

## ***Be a Chemist!* Additional Resources**

**In this guide, you will find suggestions of books, digital resources like videos and online games, and additional activities that relate to each of the activities included in *Be a Chemist!***

These resources may connect to the featured career, the relevant technology or science concepts, or otherwise relate to the story of each activity.

While these resources are meant to be used by all *GSK Science in Summer™* learners, the resources that are better for older learners (4<sup>th</sup>-6<sup>th</sup> grade) are marked with an asterisk (\*).

### **BIG IDEAS**

#### **What is Chemistry?**

**Chemistry is the “study of stuff” — what things are made of, how they behave, and how they change. Chemists study questions like:**

- What chemicals make up the materials in the world around us?
- How are substances alike or different?
- What happens when we mix substances together—do they stay the same or create something new?

**All substances in our world are made of chemicals—and chemists help us understand and use them safely and effectively. Chemists might:**

- Test products to ensure they’re safe for people to use.
- Experiment with substances to create new materials.
- Study how medicines work to keep people healthy.
- Monitor air, water, and soil to keep our planet clean.

## Books

### General Science and Chemistry

- [Chemistry for Curious Kids: An Illustrated Introduction to Atoms, Elements, Chemical Reactions, and More!](#) By Lynn Huggins-Cooper
- [What's Chemistry All About?](#) by Alex Frith
- [Why Is Milk White?: & 200 Other Curious Chemistry Questions](#) by Alexa Coelho & Simon Quellen Field
- [Ada Twist, Scientist](#) by Andrea Beaty

### Chemistry Experiments

- [11 Experiments That Failed](#) by Jenny Offill & Nancy Carpenter
- [Real Chemistry Experiments: 40 Exciting STEAM Activities for Kids](#) by Edward Zovinka
- [The Everything Kids' Science Experiments Book](#) by Tori Robinson

### Molecules and Matter

- [Bartholomew and the Oobleck](#) by Dr. Seuss
- [Be a Water Scientist: Question, Experiment, Discover](#) by Ruth Owen
- [Chemistories](#) by Maya Mourshed
- [The Story of Salt](#) by Mark Kurlansky (Author), S. D. Schindler (Illustrator)
- [Change It! Solids, Liquids, Gases and You](#) by Adrienne Mason

### Food Chemistry

- [Awesome Kitchen Science Experiments for Kids: 50 STEAM Projects You Can Eat](#) by Dr. Megan Olivia Hall PhD MEd
- [Science Experiments You Can Eat](#) by Vicki Cobb

### Forensic Chemistry

- [I Can Be a Science Detective: Fun STEM Activities for Kids](#) by Claudia Martin
- [National Geographic Kids: Solve This! Forensics: Super Science and Curious Capers for the Daring Detective in You](#) by Kate Messner

## Digital Resources

- Video: [Forensic Science](#) by Big Bang Academy Kids
- Video: [Fun as Slime](#) by Big Bang Academy Kids
- Video: [How Lipstick is Made](#) by Mission Unstoppable
- Video: [How to Make Color Changing Slime](#) by Camp GoldieBlox
- Video: [How Do Mushrooms Become Medicine](#)

## Additional Activities

### Forensic Chemist

- [Crime Scene Chemistry](#)
- [Food Coloring Chromatography](#)
- [Strawberry DNA Extraction](#)

### Cosmetic Chemist

- [Cabbage Colors](#)
- [Dissolving M & Ms](#)
- [Colors on the Move](#)
- [Milk Rainbow](#)

### Materials Chemist

- [Diaper Chemist](#)
- [Turn Milk Into Plastic](#)
- [Shaving Cream Exploration](#)

### Medicinal Chemist

- [Elephant Toothpaste](#)
- [Fizzy Candy Exploration](#)
- [Mentos Experiment](#)

### Water Chemist

- [Oil Spill Clean Up](#)
- [What's in the Water](#)
- [Wonder of Water](#)
- [Walking Water](#)