



YOU DON'T HAVE TO BE IN A SCIENCE LAB TO LEARN ABOUT DNA THIS YEAR. EXPLORE GENETICS AT HOME WITH THESE FUN ACTIVITIES!

## Experiments with Common Household Ingredients



### *Extract DNA from a Strawberry*

Watch this video featuring Carla Easter, PhD and Eric Green, MD, PhD from the National Human Genome Research Institute demonstrating how you can retrieve DNA from any fruit you have in the back of your fridge!

All you need is:

- Frozen fruit (like strawberries!)
- Plastic sandwich bag
- Dish soap
- Salt
- Water
- Coffee filter
- Rubbing alcohol

<https://www.youtube.com/watch?v=hOpu4iN5Bh4>

Recommended for grades K-8



### *Watch Germs Spread*

Watch this video from NephCure Kidney International to see how soap can help get rid of germs. While it doesn't tell you exactly how soap works on germs like COVID-19, it can help show kids how washing hands really helps! Accompany this with a video by Vox showing how hand soap destroys viruses like COVID-19.

- NephCure Kidney International demo: [https://www.youtube.com/watch?v=KirHm\\_sYfl](https://www.youtube.com/watch?v=KirHm_sYfl)
- Vox explanation: <https://www.youtube.com/watch?v=-LKVUarhtvE&t=2s>

Recommended for grades K-5

## Online Activities



### *Plan for a mission to the moon of Neptune using genetic information of your crew*

Researchers at HudsonAlpha and Lockheed Martin partnered to develop a game of space exploration called Touching Triton. Can you ensure the health and safety of your crew for the next twenty years on their spaceship? Learn about genetic factors influencing common disease in this game.

<http://triton.hudsonalpha.org/>

Recommended for grades 9-12



### *Talk to a Real Live Genetics Expert*



ASHG has a group of over 100 genetics experts ready and waiting to talk to you! Contact one of the members of our Genetics Engagement and Education (GENE) Network to arrange a video call. If you'd rather just email a few questions, they can answer those too!

<https://www.ashg.org/discover-genetics/gene-network/>

Recommended for all ages