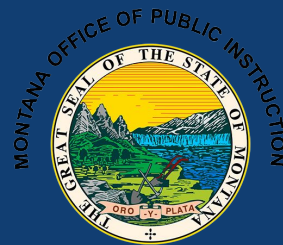


Big Sky Standards

Real World Data Webinar Series

The Art of Data Visualizations



„DataScience4

MEET YOUR HOSTS



Samantha Leav
DIRECTOR OF POLICY



Lee Ellen Harmer
PARTNERSHIPS
MANAGER



Katrina Engeldrum
MATH INSTRUCTIONAL
COORDINATOR



Aimee Konzen
PROFESSIONAL
LEARNING MANAGER



MEET TODAY'S GUEST



Aaron Reedy
Co-Founder & CEO



- Former High School Science Teacher
- PhD in Biology

Founded DataClassroom to make the data tools that fit the needs of teachers and students.



What is a data visualization?

Dictionary

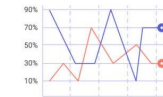
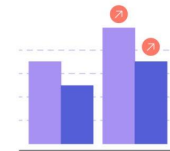
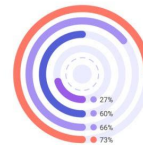
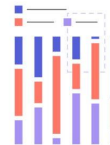
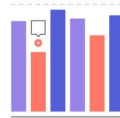
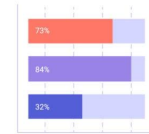
Definitions from [Oxford Languages](#) - [Learn more](#)



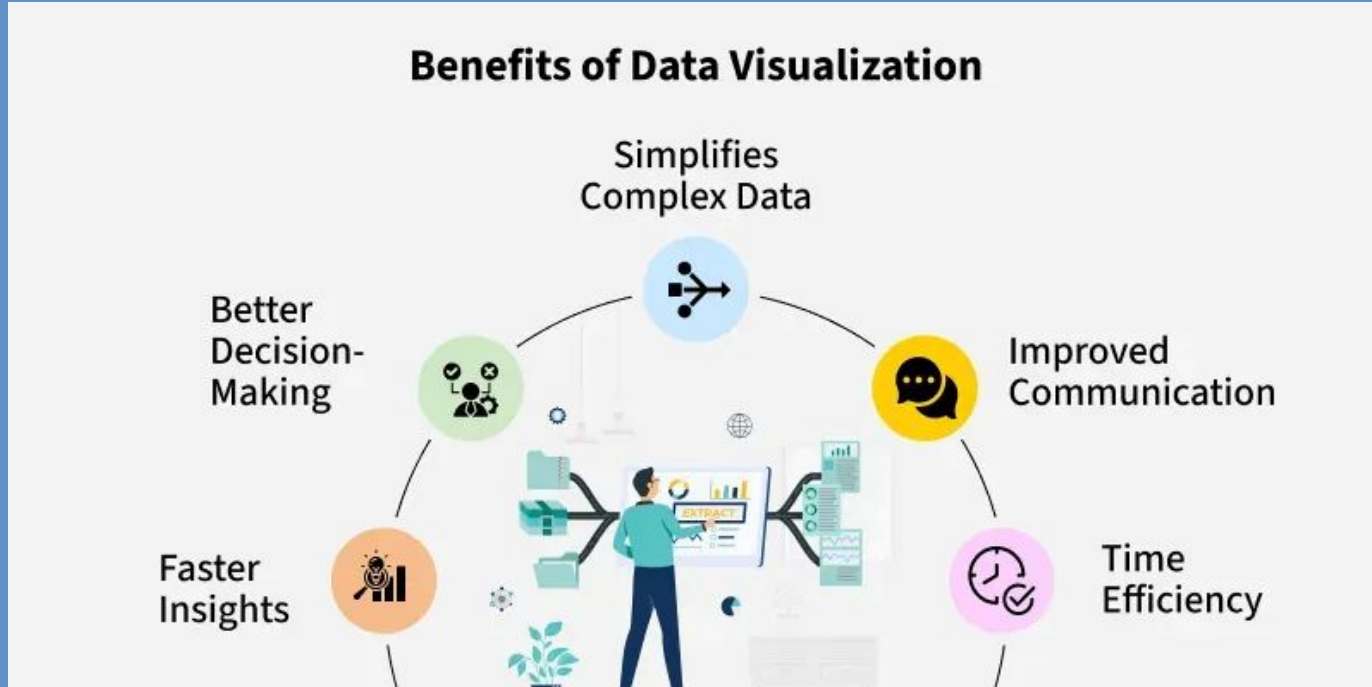
da·ta vis·u·al·i·za·tion

noun

the representation of information in the form of a chart, diagram, picture, etc.



