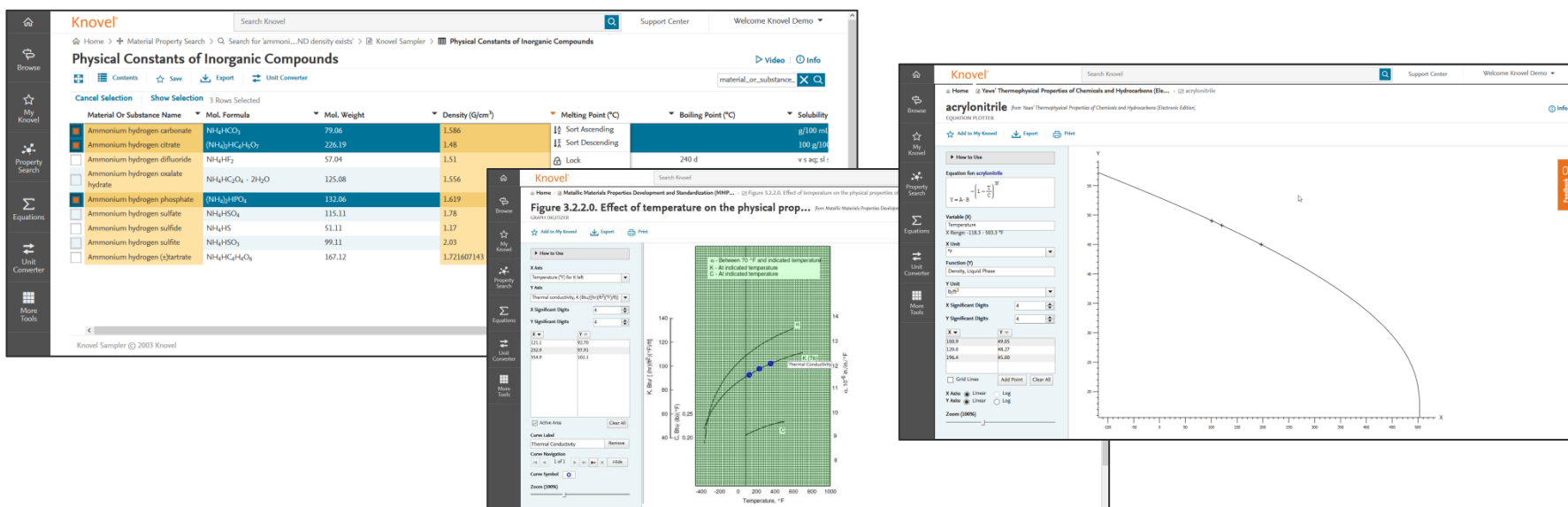   - Search query includes an *Alert.*

6. Content Viewer

Legend:

1. **Breadcrumb trail**: Use as a Navigation tool.
2. **Expanded Mode:** Toggles to Expanded view.
3. **Content:** Displays the Table of Contents.
4. **Save:** Save to My Knovel.
5. **Share:** Share this content via an email.
6. **Save for Mobile:** Save to My Knovel ToGo for offline viewing.
7. **Download:** Download the opened section to a PDF file.
8. **Print:** Print the opened section.
9. **Citations:** Create a citation for the opened section in various formats such as Bibtex, EndNote, Mendeley, ProCite, RefMan, RefWorks and Zotero.

10. ⊖⊕: Zoom In / Zoom Out.
11. **Add Note**: Add Note and / or highlight to the text.
12. **Search**: Clear the current search query [click the X] to clear hit highlighting, and enter new term(s).
13. **Find Next and Find Previous arrows**: quickly move from one instance of highlighted search query terms to the next.
14. **Highlights:** Search terms are highlighted throughout the text.
15. **Previous / Next Page**: View the previous or next page.
16. **Shortcuts**: display shortcut keys supported in the Knovel Content Viewer.

7. Interactive Tools

Knovel's data analysis tools improves your productivity by allowing you to analyze otherwise static data. Knovel offers more than 100,000 interactive objects — allowing you to visualize results, plot points along curves and export images and data for use in reports and designs. These tools include Interactive Tables and Graphs.

