



MINDS-ON 2: DNA Barcoding 101

Suggested Timing: 40 minutes

Students will be introduced to the topic of DNA barcoding by viewing the Introduction to DNA Barcoding PowerPoint presentation and answering questions based on the presentation.

Prior Knowledge and Skills

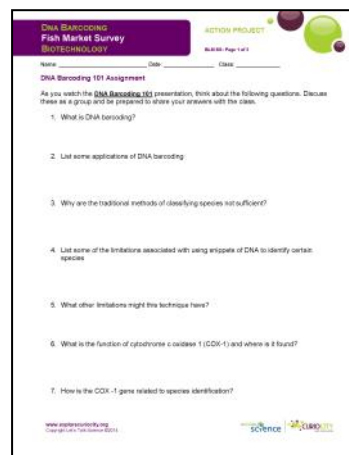
- Understanding of DNA structure and function
- Basic understanding of Linnaean classification system from previous grades

Success Criteria

- Quality responses are provided during group discussions
- Complete and accurate responses to assignment

DNA Barcoding 101 PowerPoint
BLM M3: DNA Barcoding 101 Assignment
DNA Barcoding 101 - Answer Page (for teacher use)

- Students will watch the **DNA Barcoding 101 PowerPoint** created by Amanda Naaum from the Centre for Biodiversity Genomics. Notes are provided to guide what to discuss for each PowerPoint slide.
- Encourage students to take notes during the presentation.
- Following the presentation, have students answer the assigned questions based on the presentation using a Think-Pair-Share strategy and record their responses on **BLM M3: DNA Barcoding Assignment**. The responses on paper could be handed in for assessment.
- Suggested responses to the assignment questions can be found on **DNA Barcoding 101 - Answer Page**.



CONNECTING TO CONTENT ON CURIOCITY

- [Go Barcoding! Filling the Stadium of Life](#) (Article 2013)
- [So what's your barcode?](#) (Article 2011)
- [DNA Barcoding at the Toronto Zoo](#) (Video 2012)
- [The History of DNA Barcoding](#) (Video 2012)
- [Biotechnology & Preserving Biodiversity](#) (Video 2013)
- [Classification of Life – From Linnaean Taxonomy to DNA Barcoding](#) (Backgrounder 2012)
- [DNA Day Experts answer your questions about taxonomy and DNA barcoding](#) (Q&A 2013)

ADDITIONAL INFORMATION

- <http://ibol.org/> (Accessed Feb. 28, 2018)
 Learn more about the **International Barcode of Life** project and how it is impacting real-world problems.
- http://www.ted.com/talks/e_o_wilson_on_saving_life_on_earth.html (Accessed Feb. 28, 2018)
 As E.O. Wilson accepts his 2007 TED Prize, he makes a plea on behalf of all creatures that we learn more about our biosphere -- and build a networked encyclopedia of all the world's knowledge about life.