What are they, how to see them and what to do with an unknown extension

What are file extensions?
File extensions are a 3 or 4 letter sequence that follows the dot at the end of a file name such as test.docx, test.xls, test.txt. Their purpose is to identify what program(s) can open the file. Windows keeps a list of known file extensions that can be opened by the software you have installed. If you tell it to open a file (double click it), it will select the program which can handle the file, open the program and load the file for you to view or edit. Many common file types can be opened by more than one program on your computer, Windows will always use the *default* program unless you tell it otherwise (see below). Despite Microsoft's best efforts some extensions are used for different types of applications such as .dat.
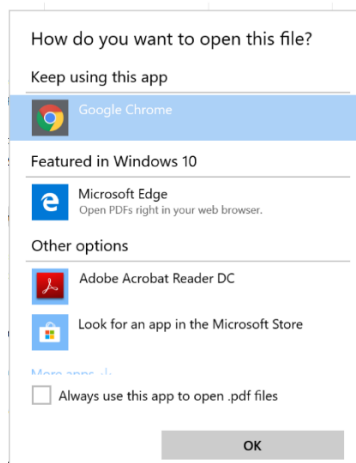
What if you can't see them?
Microsoft, in its infinite wisdom, decided you no longer need to see the extensions for files that it knows how to open, it just displays the icon for the program in front of the file.. In the file manager the default setting is to hide the extensions, if Windows knows what program can open the file. To change this behavior in the file manager, go to the view tab and tick the box that says File name extensions. This will cause all file extensions to be visible.

What to do if you want to use a different program to open the file.
To change what program opens a particular file type begin by right clicking the file. From the popup menu choose Open with. If the file has more than one program that can open the file you will see a list of the programs that will work. You then have the option to select another program that you want to use just once.
If you want to use another program as the default click on the box "Always use this app to open *xxx* files", then click on the program you want to use and OK.

What if you don't have a program that will open the file?
After selecting Open with, you will have a choice to "Look for an app in the Microsoft Store". If an app is found, you can install it and open the file. However, the results may be disappointing if it is an unusual file type.
The next step is to do a web search for the extension and see if you can find a program that way.

Common File types and some programs that will open them
.doc or .docx Microsoft Word (word processing) files which can also be opened with Open Office, Libre Office and WordPerfect.
.xls or .xlsx Microsoft Excel (Spreadsheet) files which can also be opened by Open Office, Libre Office and WordPerfect.
.ppt or .pptx Microsoft PowerPoint (presentation) files which can be opened with Open Office, Libre Office and WordPerfect.
.pdf Adobe Acrobat files which can be opened with Adobe Reader, Microsoft Word, Open Office, Libre Office, WordPerfect, Google Chrome, Microsoft Edge and a host of others.
.txt Text files which can be opened by Notepad, WordPad and all document programs
.rtf Rich Text Format is a type of Microsoft Word file that is more than a .txt file and less than a .doc file. They can be opened by Microsoft Word and most other word processors.
.mp3, .wav, .aif or aiff (Apple), .ogg are all music file formats. Windows comes with several programs that can play audio files, Groove Music and Windows Media Player. Additionally there are hundreds of programs that you can download and install to play regular or unusual file types such as .flac or .raw. A good choice for all music and video formats is VLC Media Player which is free and will even play DVD's, which can't be done natively in Windows.
.jpg or jpeg, .raw, .png, .gif are picture formats. Windows includes Paint, Paint 3D and Photos. There are lots of programs that can view and/or edit pictures such as Adobe Lightroom, Photoshop, Paint Shop Pro, Gimp and Google Photos. Higher end programs such as Lightroom and Photoshop must be purchased if you need that level of editing.
. avi, .flv, .wmv, .mov, .mp4 are video formats. Windows includes several programs that can play videos including Windows Media Player, Photos, Movies and TV. Again, there are a great many video players, but VLC Media Player is a great choice if you aren't happy with the Microsoft solutions.
.odt, .ods, .odp, .odb These are the extensions for documents created in Open Office and Libre Office, free programs that will do what Office does, where the creator chose to save them in their native format instead of using Microsoft Office compatibility. They can be opened in recent versions of Office.
.wpd, .qpw, shw These are WordPerfect Suite file extensions. They can be viewed in Office and the word processing files and spreadsheet files can be edited.