- Knovel has a large database of *Interactive Tables* and the tools to make it easy for you to analyze these tables to find exactly what you need.
- Knovel Offers five Interactive Graph Tools which allow users to derive x, y coordinates from curves that can be expressed as an equation, digitize normally static graphs or plot and compare several curves from individual data points in a table. Relevant data can then be exported to support your conclusions and to offer a source citation for subsequent peer review:
  - *Graph Digitizer*: Allows you to extract x,y coordinates from normally static graphs.
  - *Equation Plotter*: Allows you to extract x,y coordinates from a curve that can be expressed as an equation.
  - *Graph Plotter*: Allows you to define precise x,y coordinates from individual or multiple curves for data comparison.
  - *Phase Diagram Viewer*: Has the same functionality as a graph digitizer as well as the capability to plot points on a calibrated phase equilibrium diagram. Use the *"Lever Rule"* to calculate temperatures and compositions of mixture phases (solid, liquid, gas, etc.) as temperature and / or pressure change.
  - *Parameterized Graph*: Allows you to plot three or more parameters on a graph. For example, you can have temperature vs. the speed of sound and pressure.

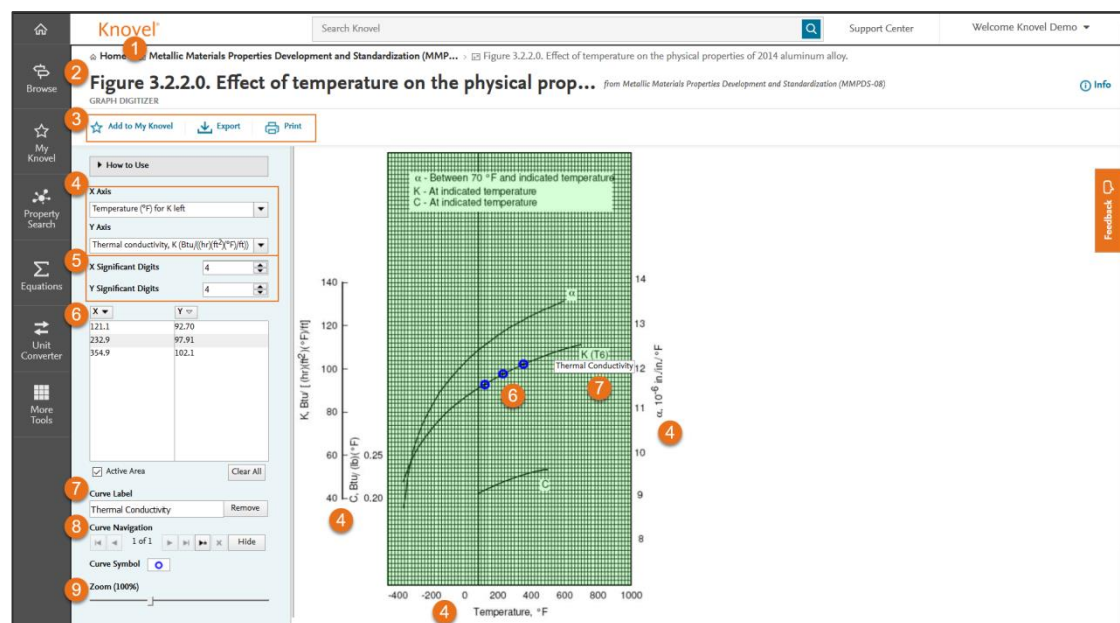## Interactive Tools - Interactive Tables

Legend:

1. **Breadcrumb trail**: can be used as a Navigation tool.
2. **Table's Name**
3. **Tools menu**:
   - **Toggle full-window viewing**: Toggle to view the table or graph in full screen.
   - **Contents**: Show / Hide the Table of Contents.
   - **Save**: Save the table to My Knovel.
   - **Export**: Export selected table data to PDF, MS Excel or CSV.
   - **Unit Converter**: Access the Knovel Unit Converter.
4. **Show Selection**: This option only appears once a selection is made. Tick the boxes on the left of each row of data to make your selection. '*Show Selection*' filters the table view to your selected rows.
   - Click '*Cancel Selection*' to show the entire table.
   - Click '*Edit Selection*' to edit your selection.
5. **Search Field**: Enter a new search term to find it within the entire table. To cancel the current search and view the entire table, click 'X' to the right of your search term(s).

