**Teacher Template: Explainers**

Use this lesson plan to learn about the article type called Explainers that is published by *Science News Explores* in print and online and access a lesson plan template that can be used with any Explainer article. Note that all print Explainers are also online, and the online version will contain multimedia resources and Power Words (vocabulary) and will be longer in length.

 **What is an Explainer article type?**

Explainer articles take a deep dive into a key scientific concept or process. Each Explainer gives an overview of a scientific concept or process and highlights the current research being done in that area, while also making connections to other related terms. The online articles offer many related multimedia resources.

**How can you use Explainer articles in the classroom?**

Use Explainers with students to introduce or review a concept or process, or to help students who may be struggling to understand certain concepts. Explainers can also be a great way to boost background knowledge of a topic for students doing research projects.

**What is a literacy practice that can be used with this type of article?**

The Cornell Notetaking System is a helpful literacy practice to introduce or use with your students when they are reading an Explainer. It is suggested in the lesson plan template below. Click here for an overview of the Cornell Notetaking System literacy practice.

**Some example Explainer articles in key subject areas include**:

[Explainer: What are genes?](https://www.snexplores.org/article/explainer-what-are-genes)

[Explainer: How photosynthesis works](https://www.snexplores.org/article/explainer-how-photosynthesis-works)

[Explainer: Reflection, refraction and the power of lenses](https://www.snexplores.org/article/explainer-reflection-refraction-and-the-power-of-lenses)

[Explainer: Kinetic and potential energy](https://www.snexplores.org/article/explainer-kinetic-potential-energy-physics)

[Explainer: What are the different states of matter?](https://www.snexplores.org/article/explainer-states-matter-solid-liquid-gas-plasma)

[Explainer: All about orbits](https://www.snexplores.org/article/explainer-all-about-orbits)

[Explainer: What are chemical bonds?](https://www.snexplores.org/article/explainer-what-are-chemical-bonds)

[Explainer: Our atmosphere – layer by layer](https://www.snexplores.org/article/explainer-our-atmosphere-layer-by-layer)

**Build your lesson plan based on an Explainer:**

\*Please note: the example Explainer article provided in the template below ([Explainer: What is the internet?](https://www.snexplores.org/article/what-is-the-internet)) is published in the February 2025 print issue of *Science News Explores* and its online version is available [here](https://www.snexplores.org/article/what-is-the-internet).

**Step 1: Choose an Explainer that relates to a topic you teach**

Search the archive of [Explainer articles](https://www.snexplores.org/collections/explainers) or open the latest print issue of *Science News Explores* to find an Explainer article that highlights a topic you teach.

To search the online Explainer archive:

* Go to [the page where all Explainers](https://www.snexplores.org/collections/explainers) are posted by publication date and scroll through the stories.
* Go to [the search page](https://www.sciencenews.org/learning/search) on the Science News Learning Educator portal, type in “Explainer:” and a topic you are interested in (for example, “Explainer: internet”) and press submit, then right click on the top of the search box where it says “Search Explainer on Science News Explores” and open the window in a new tab.
* You can also search for the keyword “Explainer” and filter by a topic or NGSS code.

**What article are you using? Paste the URL for the online version below.**

**What is the main topic, concept or phenomena you want your students to take away?** \*Tip: Use the Power Words at the end of the online article to identify related topics that you may not have thought about initially.

**What are a couple of related topics that you want students to understand?**

**How is this topic relevant to student experiences/interests?**

**Step 2: Engage students with the Explainer topic**

Many Explainers have a question in their title. Write that question or a similar one on the board and ask your students to individually write a one-sentence answer to the question in the first 10 minutes of class using only their prior knowledge. Then have students pair up, share their one-sentence answer with their partner and write down a list of questions that the partnership has about the topic. Give partners about 5 to 10 minutes for this activity.

**Step 3: Have students read the article using a literacy practice**

Engage students in a literacy practice, such as the [Cornell Note-taking System](https://www.sciencenews.org/learning/guide/component/literacy-practice-cornell-note-taking-system), and have them read either the print or online Explainer article while using the literacy practice. The Cornell Note-taking System asks students to summarize their reading after taking notes and posing questions during reading. Have students share their summaries with their same partner and ask partners to try to answer the questions that they posed before and during the reading. Discuss any outlying questions with the entire class.

If multimedia resources are available with the online article version, consider showing the video, data visualization or image and have student pairs explain what they are seeing by answering a question you pose, like “Why is this topic important for the public to know? or “How does this topic relate to other topics we have studied this year?” Or by asking students to provide a caption for the image or data visualization.

**Step 4: Have students extend their knowledge to another example**

If class time allows, or for homework, have students search the [*Science News*](https://www.sciencenews.org/) or [*Science News Explores*](https://www.snexplores.org/) archives for a recent news story or science research application that applies to this concept. Ask students to cite their article and write a paragraph to explain how the recent article applies the concept or topic. Grade the homework assignments, or have students share their examples during the next class period.