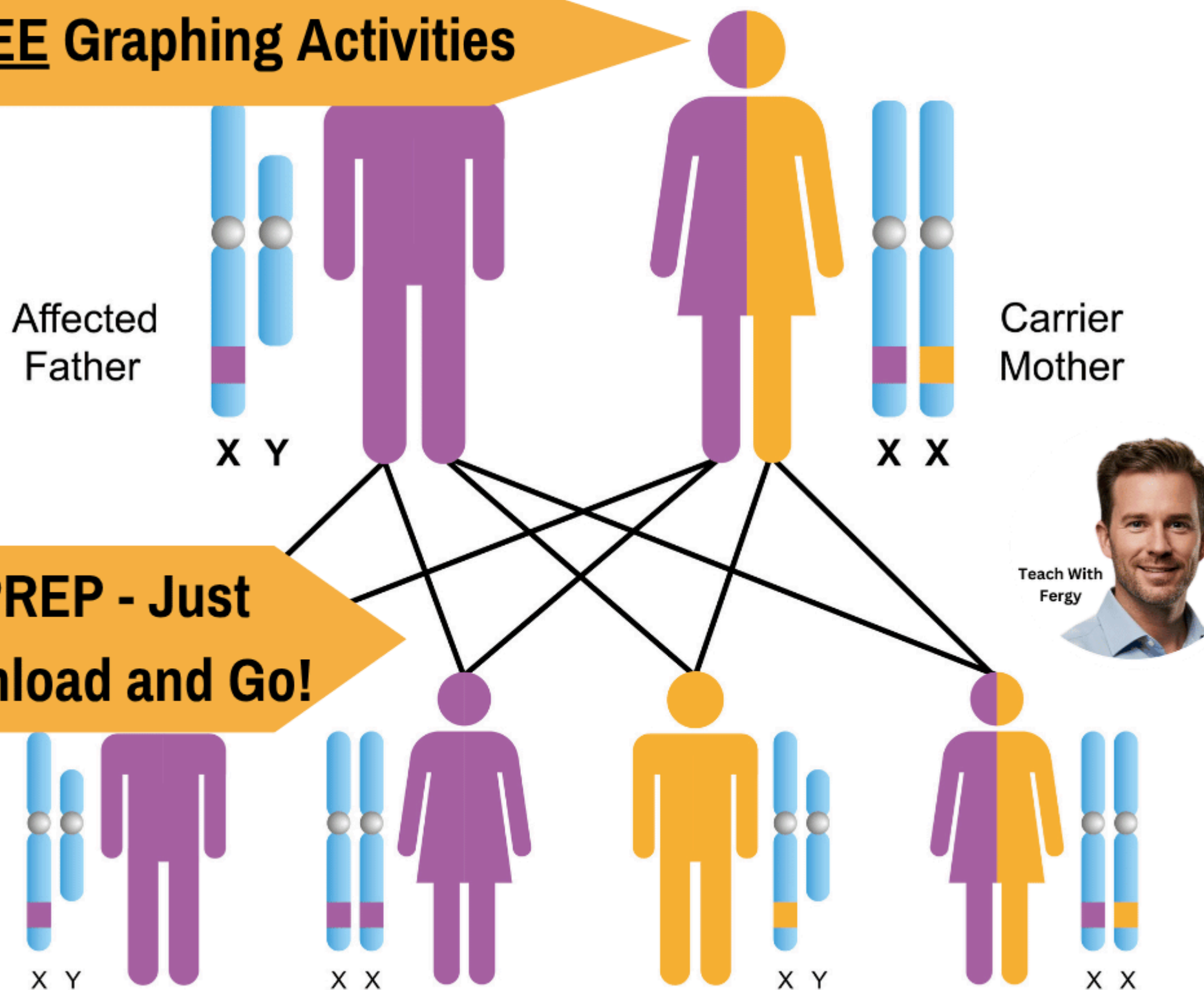


Genetics and Environment - Trait Distribution Data Graphing Bundle HIGH SCHOOL

THREE Graphing Activities

NO PREP - Just
download and Go!



