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Genetics

## Writing Assignment #2

In a primary article, it is usually the original report of a new research discovery. It presents new data or discovering, rather than summarizing or analyzing work that has already been found. The structure for a primary article is an IMRAD format: Introduction (which introduces the background and research questions); Methods (how the data was found); Results (the findings and data); and finally the discussion (which is the interpretation and implications). They are also typically published in peer-reviewed academic journals.

In a review article, it's a scholarly paper that already has existing research on a specific topic and is just analyzing and summarizing it. A review article does not present new experiments, data, or original findings. Instead it goes into a deep overview of prior studies to highlight trends, gaps, and research directions. The key features of a review article are: summarizing existing research, providing a critical analysis, and is usually written by experts that help identify where further studies are needed. There are many types of review articles. For example, there are literature reviews that summarize past research on a topic, often providing historical context and trends. Systematic review which uses a structured method to collect, analyze, and synthesize research on a specific question. As well as a Meta-Review which is a subset of systematic reviews that combines statistical data from multiple studies to derive broader conclusions.

The scientific peer review process is when a researcher wants to make an article go public but must go through a process of peer reviews before it gets published. The first step of the peer review process would be the author/researcher making a draft article and submitting it for publication in a scholarly journal. Then the journal's editor looks over the article to decide whether they want to publish or not if it's a good fit for their journal. If they approve, then they'll send copies to a group of experts for them to evaluate if the article is good or not. These experts are called the author's peers. They evaluate the

article by asking questions like: What is this research about? Will it capture people's attention? Is this information relevant to today's society? And are the findings original? Once they make the final decision on the article, they might approve it and add some revisions or reject it altogether. In the end the author makes the final decision whether it should be published or not.