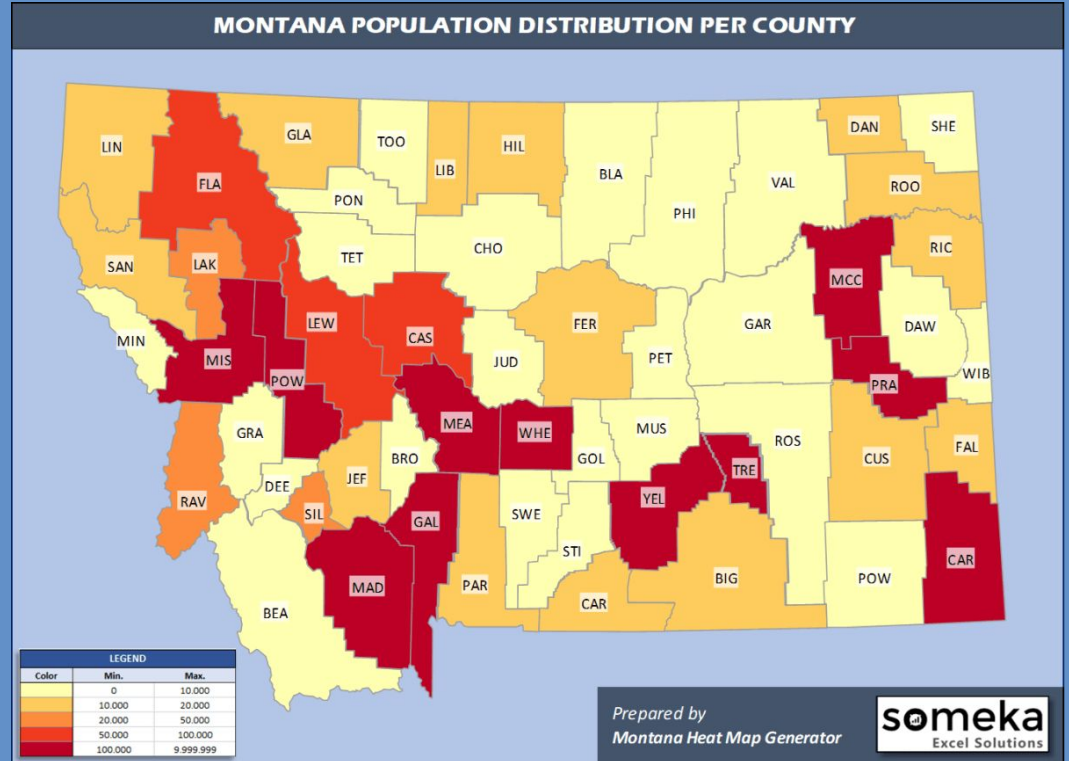
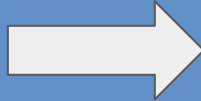
Why do we need data visualizations?



What is a data visualization?

2023 Montana Population Distribution Per County

1	Yellowstone County	161,300
2	Missoula County	119,600
3	Gallatin County	114,434
4	Flathead County	103,806
5	Cascade County	81,366
6	Lewis and Clark County	69,432
7	Ravalli County	43,806
8	Silver Bow County	34,915
9	Lake County	30,458
10	Lincoln County	19,980



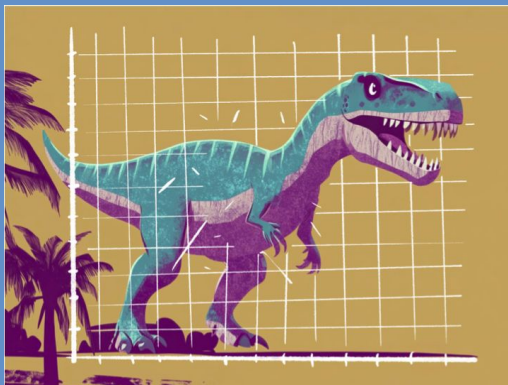
Credit: [Montana County Map and Population List in Excel](#)

Creating Data Visualizations in the Classroom

Three reasons why data visualization should be a part of almost all work with data

#1

A dinosaur might be hiding in your data.