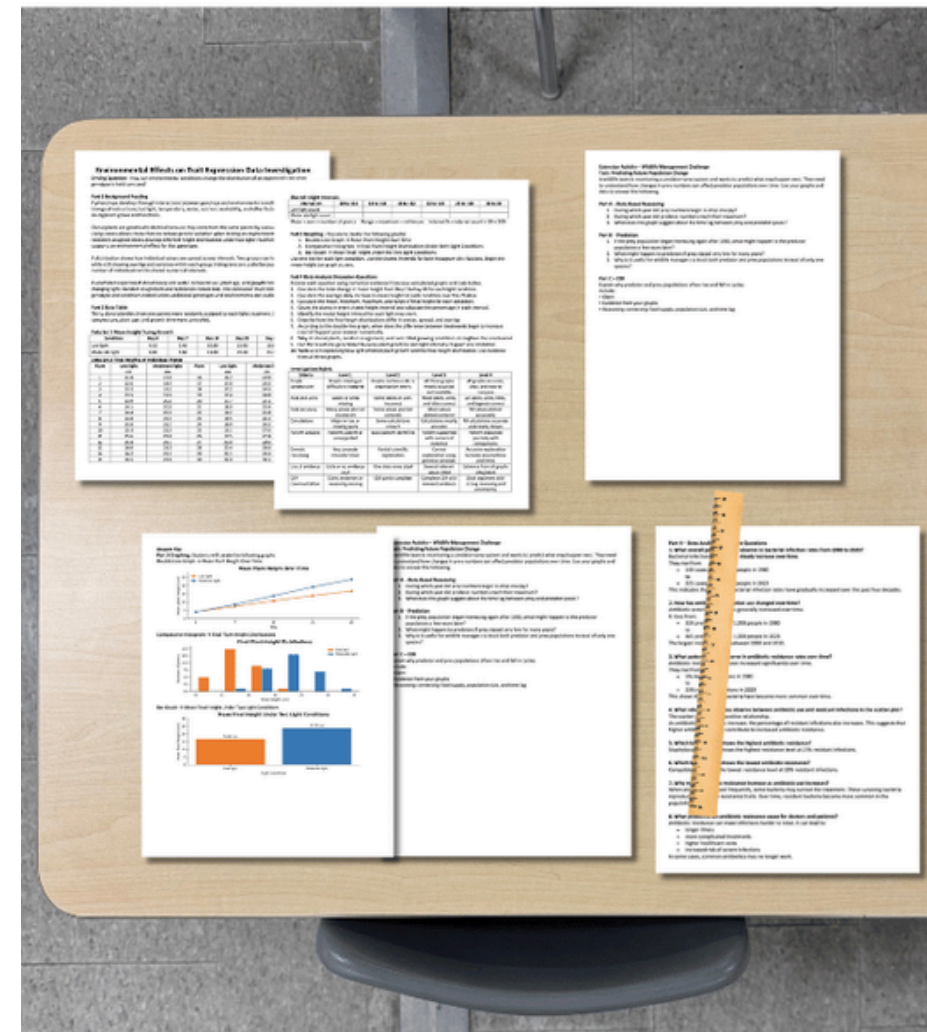
Students use Real
World Data to create
graphs and answer
**Genetics and
Environment** questions
including inheritance
and trait expression.

SCROLL
to take a look inside!

HOW THESE ACTIVITIES HELP YOU

- **Saves Prep Time** - Everything is pre-made, ready to go, and fully editable.
- **Provides Built-In Assessments** - The rubric let you quickly check for understanding.
- **Encourages evidence-based reasoning** by having students use graphs to explain how and why trends and changes occur

