

Obtaining, Evaluating & Communicating Activity #1: Using Primary Source Material

Using the model of instruction shown in the [Literacy in Physics: Reading a Primary Source](#) video from TeachingChannel.org, provide learners one of the following primary source articles:

- [Lake Trout: Changes in lake trout growth associated with *Mysis relicta* establishment: a retrospective analysis using otoliths](#). (PDF format)
- [Mountain Pine Beetle: Multi-temporal analysis reveals that predictors of mountain pine beetle infestation change during outbreak cycles](#). (PDF format)
- [Gold Mining: Mercury-free, small-scale artisanal gold mining in Mozambique: utilization of magnets to isolate gold at clean tech mine](#). (PDF format)

Introduce learners to the article. Lead a discussion about the differences between primary and secondary/tertiary sources. Ask learners to read/skim the article and identify 5-10 vocabulary words they are not familiar with and define the words for themselves. Ask learners to identify the problem presented in the article, the steps undertaken to understand the problem and the conclusion. Encourage learners to ask additional questions. Invite learners into a discussion about the article.

Related Crosscutting Concepts:

- [Patterns](#)
- [Cause & Effect](#)
- [Stability & Change](#)

Related Disciplinary Core Ideas:

- [Core Idea LS1: From Molecules to Organisms: Structures and Processes](#)
 - [LS1.A: Structure and Function](#)
 - [LS1.B: Growth and Development of Organisms](#)
 - [LS1.C: Organization for Matter and Energy Flow in Organisms](#)
 - [LS1.D: Information Processing](#)
- [Core Idea LS2: Ecosystems: Interactions, Energy, and Dynamics](#)
 - [LS2.A: Interdependent Relationships in Ecosystems](#)
 - [LS2.B: Cycles of Matter and Energy Transfer in Ecosystems](#)
 - [LS2.C: Ecosystem Dynamics, Functioning, and Resilience](#)
 - [LS2.D: Social Interactions and Group Behavior](#)
- [Core Idea ETS2: Links Among Engineering, Technology, Science, and Society](#)
 - [ETS2.A: Interdependence of Science, Engineering, and Technology](#)
 - [ETS2.B: Influence of Engineering, Technology, and Science on Society and the Natural World](#)