6. **Column options** (click the down arrow next to the heading):
   - **Sort Ascending / Descending:** sort the column in ascending / descending order.
   - **Lock / Unlock**: Toggle between locking / unlocking selected column to the far left.
   - **Columns**: Hide / Show desired columns.
   - **Toggle Empty**: Hide the entire row if the selected column is empty.
   - **Filters**: Enter a numeric value or check the box in front of a specific text value to filter your search results.
     - **Text column**: filter by specific text.
     - **Numeric column**: filter on <, >, or = value.
7. **Highlighted columns**: columns that match your search query.
8. **Resource's Name**: Displays the title of the source from which the table was extracted.
9. **Row and Page selector:** Shows the total number of rows and pages and lets you browse between pages.
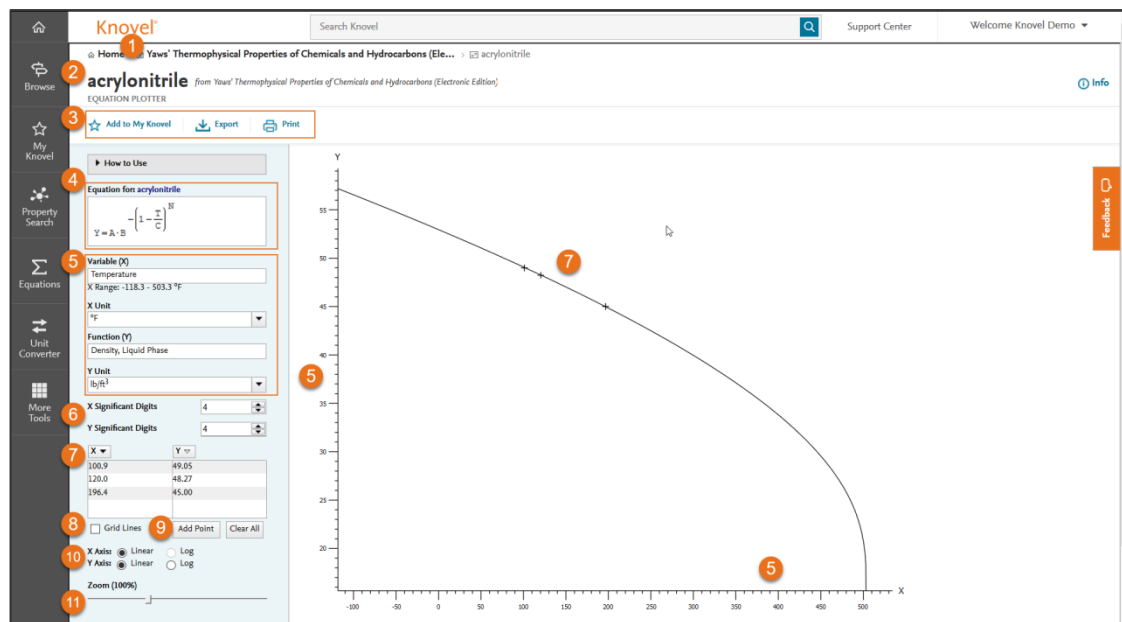
Interactive Tools - Graph Digitizer

Legend:

1. **Resource Title**
2. **Graph Title**
3. **Tools menu**:
   - **Add to My Knovel**: Save modified graph to My Knovel.
   - **Export**: Export Data Points or Graph to various formats.
   - **Print**: Print Data Points and / or Graph.
4. **X-Axis / Y-Axis**: Select X and Y axis.
5. **X / Y Significant Digits**: Define the number of digits for X and Y values.

