Helpful Resource for the Teacher
This would be a good resource for teachers and students, there is a great glossary on this website.

The STR Database can be reached at https://strbase.nist.gov/

“Tandemly repeated regions of DNA are typically classified into several groups depending on the size of the repeat region. Minisatellites (variable number of tandem repeats, VNTRs) have core repeats with 9-80 bp, while microsatellites (short tandem repeats, STRs) contain 2-5 bp repeats. The forensic DNA community has moved primarily towards tetranucleotide repeats, which may be amplified using the polymerase chain reaction (PCR) with greater fidelity than dinucleotide repeats.”

Please note for the purpose of teaching basic understanding of the STR DNA Fingerprinting process the activity models only Simple STR’s. Tetranucleotide repeats are used more commonly in testing however, 2,3 & 4 nucleotide repeats were used to demonstrate the concept.

Students should always write the smaller number of repeats first, and point out that if the numbers match only one peak will be evident on the electropherogram.
This was designed to be done as a group to encourage collaboration but I could easily be done as an individual assignment.

https://www.youtube.com/watch?v=9bEAJYnVVBA Video clip explaining the basics. Gives overview of stats less than 2 min.

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**STR Results**

- Individuals will differ from one another in terms of their STR profile
- STR genotype can then be put into an alpha numeric form for search on a DNA database

What would be entered into a DNA database for searching:
16,17-17,18-21,22-12,14-28,30-14,16-12,13-11,14-9,9-11,13-6,6-8,8-10,10

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