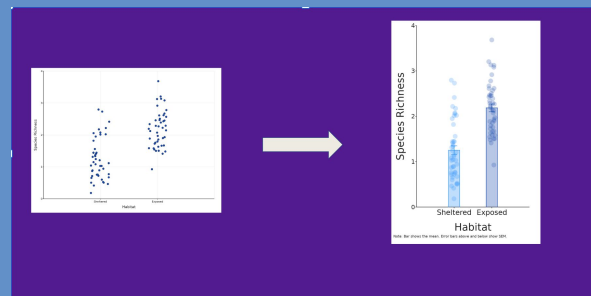
#2

Graphs help you ask the right questions.



#3

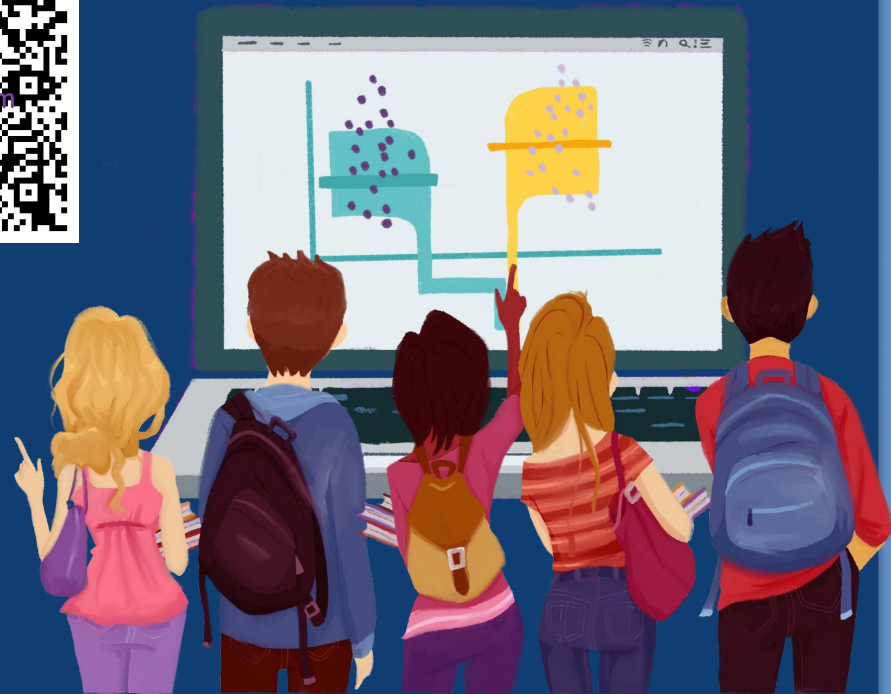
Intentional graphs speak loud and clear.