6. **Define points:** Move mouse along curve in graph, click as desired to save X / Y values in the table.
   - To **delete** a point, click on it in the graph; or select it in the table and press keyboard Delete.
   - To **move** a point, drag and drop it on the curve.
7. **Curve Label**: define curve label, if desired, and click Add button to place on graph. This label will also be used when exporting or printing.
8. **Curve Navigation**: Used to move through multiple curves.
9. **Zoom:** Zoom in and out on graph to ease point creation.
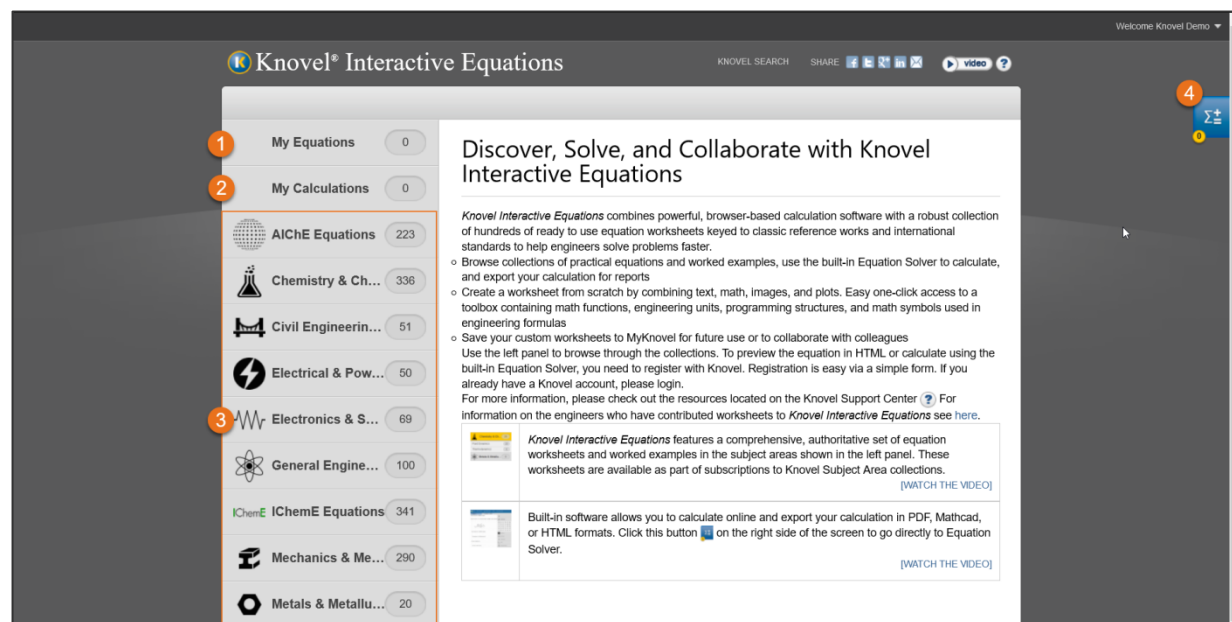
Interactive Tools - Equation Plotter

Legend:

1. **Resource Title**
2. **Substance Name**
3. **Tools menu**:
   - **Add to My Knovel**: Save modified graph to My Knovel.
   - **Export**: Export Data Points or Graph to various formats.
   - **Print**: Print Data Points and / or Graph.
4. **Equation**
5. **Variable (X) / Function (Y)**:
   - If *Variable (X)* represents temperature, define the X-Unit as °F, °C, °R or K.
   - If *Function (Y)* represents density, define the Y-unit as lb/ft^3, kg/m^3, etc.

6. **X / Y Significant Digits**: Define number of digits for X and Y values.
7. **Define points:**   Move mouse along curve in graph, click as desired to save X / Y values in the table.
   - To **delete** a point, click it in the graph; or select it in the table and press keyboard Delete.
   - To **move** a point, drag and drop it on the curve.
8. **Grid Lines**: Toggle on / off grid lines.
9. **Add Point**: Enter X (or Y) value in the table and press Enter key.
10. **Linear / Log**: Define if you want to use a linear vs. logarithmic scale for either axis.
11. **Zoom:** Zoom in and out on graph to ease point creation.

8. Knovel Interactive Equations – Home Page

Knovel Interactive Equations features a comprehensive, authoritative set of interactive worksheets and worked examples across various subject areas including Chemistry, Civil Engineering, Electrical, Oil & Gas and more.
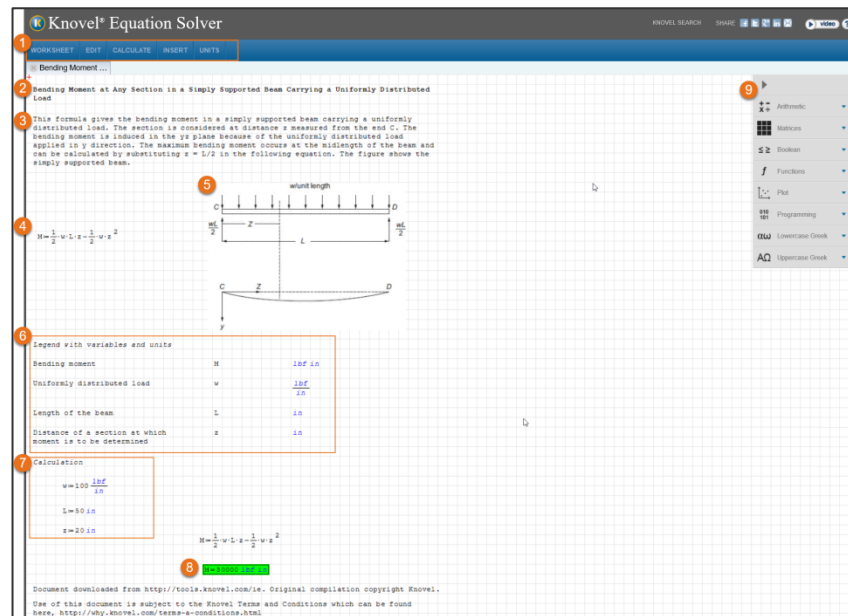