ENVIRONMENTAL EFFECTS ON TRAIT EXPRESSION

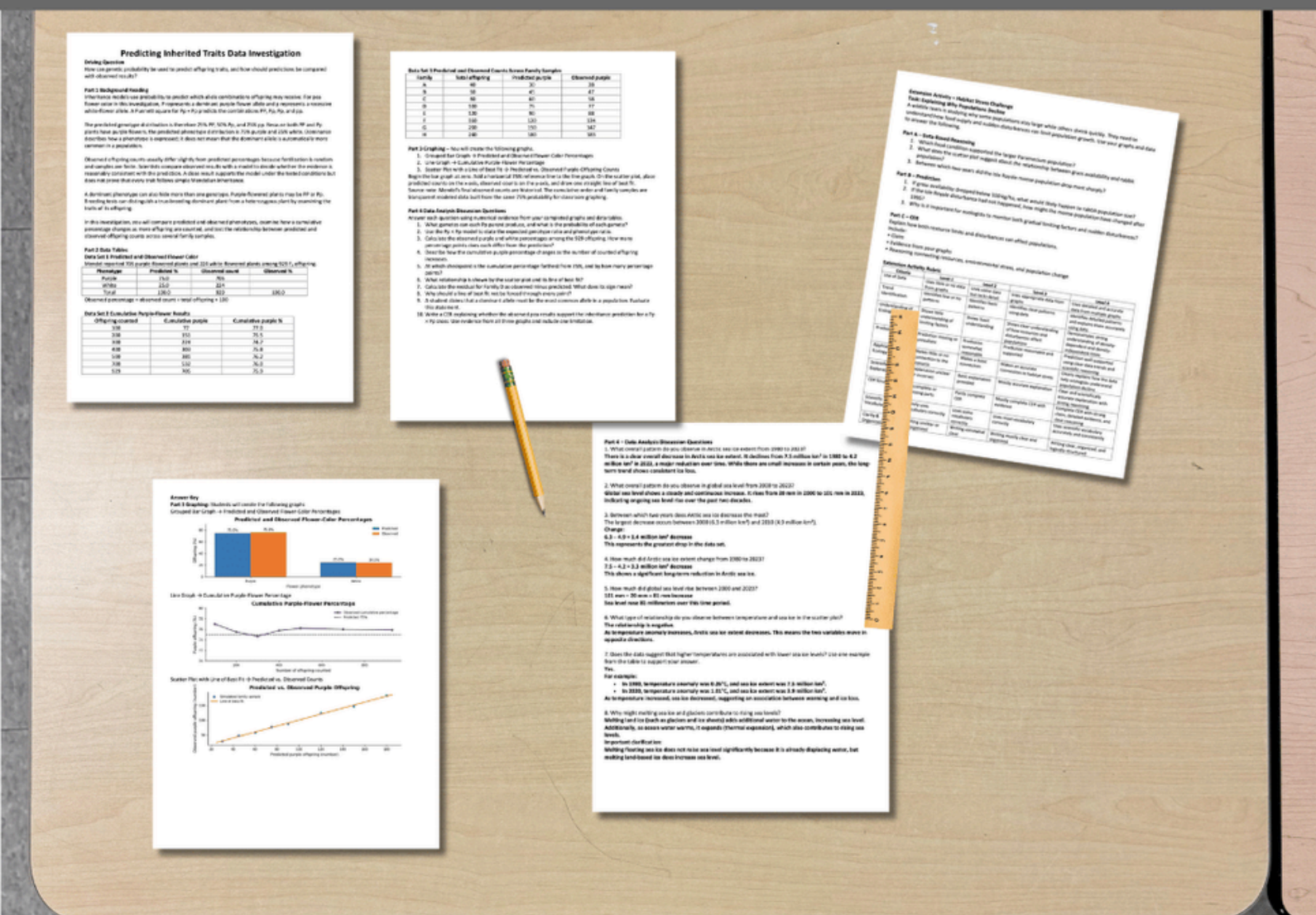


- Background Reading
- Data Tables
- Students Create Different Graph Types
- Extension Activity
- Full Marking Rubric

NO PREP or Materials

What Will Your Students Learn?

