Citizen Science and STEM Learning Projects for Kids

Potential Projects Perfect for Kids at Home with Teleworking Parents

- Safe to do at home or outside with social distancing in mind
- Educational curriculum for a targeted age group
- Non-digital versus requiring a laptop versus smartphone

Articles Promoting Citizen Science

- 7 NSF-supported STEM Resources that are Perfect for At-Home Learning
- You Can Celebrate Citizen Science Month From Home
- Citizen Science-ing Where You Are
- Engaging Volunteers Online
- Cooped up at Home? Here Are 7 Ways to Take Part in Online Science Projects
- 30 citizen science projects looking for volunteers to help protect our environment

Federal Projects to Highlight on CitizenScience.gov

- The Crowd and The Cloud (NSF)
- Foldit Coronavirus Binder Design (NIH, NSF)
- NASA STEM Engagement | Future Engineers | Floating Forests | Backyard Worlds: Planet 9 | Planet Hunters TESS | Stardust@Home (NASA)
- USGS Resources for Teachers & Learning from Home (OSQ I, YES)
- Outside Science (Inside Parks) (NPS)
- USGS Resources for Teachers & Learning from Home (USGS)
- National Phenology Network - Nature’s Notebook (Education Program) (USGS)
- Project eTrout | Linking Research and Education with Virtual Reality (USGS)
- City Nature Challenge 2020 with COVID-19

Interagency Projects (not included in each agency list)

- Foldit Coronavirus Binder Design (NIH, NSF)
- Nature’s Notebook (USGS, NSF, NOAA, NPS)
- iNaturalist (Platform used to support projects by NPS and NSF)
- CoCoRaHS Community Collaborative Rain, Hail and Snow Network (NOAA, NSF, BLM)
- Zooniverse (NSF, NASA)
- iSeeChange (NASA, NOAA)
- Old Weather (NOAA, NARA)
- Bird Banding Lab (USGS, BLM, NPS, FWS)
- North American Breeding Bird Survey (USGS, BLM, NPS, FWS)
- MapGive (DOS, USAID, Peace Corps)
- Citizen Science Grid: Wildlife@home (NSF, USGS)
- Cyanobacteria Monitoring Collaborative: Bloomwatch App | Cyanoscope | Cyanomonitoring (USGS, EPA)
- Earth Challenge 2020 (State Dept, Wilson Center)
- CitizenScience.gov Catalog

April - Citizen Science Month

- SciStarter (Filter by Age Group in Project Finder)
  - SciStarter Citizen Science Month April 2020
  - SciStarter Event Finder
  - What is Citizen Science? | SciStarter Home School
- Citizen Science Association Citizen Science Month

U.S. Geological Survey (USGS)

- USGS Resources for Teachers & Learning from Home
- National Phenology Network - Nature’s Notebook (see Education Program)
  - Featured on PBS Kids Show SciGirls in Flower Power Episode
- Project eTrout | Linking Research and Education with Virtual Reality
- The National Map Corps | Mapping Challenges
- North American Breeding Bird Survey
- Bird Banding Lab
- USGS Projects on CitizenScience.gov

National Park Service (NPS)

- Outside Science (Inside Parks)
- NPS Citizen Science | Internet Citizen Science Databases
- NPS Projects on CitizenScience.gov

National Aeronautics and Space Administration (NASA)

- Future Engineers | Floating Forests | Backyard Worlds: Planet 9 | Planet Hunters TESS | Stardust@Home
- NASA STEM Engagement
- NOAA Projects on CitizenScience.gov

National Institutes of Health (NIH)

- Eyewire - Game to Map the Brain
- CitSciBio - Biomedical Citizen Science Hub
- NIH Projects on CitizenScience.gov
- NIH-NLM Projects on SciStarter

Environmental Protection Agency (EPA)

- Deep Lake Explorer | Crowd the Tap (SciStarter)
- EnviroAtlas Educational Materials
- EPA Projects on CitizenScience.gov

National Oceanic and Atmospheric Administration (NOAA)

- CrowdMag
- NOAA Projects on CitizenScience.gov
- NOAA Projects on SciStarter

National Science Foundation (NSF)

- NSF STEM Apps | iDigBio
- SciStarter (Filter by Age Group in Project Finder)
  - What is Citizen Science? | SciStarter Home School
  - April - Citizen Science Month
  - You Can Celebrate Citizen Science Month From Home
  - Citizen Science-ing Where You Are
- PBS Kids SciGirls Citizen Science
  - Flower Power Episode
- PBS Nature American Spring Live - Citizen Science
- How To Videos for Citizen Scientists
- NSF Projects on CitizenScience.gov

Smithsonian Institute (SI)

- eMammal | Invader ID | Transcription Center | Neighborhood Nestwatch
- SI Projects on CitizenScience.gov
Citizen Science Videos and Portals

- The Crowd and The Cloud
- PBS Kids SciGirls Citizen Science | Flower Power Episode
- Caren Cooper “Citizen Science: Everybody Counts” TEDxGreensboro Talk
- NPS Outside Science (Inside Parks)
- CitizenScience.gov
- Zooniverse - People Powered Research
- CitSci.org Citizen Science Projects During COVID-19
- Anecdata - Collecting Observations of Our Changing World
- City Nature Challenge 2020 | iNaturalist | eBird

Citizen Science Projects and Educational Resources

- USGS Learning from Home
- National Phenology Network | Nature’s Notebook Education Program
- USGS The National Map Corps | Step Up to the Map Challenge
- USGS Project eTrout | Links Research & Education with Virtual Reality
- AmericaView Education / Shareable Resources: Remote Sensing Imagery Game | Google Earth Engine Tutorials | Land Cover Lessons | Earth Image Puzzles
- NASA @ Home | STEM Engagement | STEM Connection Blog | Future Engineers | Floating Forests | Backyard Worlds: Planet 9 | Planet Hunters TESS | Stardust@Home | Globe Observer Land Cover App
- NOAA Oceans Video Lab | CrowdMag

Citizen Science Articles and Resources for Learning at Home

- 7 NSF-supported STEM Resources Perfect for At-Home Learning
- NOAA - Staying in? Keep Learning with Science Activities that Kids and Families Can Do at Home
- Citizen Science Month - SciStarter
- You Can Celebrate Citizen Science Month From Home
- Citizen Science-ing Where You Are
- Discover Magazine - Cooped up at Home? Here Are 7 Ways to Take Part in Online Science Projects and Activities
- Citizen Science: How You Can Contribute to Coronavirus Research Without Leaving the House

National Archives and Records Administration (NARA)

- Citizen Archivist

US Patent and Trade Office (USPTO)

- Kids and Educators
- Journeys of Innovation
- Science of Innovation Video Series

Department of Defense (DOD)

- SciTech Futures (Department of the Army)