Legend:
1. **My Equations:** worksheets you have Saved to *My Knovel* without making any changes to.
2. **My Calculations:** worksheets you created from scratch or a Knovel worksheet you modified and Saved to *My Knovel*.
3. **Equations by Subject Area or Society**
4. **Show Solver**: this opens the Knovel Equation Solver.

9. Knovel Equation Solver

Knovel's Equations Solver is a web application that allows engineers to quickly make calculations using online worksheets. The Equation solver does not requires installation of software as is it embedded in Knovel, and includes built-in math functions and engineering units that allows you to quickly key in calculations with no programming experience.

Legend:

1. **Toolbar:**
   - **Worksheet**: Create new, Save to My Knovel, Upload / Download in various formats and Print.
   - **Edit**: Cut, Copy, Paste, Undo, Redo, Delete and Select All.
   - **Calculate**: Toggle between automatic and manual calculation, Find the Root of an Expression, Invert a Fraction or Differentiate a part of the Expression.
   - **Insert**: Insert Equation, Text, Picture, Plot, Area Delimiters, Hyperlinks and Metadata Tag.
   - **Units**: Insert units.
2. **Equation Name**
3. **Equation Description**

4. **Equation Formula**
5. **Illustration**
6. **Legend with variables and units**: explains the variables by name, symbol and default units.
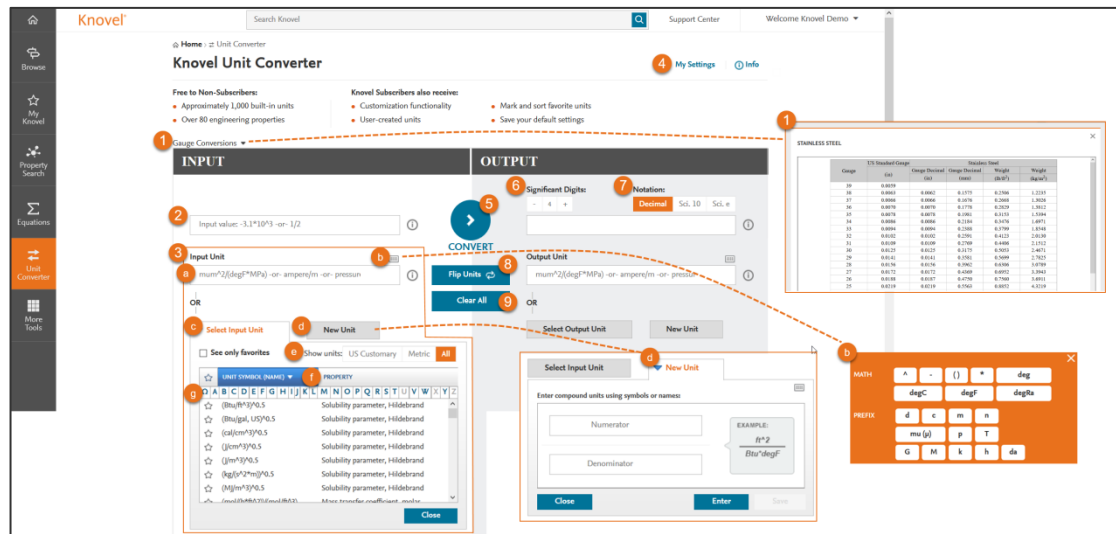7. **Calculation variables:** default values and units, both of which are modifiable.
8. **Calculation Result** with current values.
9. **Palette**: includes tools such as mathematical symbols and functions, as well as graphical and programming functions that help you edit your calculations.

