Welcome to the video on What are Primary Resources in the Sciences. By the end of this video you will be able to identify the different parts of a primary research article in the Sciences.

So what is primary research? Primary research is the formal observation of procedures or experiments performed through scientifically accepted methods. A primary research article in the Sciences will have: original research, an abstract outlining the purpose and results of the research, the credentials of the author, a research methods section outlining how the research was done, and references indicating the depth and breadth of the background and sources consulted to inform the original research.

The title of the article is your first clue about the research. Often there will be a very specific topic briefly outlined using subject specific language. Next, check out the Credentials of the author: Are they associated with an accredited university? Does the department they are in match the subject area or topic? This will give you some indication on whether or not the author has the authority to be writing about the topic or subject area. The abstract gives you a short summary of the contents of the article, typically including purpose, design and major findings. This should give you an idea on whether or not you want to read the entire article. The introduction outlines the problem being discussed, and sets the stage for the rest of the article, often including previous research and other sources relevant to the topic. The methods and materials section tells you how the research was conducted by outlining the equipment, procedures, participants, apparatus, materials, tests and the method in which the research was done. Tables give you a visual on the data collected in the study in an organized format. Not all the data found in the study may be represented here, but instead may also be found in any appendices included or the results section.

The results section is the main focus of a primary research article. There are three pieces of information to be taken away from this section. First, the actual data from the experiment, second, it will give you an idea about any shortcomings in the methodology and third, it will give you an idea of how to represent similar data.

The discussion section evaluates and interprets what was found overall and relates it to previous research and findings. This is the author’s chance to interpret and explain the results. The conclusion summarizes the findings, results and possibilities for further research. Finally, the references section gives you the full details about any sources identified throughout the article and is a great place to look for more information on the topic.

Need more help? Check out our reference services in person, by phone, by email or chat at any of our Lakehead University Libraries and follow us on Facebook and Twitter.