PREDICTING INHERITED TRAITS

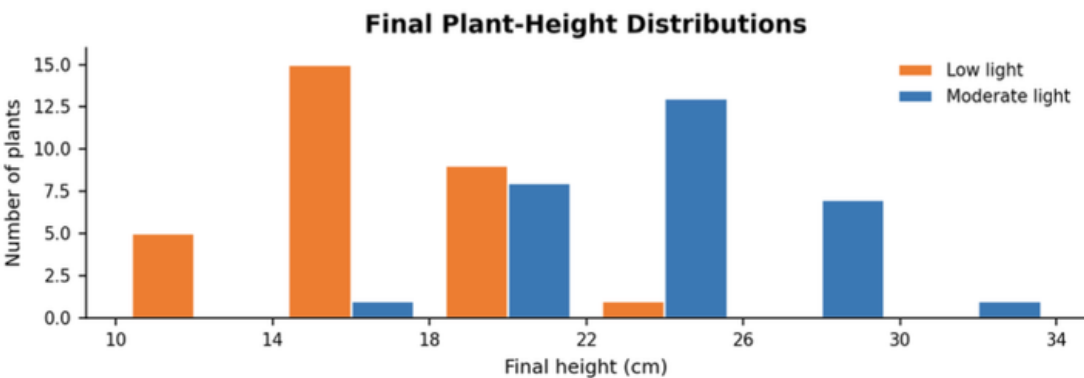
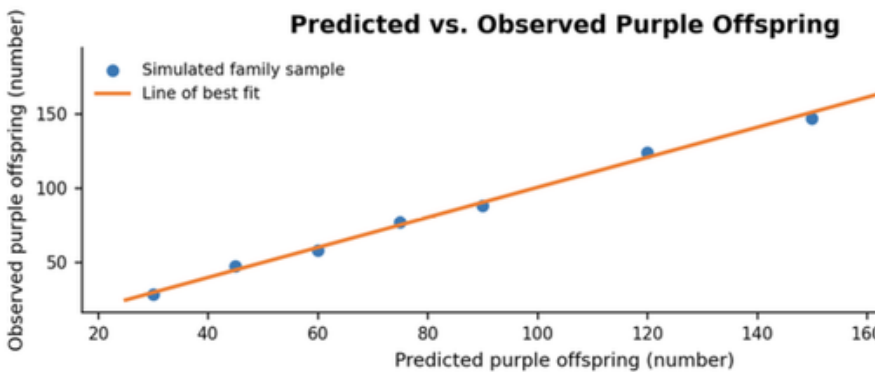


Students Use Their Graphs to Answer Questions and Draw a Conclusion

- ✓ Genetics and environmental influences on traits
- ✓ Predicting inherited traits
- ✓ Genotypes and phenotypes
- ✓ Dominant and recessive alleles
- ✓ Punnett squares and genetic crosses
- ✓ Expected and observed offspring ratios
- ✓ Genetic probability and Cumulative trait percentages
- ✓ Sampling variation and the effect of sample size
- ✓ Scatter plots and lines of best fit
- ✓ Environmental effects on trait expression
- ✓ Plant growth under different light conditions
- ✓ Trait distributions and histograms
- ✓ Mean, range, and percentage calculations
- ✓ Genotype–environment interactions
- ✓ Using numerical evidence to explain trait variation

- Three genetics and environment graphing investigations that use real-world and scientifically modeled data for students to graph, analyze, and explain trait distributions
- Multiple graphing tasks—including grouped bar graphs, line graphs, scatter plots with lines of best fit, and histograms—with data tables and analysis questions
- Complete teacher supports including answer keys, discussion questions, extension activities, and grading rubrics

What You Get



Rubric	Level 1 (Limited)	Level 2 (Some)	Level 3 (Considerable)	Level 4 (Thorough)
Graph Construction	Graphs incomplete or unclear	Graphs contain scale errors	Graphs mostly accurate	Graphs accurate and well-constructed
Axis Labels & Units	Missing labels	Some labels	Most labels correct	All labels and units correct
Data Plotting Accuracy	Data incorrect	Some correct	Most correct	All accurate
Use of Provided Data	Uses little data	Uses some data	Uses most data	Uses all data appropriately
Pattern Identification	Few patterns identified	Basic patterns	Clear patterns	Detailed accurate patterns
Resource Trend Understanding	Limited understanding	Basic understanding	Clear understanding of trends	Strong understanding using data evidence
Connection to Depletion	Weak connection	Basic connection	Accurate connection	Clear explanation of how trends relate to depletion
Scientific Vocabulary	Rare use	Some correct use	Mostly correct use	Accurate throughout
Communication of Reasoning	Unclear	Somewhat clear	Mostly clear	Logical and well supported

Data Set 1 Predicted and Observed Flower Color

Mendel reported 705 purple-flowered plants and 224 white-flowered plants among 929 F₂ offspring.