10. Knovel Unit Converter

Knovel's Unit Converter enables you to quickly convert any unit of measurement—or any combination of units—into another unit in just a few simple steps. Choose from a list of approximately 1,000 unique units for approximately 90 properties.
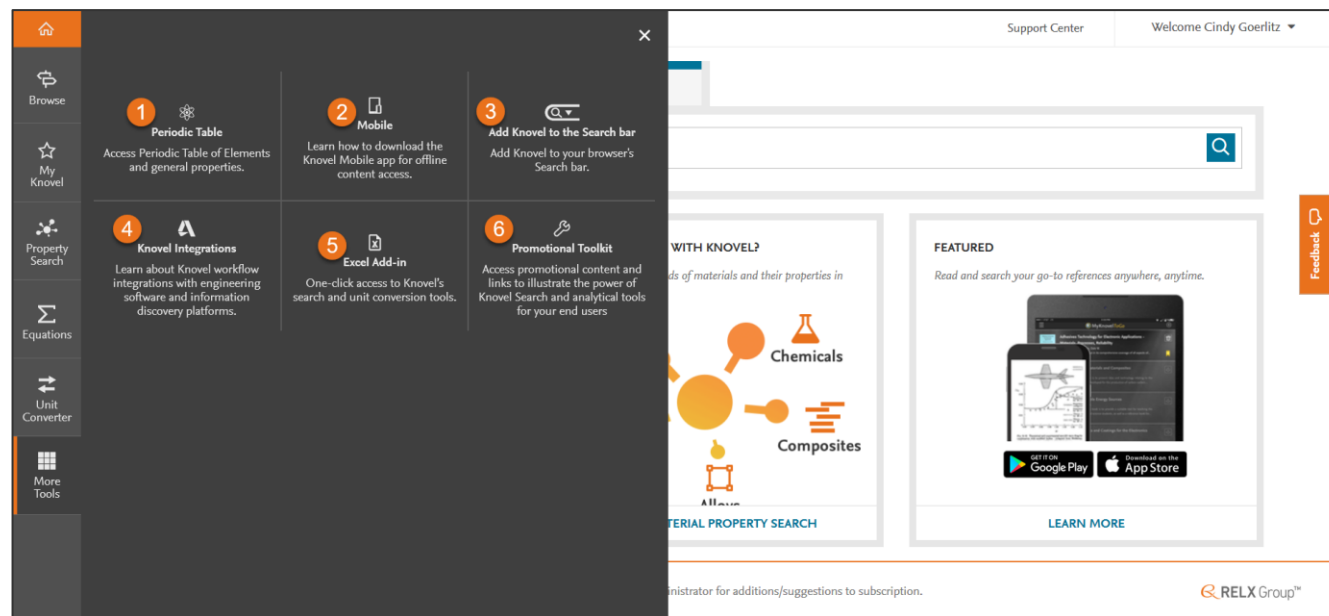

Legend:

1. **Gauge Conversions**: Wire gauge measurement and weight charts for mild steel, galvanized steel, stainless steel and aluminum.
2. **Input / Output Value:** Enter a numeric value to be converted.
3. **Input / Output Unit:**
   a. Enter symbol or name of unit to convert.
   b. Click "keys" on virtual keyboard to define new units.
   c. Select from available units.
   d. Create new units.
   e. Filter units by US Customary, Metric or All.
   f. Browse units by Symbol Name or Property.
   g. Use alpha list to browse.

4. **My Settings**: Define your Significant Digits, Unit System and Output Notations.
5. **Convert**: Execute conversion.
6. **Significant Digits:** Adjust precision level.
7. **Notation:** Display values in Decimal or Scientific notation.
8. **Flip Units**: Swamp input and output units.
9. **Clear All**

11. More Tools

Legend:

1. **Periodic Table**: Access Knovel's Periodic Table of Elements and general properties.
2. **Mobile**: Learn about *My Knovel ToGo*, Knovel's Mobile app for offline access of Knovel books, for tablets and smartphones.
3. **Add Knovel to the Search Bar**: Add Knovel to your browser's Search bar.
4. **Knovel Integrations**: Learn about Knovel workflow integrations with engineering software and information discovery platforms.
5. **Excel Add-in**: One-click access to Knovel's search and unit conversion tools from within Microsoft Excel.
6. **Promotional Toolkit**: Access promotional content and links to illustrate the power of Knovel Search and Analytical tools for your end users.