

# CIRCULATING STEAM KITS? YES, YOU CAN!



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# Welcome!

- Been a librarian 32 years.
- Mostly as a school librarian Pre-12<sup>th</sup> grade
- A short time in a college library
- Twelve years (and running) in a public library
- I am NOT a scientist

# Mt. Angel, OR & Its Library

- Small town (pop. 3500) in the Willamette Valley, est. 1893
- Known for annual Oktoberfest in September, the largest of its kind in the Pacific Northwest (400,000 visitors)
- The Library:
  - 4,100 square feet; 30,000 items in the collection
  - Part of the Chemeketa Cooperative Regional Library Service (18 libraries in 3 counties)
  - Open 37 hours per week
  - 4 staff=2.52 FTE



# What are some attitudes that cause hesitation about circulating STEAM Kits?

- Cost
- Managing the pieces
- What to include and where to get it
- How to organize
- Time
- Don't feel qualified (not a scientist)



# Today's Goals

- Define what a STEAM Kit is
- Topics/themes
- Purchasing
- Processing/Cataloging
- Managing pieces/Organization/Circulation Policies
- Possible Funding Sources
- Questions



# What is a STEAM Kit?

- Hands-on interactive and creative learning for kids (and adults)
- STEAM Concepts: Science, Technology, Engineering, Art, Math
- Includes any or all of the following:
  - List of contents
  - Learning games/manipulatives
  - Hands-on activities
  - Non-fiction books
  - Equipment
  - Supplemental suggested learning activities
  - A notebook to record observations

# Topics/Themes

- Do NOT recreate the wheel. Freely borrow from other libraries that have already created STEAM Kits:  
<https://www.anchoragelibrary.org/services/services-for/kids/stem-kits/>
- ANYTHING STEAM related
- Ask [kids](#), parents, teachers, homeschoolers...
- Exploration Space



# Purchasing

- Amazon
- Geyer Instructional Products  
<https://www.geyerinstructional.com/>
- Brown Dog Gadgets <https://www.browndoggadgets.com/>
- Kid Wind <https://www.kidwind.org/>
- 4-H <https://shop4-h.org/>
- Lakeshore <https://www.lakeshorelearning.com/>
  - Commercial STEAM Kits. Have not used.
- Others?



# Activities Sources

- StarNet <https://www.starnetlibraries.org/>
- STEM Activity Clearinghouse  
<https://clearinghouse.starnetlibraries.org/>
- SciGirls <https://opb.pbslearningmedia.org/collection/scigirls/>
- Brown Dog Gadgets <https://www.browndoggadgets.com/>
- Others?

# Processing/Cataloging

- Label everything (utilize Volunteers)
- Folder with content list and supplemental activities
- Cataloging: See supplemental materials. (Call or email me with questions.)

# Managing pieces/Organization

- Brochure with pictures and contents
- Containers with handles
- Luggage tags
- Lots of pieces? Use a digital kitchen scale
- Utilize Volunteers
- If possible, buy two of everything (to easily replace lost items)

### Kit Contents & Replacement Costs

Item Type	Description	Replacement Cost
Object	Celestron 70mm Travel Scope with backpack	\$128
Leaflet	Celestron Telescope Instructions	N/A
Object	Red Flashlight	\$9
Object	The Night Sky, 40°-50° Star Finder	\$12
Book	<i>50 Things to See With a Telescope—Young Stargazer's Guide</i>	\$17
Book	<i>Telescopes for Kids</i>	\$8
Book	<i>50 Things to See With a Telescope—Kids</i>	\$14
	Packaging and Processing Fee	\$25
	<b>Total Kit Replacement Cost</b>	<b>\$213</b>



**Please do not attempt to clean the lenses!**  
Cleaning the lenses can inadvertently scratch them.  
Notify library staff if they need to be cleaned.

**Please verify that all parts are present before  
returning to the Circulation Desk.**

Did you enjoy this kit? We'd love to see how you used it! Tag us on social media and let us know! #MTAstem, #STEAMequity

Twitter: @PublicMt

Facebook & Instagram: @mtangelpubliclibrary



## Scientific Method

**Ask questions, test the answers, do it again.**

That's the process scientists use when they tackle a problem.

**Observations** lead to a question. Possible answers are called **hypotheses**. You can test these in many ways such as with an experiment, a mathematical analysis, creating a model, and more observation.

Next the scientists **analyze** their results to come to a **conclusion** that supports or rejects their hypothesis.

Sometimes this process leads to new observations which lead to new questions.

Experiments need to be repeatable by other teams to see if they get the same results. A hypothesis that repeatedly is validated (found to be true in testing) can become a scientific theory.

**Scientists are always observing, questioning, and repeating experiments to keep learning!**



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**STEM** Science, Technology,  
Engineering, Mathematics

## Astronomy Telescope

Explore the night sky!

**Scientific Concept:** Astronomy

**Recommended Ages:** 8+

**Scientific Practice:** Observation, Inquiry

### What to Know About This Kit

This kit has a telescope in a convenient backpack so it is easy to take anywhere you want to set it up for night sky viewing. We also include a red light flashlight so you can look at the star charts without ruining your night vision. The included star chart is specifically for our latitude!

**Please note:** This kit must be returned to a staff member.



Mt. Angel  
Public Library

WWW.MTANGELPUBLICLIBRARY.COM

# Circulation Policies

- Three-week checkout—no renewals
- One kit per family at a time
- Check contents coming in (volunteers)
- Our kits are behind the desk and must be requested
- Pick up and return at owning library (no outside holds—no use of courier)
- Return directly to Circulation Desk

# Possible Funding Sources

- Grants
- Local Businesses: sponsoring a kit that aligns with their business
- Civic groups
- Friends of the Library or Foundation
- [Oregon Regional STEM Hub Network](#)
- Companies: <https://www.browndoggadgets.com/pages/grants>
- Other?

# Questions?

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