**Pharmacy STEM Activities List**

The following is a list of activities that can be used to spark prospective students’ interest and demonstrate scientific aspects of the various career pathways in pharmacy. These activities can be use during summer programs, exhibiting at college/career fairs, classroom visits, etc.

Direct links to the source of each activity that provide detail of the supplies needed, instructions, and notes can be navigated to by clicking on the title of the activity.

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| **[Extract DNA From a Strawberry](http://gemsclub.org/yahoo_site_admin/assets/docs/StrawberryDNAExtra.4395135.pdf)**  Learning objectives   * Demonstrate how to extract DNA and why each step is necessary due to complex organization of DNA cells. * Explain how pharmacist’s knowledge of DNA aids in medication use. | | |
| [**Make Hand Sanitizer**](https://www.thoughtco.com/make-your-own-homemade-hand-sanitizer-606145)  Learning objectives   * Demonstrates sterile compounding. * Explain how pharmacists work in sterile environments. | | |
| [**Chill Pills**](https://thestayathomechef.com/homemade-gumdrops/)  Learning objectives   * Demonstrate a form of compounding to make candy “pills” using silicon molds. * Silicon pill molds can be purchased [HERE](https://www.amazon.com/Dragonfly-Homemade-Silicone-Process-Homemake/dp/B076HG6RMB/ref=sr_1_6?crid=3N4O7OIIGT4OD&keywords=silicone+pill+mold&qid=1571773524&s=arts-crafts&sprefix=si%2Carts-crafts%2C130&sr=1-6) (note: you can substitute the recipe to also make chocolate “pills”). | | |
| [**Honey Lemon Ginger Cough Drops**](https://www.tastyeverafter.com/honey-lemon-ginger-cough-drops/)  Learning objectives   * Demonstrates compounding of natural ingredients for common illnesses. * Explain how pharmacists assist in patient care with illnesses such as colds. | | |
| [**How Pills Dissolve in the Body**](https://www.teachengineering.org/activities/view/van_feelbetter_lesson01_activity01)  Learning objectives   * Describes what happens to a pill in the human stomach. * Explain which pill form is absorbed the fastest in the body. | | |
| [**Drug Emulsion**](https://teachchemistry.org/classroom-resources/salad-dressing-science-emulsions)  Learning objectives   * Demonstrate drug emulsion and understand polarity. * Explain pharmacists understanding of drug properties. | | |
| [**Build a Candy DNA**](https://littlebinsforlittlehands.com/candy-dna-model-edible-science-activitiy/)  Learning objectives   * Construct the cells that make up the human body DNA. * Discuss pharmacogenomics. | | |
| [**Build a Functioning Heart Model**](https://www.steampoweredfamily.com/activities/heart-model-heart-stem/)  Learning objectives   * Understand how blood flows. * Discuss cardiology pharmacy. | | |
| [**How to Read a Prescription Label**](https://www.edu.gov.mb.ca/k12/cur/physhlth/frame_found_gr11/rm/1_su.pdf)  Learning objectives   * Become familiar with important information on prescription labels. * Discuss how pharmacists counsel patients on medication use. | | |
| [**Pokémon or Drug**](https://www.sporcle.com/games/LinkinMarc/Drug_or_Pokemon)  Learning objective   * Become familiar with the various drug names and use for treatment.   *This electronic quiz can also be conducted as a large group activity where you project the name of the drug or Pokémon on a projector screen and have students move to each side of the room (one side represents drug the other side represents Pokémon).* | | |
| [**Pharmacy Feud**](https://drive.google.com/open?id=1fzLV0YFnfDpqXO-kpF7mIpXF8gs4oyLV)  Learning objective   * Learn more about pharmacy practice, patient care, and medication.   *This activity was developed by Manchester University and presented during the 2019 Admission Workshop* | | |
| [**Pharmacy Jeopardy**](https://drive.google.com/file/d/1VUKnlRX7ktB9Xa9YWtyo_Mq2y4_kDSE_/view)  Learning objective   * Learn more about pharmacy practice, patient care, career specialties, PharmCAS admissions, and much more. | | |
| |  | | --- | | [**Which Pharmacy Career is The Best Fit For You?**](https://pharmacyforme.org/which-pharmacy-career-is-the-best-fit-for-you/)  Learning objective   * Learn about different pharmacy career pathways. * Self-assess personal qualities that may be a good fit for a career on pharmacy.   *Oregon State University College of Pharmacy uses the pharmacy career quiz at recruitment fairs in a very cool way. The students take the quiz at the table using an iPad and once the results are displayed they have printed stickers of each pharmacy career pathway to give to the student!* | | | |
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| [El Civics](http://elcivics30.pbworks.com/w/page/15819988/FrontPage) provides lesson ideas and activities specifically related to pharmacy with topics related to: over the counter medications, charting medicine, talking with pharmacist role play, etc. | | |
| [Generation Rx](https://www.generationrx.org/toolkits/teen/) is a partnership between College of Pharmacy at The Ohio State University and the Cardinal Health Foundation to provide open source educational materials that anyone can use to help prevent the misuse of prescription drugs. There are activities for every age group; elementary, teens, college, and adult. | | |
| [STEM Works](http://stem-works.com/subjects/17-medical-innovations/activities) is an online resource with worksheets, games, and activities related to STEM and healthcare. | | |
| [Teach Engineering](https://www.teachengineering.org/) is a digital library comprised of curricula for K-12 students. Browse the free collection of resources which focus on math, physics, and applied science activities. | | |