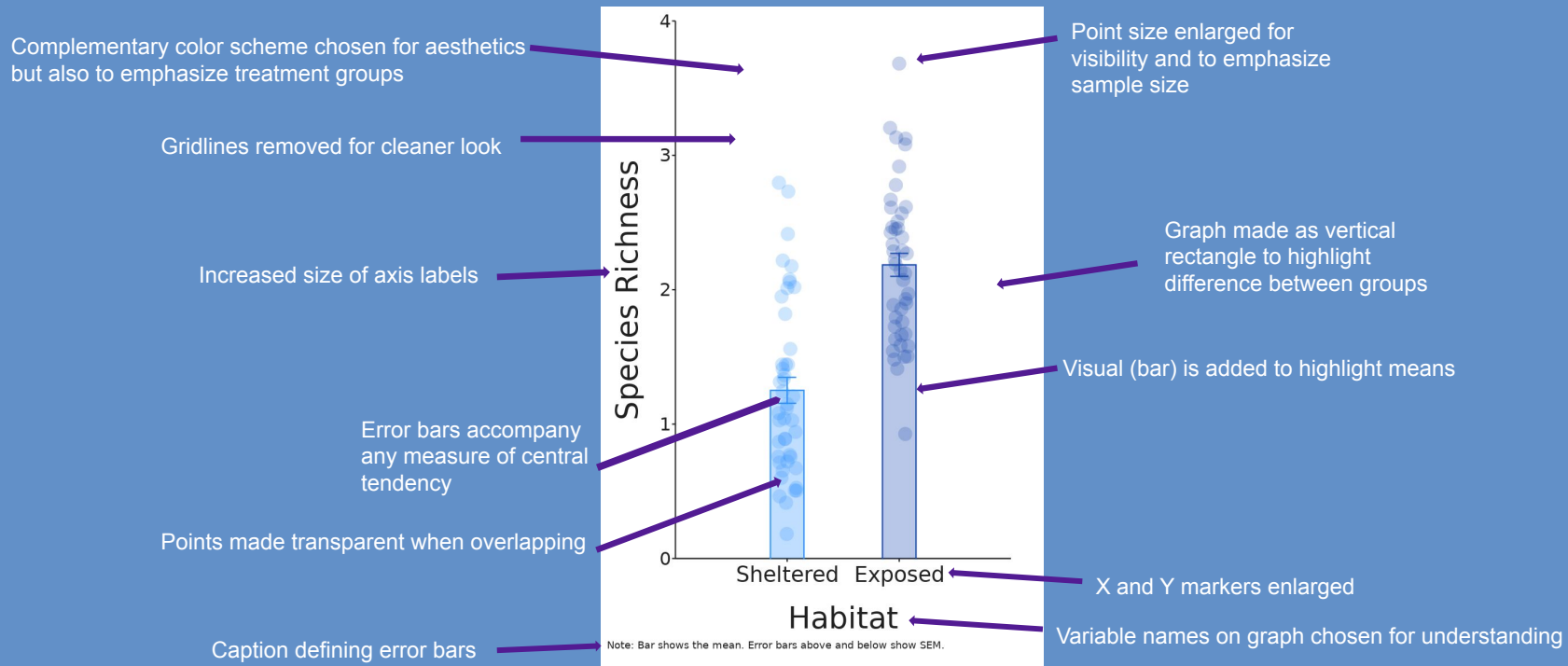
Free 60-days of full
teacher access to
DataClassroom



Please Reach Out:
aaron@dataclassroom.com



Happy graphing!



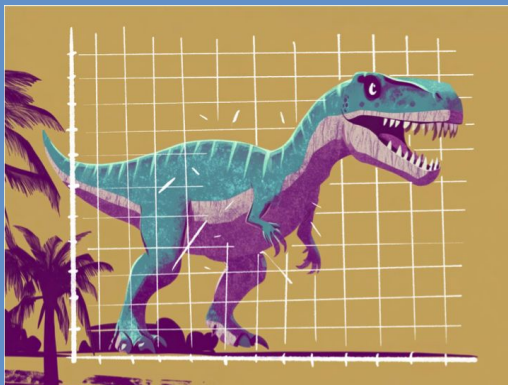
Graph with intentional design

Intentional graphs speak loud and clear

Three reasons why data visualization should be a part of almost all work with data

#1

A dinosaur might be hiding in your data.



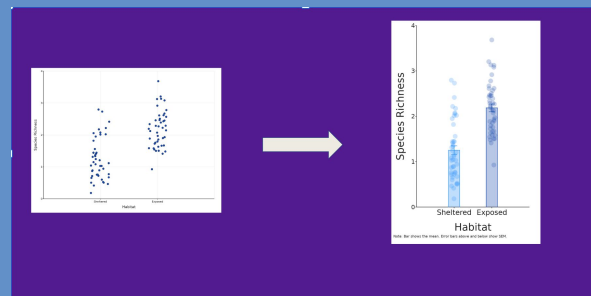
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Graphs help you ask the right questions.



#3

Intentional graphs speak loud and clear.



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Happy graphing!

