

Skills Practice Problems

STN[®] on the WebSM – LIS Training Program web login site: <http://stnweb.cas.org/?USERTYPE=LIS>

- 1. In the CAplusSM database, perform keyword searches on the following questions.** Use D SCAN to evaluate some answers and determine some additional terms that could be added to the search strategies to improve their comprehensiveness. Display the bibliographic information and abstract from three records from each search.
 - A.** Find information on the flavor or aroma components of blackberries.
 - B.** What has been determined about the amount of ammonia or ammonium salts that was released by the 1906 eruption of Vesuvius?
 - C.** Locate publications and patents dealing with research that Angela Belcher has done on nanowires that involve a virus known as M13 bacteriophage. What product is being targeted to use this new technology?
 - D.** Retrieve literature on genetic engineering applied to developing tomatoes with increased freeze protection. Note that freeze protection is also talked about using the terms “antifreeze protein.”
 - E.** What kinds of materials have been used to adulterate saffron?
 - F.** A recent law requires mattresses to resist an open flame for at least 30 minutes before igniting in order to reduce the number of deaths from house fires. Locate patents on this technology issued after 2006. Brainstorm synonyms for your search terms to be as comprehensive as possible.
- 2. How many patents about hydrogen fuel cells does Takahiro Kuriwa have?**
 - Remember to review the article indexing to obtain additional search terms
 - Compare the results of at least two databases that contain patents (such as CAplus, USPAT2, LWPI, or USPATFULL)
 - Display three patent titles from each database
- 3. Find information in the MEDLINE[®] database on job stress in the dental profession.**
 - Use various proximity operators to adjust the size and focus of your answer set
 - Use the appropriate no cost display format to evaluate and improve your answer set
 - Relevance rank the final answer set and display the titles of the 5 most relevant answers

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- 4. Choose a company of interest to you and find a recent patent filed by this company.**
 - Use the CAplus company name thesaurus and the Derwent Patent Assignee Codes (PACOs) in LWPI to identify variations on this company name and or subsidiaries
 - Using this information, do a multifile patent search for this company in CAplus and LWPI
 - **No solution for this is provided as the answers will vary, but check your process against the Syngenta example in the workbook**

- 5. Find patents on golf ball covers held by Acushnet.**
 - HINT: Search in at least three of the following databases: CAplus, LWPI, USPAT2, or EPFULL to compare your results

- 6. What is the structure of the drug sumatriptan?**
 - What other names is this drug known by? (HINT: Remember to start in the CAS REGISTRYSM file then cross over to CAplus to find relevant references)
 - Are there any references discussing its preparation? (HINT: The preparation role (PREP) might be helpful here)
 - If so, what are the names of some companies who have reported methods of preparing it?
 - Have any of the companies received a patent for this?

- 7. Find articles on the Type 2 diabetes drug Byetta and its effect on weight loss.**
 - What other names is this drug known by?
 - Search in both CAplus and MEDLINE (HINT: Remember to remove duplicates before displaying the first three answers from each database)

- 8. In 2005, a number of petroleum companies announced their intent to eliminate MTBE from gasoline due to drinking and ground water contamination concerns and continuing liability exposure.**
 - Find three journal review articles on this topic in CAplus. (HINT: Use both left and right truncation (SLART) to enhance your search retrieval for water)

- 9. Choose a drug or chemical of your choice.**
 - Locate other names that the drug or chemical are known by, then search in relevant databases and find recent patents and journal articles
 - **No solution for this is provided as the answers will vary, but check your search strategy against the multifile substance-based search in the workbook**

If you need search assistance beyond the Skills Practice Solutions, contact your instructor or the CAS Help Desk at 800-753-4227 – which is available at no cost to STN LIS participants.

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