



## STEAM-Powered Classroom

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## Homeschool End-of-Year Report Example

This information is intended to assist homeschoolers in creating their own end-of-year reports. Please do not use it for any other purpose. This is an excerpt of our report and does not fully reflect our work. Though I have included the completed information for the first three topics to provide an idea of the kind of detail I record, the remaining topics have only their titles. If you have any questions, feel free to email me at [gwyn@STEAMPoweredClassroom.com](mailto:gwyn@STEAMPoweredClassroom.com).

## Homeschool Summary **School Year** **Student Name, age**

### Math

**Topics Covered:** Algebra I, Fractals, Math logic puzzles

**Resources and Activities:** Khan Academy, Art of Problem Solving (Alcumus module and Algebra I textbook), PBS documentary on fractals, Vi Hart, Math Bafflers, gift wrapping lessons.

### History

**Topics Covered:** European Renaissance through Age of Enlightenment (1800)

**Resources and Activities:**

#### Renaissance Unit

- Week 1: General Overview/plotted timeline (used Schlessinger's Renaissance for Kids DVD series throughout the 6 weeks, various library books on the Renaissance, Horrible Histories Stuarts and Tudors books)
- Week 2: Art (The Renaissance Art Game, various picture book biographies of Renaissance artists including Raphael, Michelangelo, *Art Around the World in the Time of Michelangelo*)

- Week 3: Science and Medicine (*Galileo's Leaning Tower Experiment* by Wendy McDonald, *Pippo the Fool*, *Poop Happened*, discussion of Kepler and the laws of planetary motion, general research, watched Ever After for pizza movie night, interactive computer game that lets you make cathedrals and explore various building techniques)
- Week 4: DaVinci (DaVinci paddle boat and drum machine kits, *Leonardo: Beautiful Dreamer*, Magic Tree House Research Guide on DaVinci, *Leonard's Machines* by Tadder; wrote essay)
- Week 5: Exploration and the Reformation (examined Vasco de Gama and Columbus, looked at exploration maps, held debate between Martin Luther and the pope)
- Week 6: Royals (*Kings and Queens of Britain* by Usborne, watched Elizabeth I History Channel documentary)

### Age of Enlightenment

- Week 1: General Overview (*Horrible Histories Slimy Stuarts*, *Horrible Histories Gorgeous Georgians*, *Take Me Back* (DK Publishers), *Poop Happened* by Sarah Albee, *History of the World* (DK), *Birth of Modern Nations: Europe in the 17th Century* by John Malam, *Off With Their Heads! All the Cool Bits of British History* by Martin Oliver, and a fabulous introduction lecture by Professor Jamie Ridenhour.
- Week 2: Philosophy (Philosophy puppet show, *A Young Person's Guide to Philosophy* by Jeremy Weate (DK Publishing), *Philosophy* (DK Eyewitness Companions) by Stephen Law, *Philosophy for Kids* by David White, *Philosophy for Beginners* (comic format) by Richard Osborne), Teaching Company DVDs lectures: Descartes-Hobbes
- Week 3: Science (Isaac Newton, Lavoisier, Euler, Ben Franklin, watched documentary on Isaac Newton, read Isaac Newton biography by Kathleen Krull)
- Week 4: Music and Art (William Hogarth study; art activities in the downtown area)
- Week 5: American Revolution (Liberty's Kids DVD series)

## Science

**Topics Covered:** Earth Science, Physical Science, Science Olympiad (Trebuchet, Space, and Rube Goldberg events), Rube Goldberg projects, scientific method

### Resources and Activities:

- Took one semester of Earth Science at public middle school
- Visited Shedd Aquarium and the Field Museum in Chicago
- Watched online videos and The Way Things Work DVDs on simple machines
- *Forces and Motion Science Fair Projects* by Robert Gardner – worked through most of this book doing various experiments that explored all the simple machines (pendulums, friction, springs, circular motion and trajectory, etc.)
- *Zombies and Forces and Motion* by Mark Weakland
- Disney DVDs on energy, trajectory, etc.
- Velocity experiments using Vernier data collector
- Great Courses Joy of Science lectures (fission and fusion, life cycle of stars)
- Read *Physics of the Future* by Michio Kaku
- Rube Goldberg planning and building (falling pendulum, etc.)
- Bill Nye DVDs (pressure, motion, etc.)
- Astronomy study for Science Olympiad (focus on stars)
- TED-Ed talks
- Contraptions kit building
- Attended university talk by Jack Bacon, “futurist”
- Built rockets on Lego/NASA interactive site

**Reading/Writing/Literature**  
**Physical Education**  
**Home Ec**  
**Music**  
**Social Consciousness Building**  
**Logic and Philosophy**  
**Language**  
**Leadership and Public Speaking**  
**Entrepreneurship**  
**Other**