

FAIR data principles: homework assignment with hands-on activities

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The following problems will help you better understand FAIR data principles and be able to use them in your own work. Before starting with the assignment make sure you go over the accompanying lecture. For the assignments below, you will work with the citrination repository: <https://citrination.com>. You will need to create a free account.

Data exploration. After logging in citrination, use the search functionality to search for your favorite materials property. Explore the entries and answer the following questions.

Problem 1. Select what you consider one of the most complete entries and provide:

- a) The value(s) of the property of interest. (You can include a snapshot of the data)
- b) What metadata is included with the entry? Is this metadata and provenance enough to fully characterize the material?
- c) What is the unique identifier of the data in question?

Problem 2. Repeat Problem 1 for a data entry you consider of poor quality. What metadata is missing?