Phenotype	Predicted %	Observed count	Observed %
Purple	75.0	705	
White	25.0	224	
Total	100.0	929	100.0

Observed percentage = observed count ÷ total offspring × 100

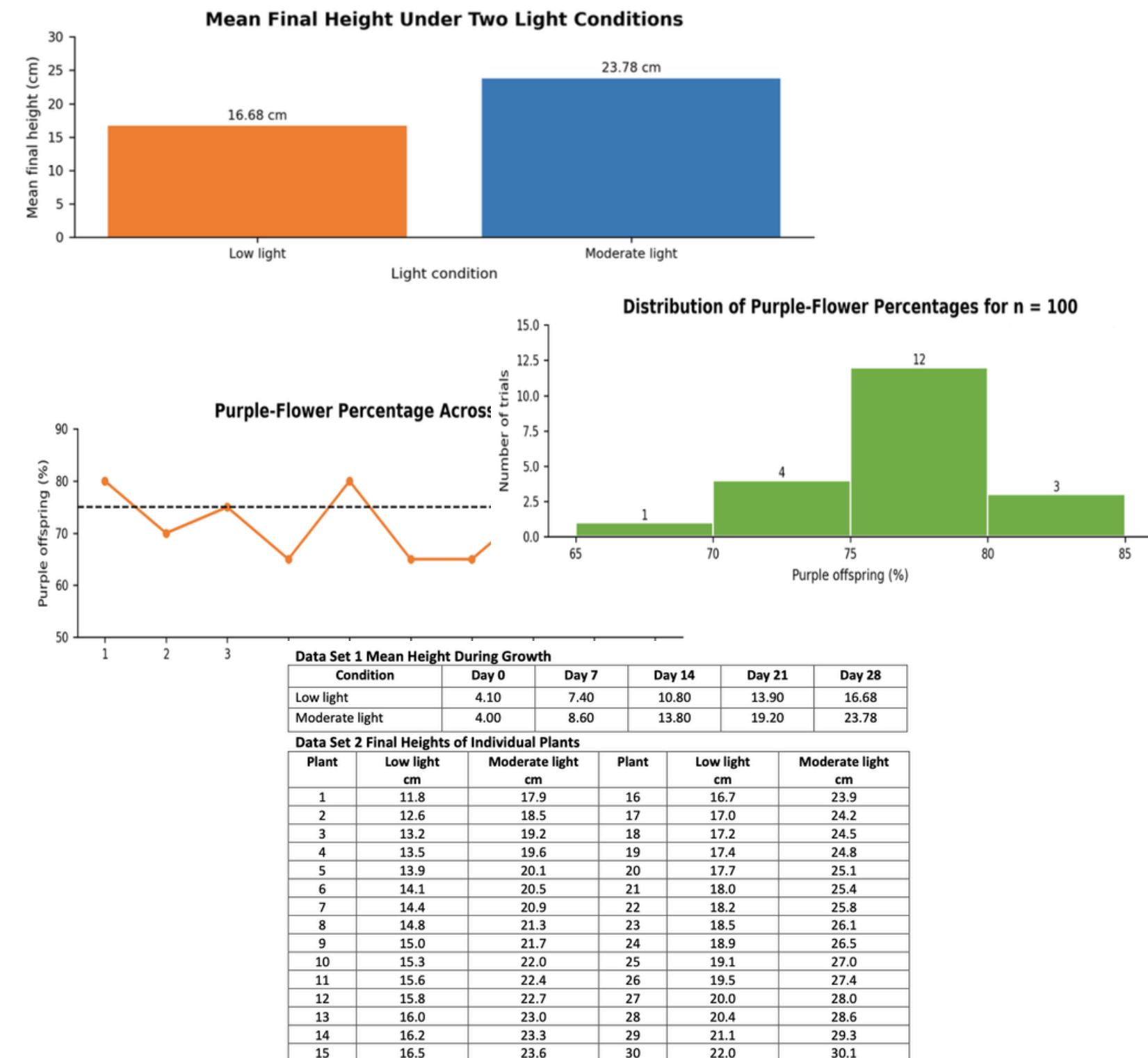
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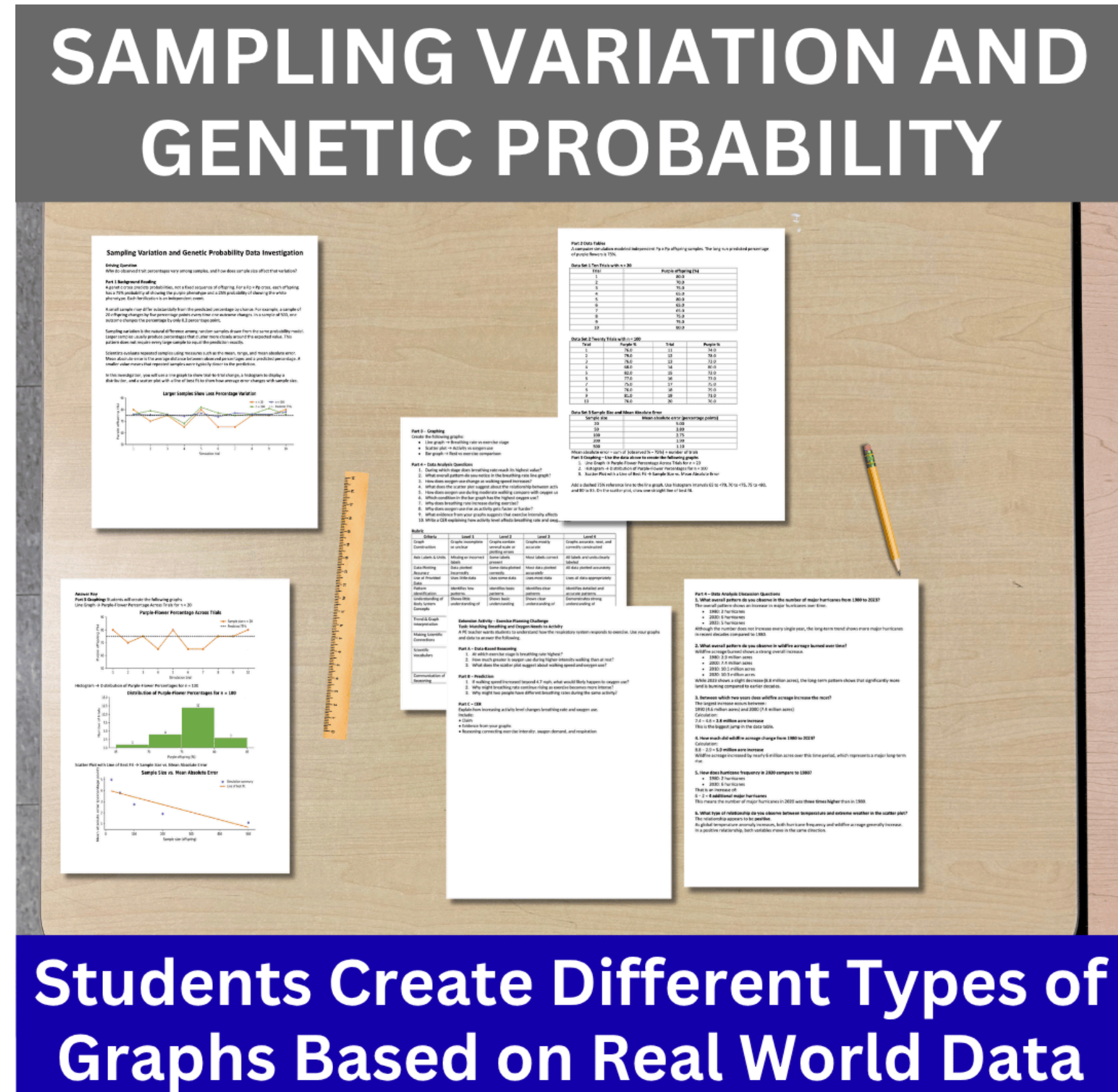
Skills Your Students Will Develop

