## Lesson 4: Estimating Probabilities Through Repeated Experiments <br> Cool Down: Fiction or Non-fiction?

A librarian is curious about the habits of the library's patrons. He records the type of item that the first 10 patrons check out from the library.

| patron | item type |
| :---: | :---: |
| 1 | fiction book |
| 2 | non-fiction book |
| 3 | fiction book |
| 4 | fiction book |
| 5 | audiobook |
| 6 | non-fiction book |
| 7 | DVD |
| 8 | non-fiction book |
| 9 | fiction book |
| 10 | DVD |

Based on the information from these patrons ...

1. Estimate the probability that the next patron will check out a fiction book. Explain your reasoning.
2. Estimate the number of DVDs that will be checked out for every 100 patrons. Explain your reasoning.