More Data Visualization Resources

Slow Reveal Graphs

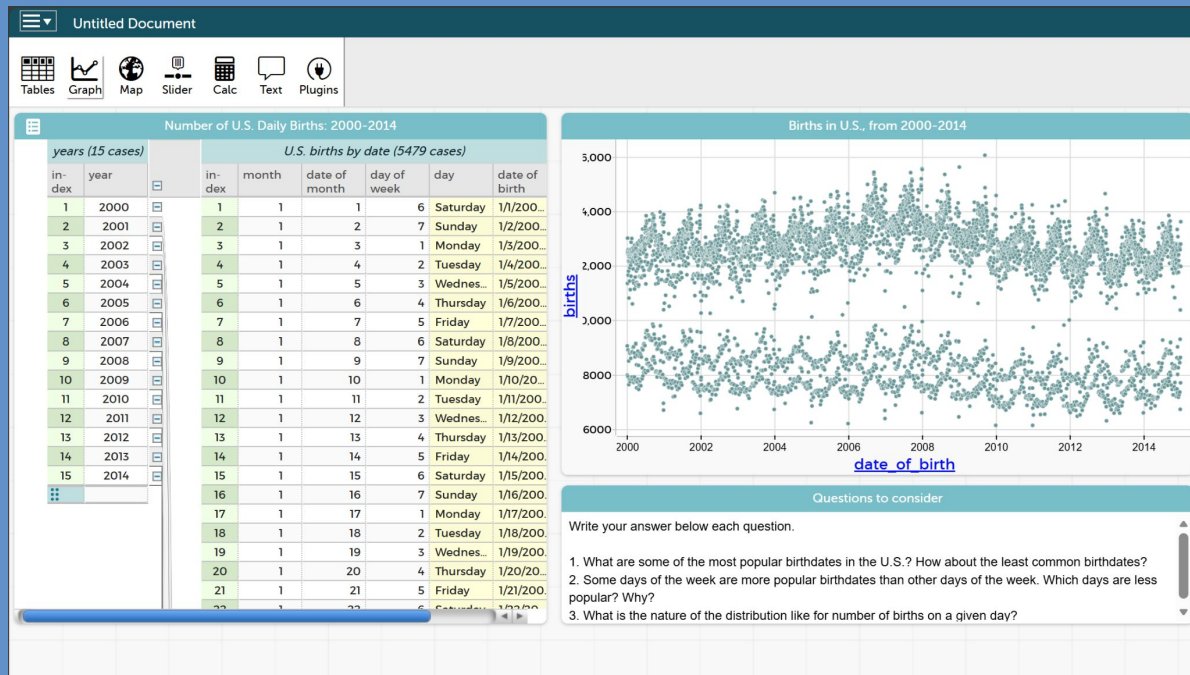
- **The Slow Reveal Graph** ([#slowrevealgraph](https://www.slowrevealgraph.com/)) is an instructional routine that promotes sensemaking about data.
- Graphs build, slowing revealing information
- At each stage, educators ask students what they can determine from the current information displayed... and what they're curious about.
- The Slow Reveal Graph website offers many different graphs that can be used across disciplines and grade levels



CODAP



- Social Studies:
US Population Map
- Science:
Roller Coasters
- Math:
Birthdays

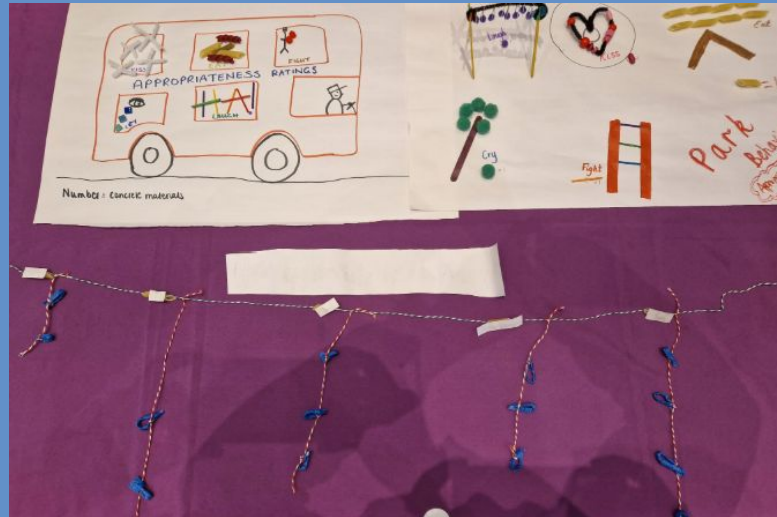


Tactile Data Visualizations

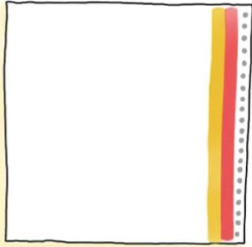
Data Physicalisation, or Fizzy Data, for short!