- ✓ Three genetics and environment graphing investigations that use real-world and scientifically modeled data for students to graph, analyze, and explain trait distributions
- ✓ Multiple graphing tasks—including grouped bar graphs, line graphs, scatter plots with lines of best fit, and histograms—with data tables and analysis questions
- ✓ Complete teacher supports including answer keys, discussion questions, extension activities, and grading rubrics



Your Activities

- **Include a background reading for student understanding**
- **DIGITAL and PRINT ready**
- **FULLY EDITABLE**
- **Extension activities for early finishers**
- **Complete Answer Key**



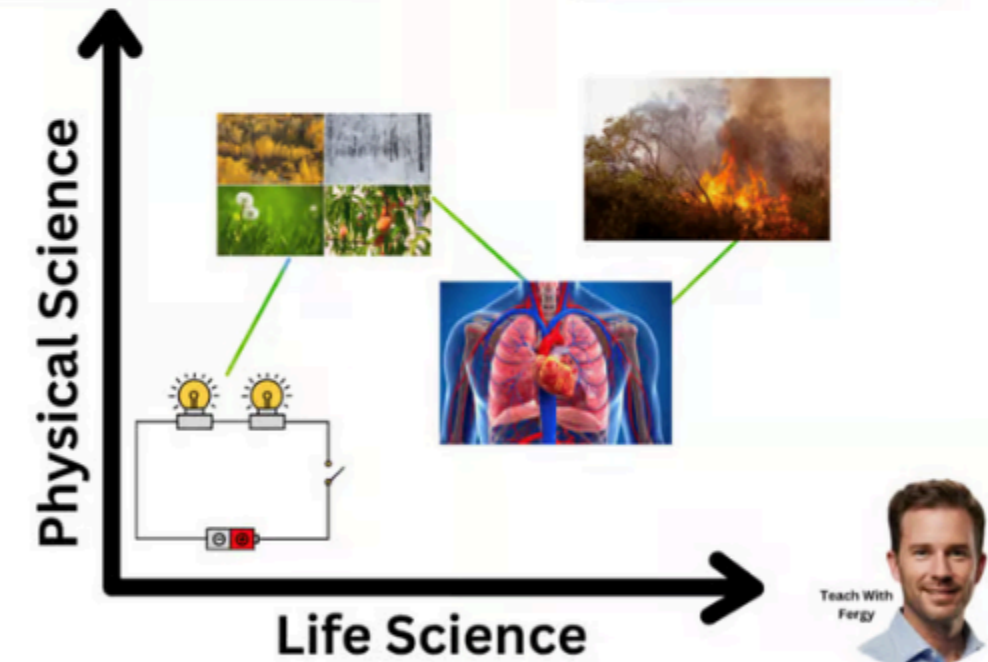
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Mega Bundle

Graphing Activities Across
ALL TOPICS

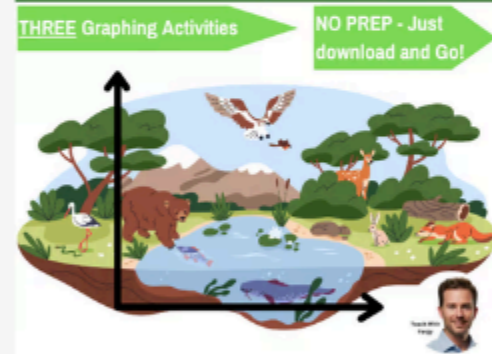
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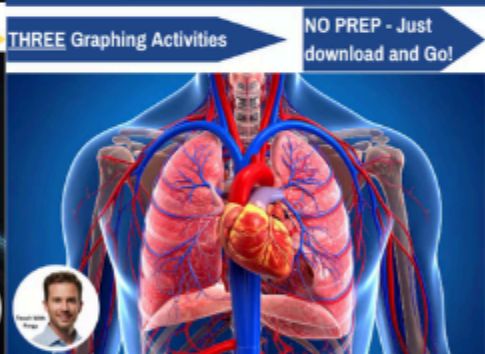
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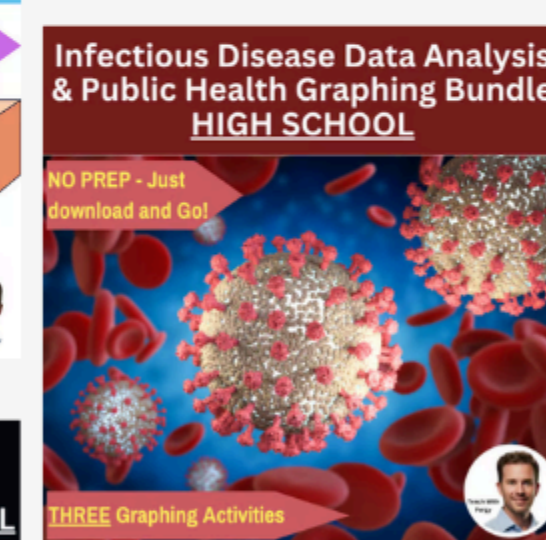
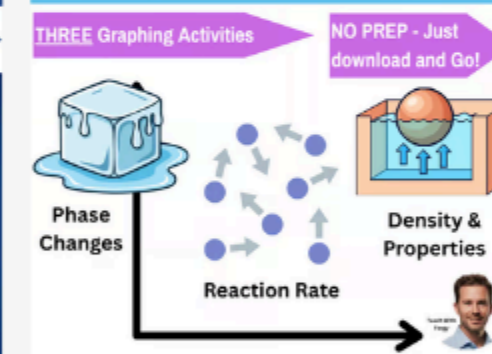
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Graphing Bundle
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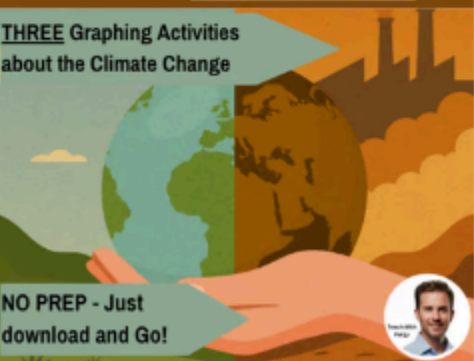
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Matter & Chemical Change
Data Graphing Bundle
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Climate Change Data Analysis
& Long-Term Trends Graphing
Bundle - **HIGH SCHOOL**



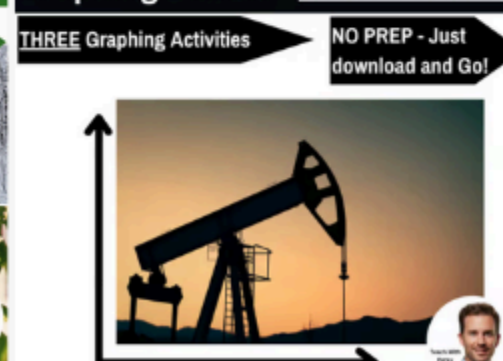
Force, Motion & Newton's
Laws - **HIGH SCHOOL**



Seasons and Earth's Systems
Graphing Bundle
HIGH SCHOOL



Energy, Resources and
Sustainability Data Analysis
Graphing Bundle - **HIGH SCHOOL**



Thanks
**for your interest
in this resource!**

I am a real person and if
you have any questions,
suggestions, or concerns,
please reach out.



devon@teachwithfergy.com

TWF

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*Let's
Connect!*