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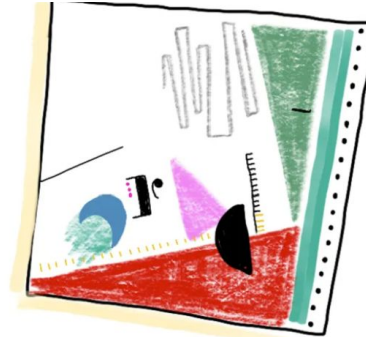
Data Portraits (Data Humanism)



Where are you from?

Pick the color that corresponds with the continent you were born in. Draw a vertical line in that color next to your age. Then pick the color that corresponds with where you live at the moment, and draw another line in that color. They may be of the same color, of course!

- Europe
- Africa
- Asia
- North America
- South America
- Oceania



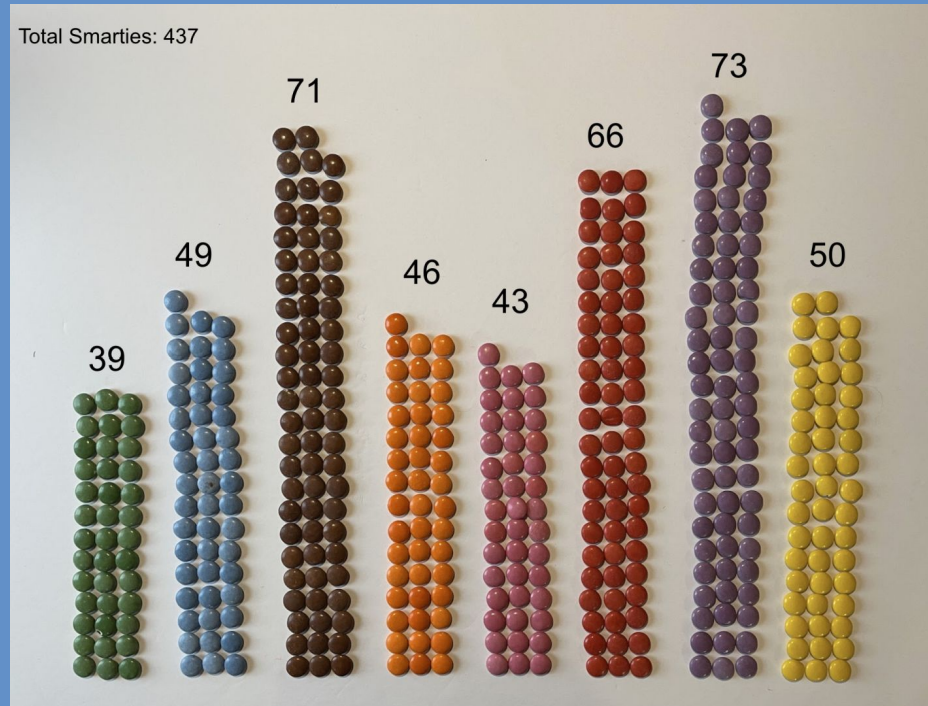
Let's Breathe

More Tactile Data Visualization Ideas

- [Data Sculptures](#)
- [Data Murals](#)
- [Weaving Data](#)
- ([Hello! Loom](#) or [DIY](#))



Data - Visualize It!



Source: <https://nightingaledvs.com/data-visualization-for-kids/>



JOIN US NEXT TIME

December 2025

**“Cross-Disciplinary
Projects and Real-World
Applications of Data
Science”**

Complete by January 12th



Questions and Answers

To access recordings
and slides please visit the
Montana OPI Math Page

<https://shorturl.at/Awnp2>

Contact us at
OPICSI@mt.gov

Feedback and Evaluation

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feedback form to
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Development Unit
Certificate from OPI
and to provide
feedback for
improvement.**

