

Curriculum Unit Title

Is There a "Scientific Method" to the Madness?

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KEY LEARNING, ENDURING UNDERSTANDING, ETC.

Students will develop critical thinking skills and perseverance in their work by utilizing the Scientific Method in Science class. The Scientific method is: A problem is stated. A hypothesis is formulated. An experiment is conducted. Data are collected. A conclusion is drawn.

ESSENTIAL QUESTION(S) for the UNIT

How can the Scientific Method be used by first graders to understand their world.

CONCEPT A

How can we use questions to find answers?

CONCEPT B

Drawing Conclusions

CONCEPT C

Observation and collecting data

ESSENTIAL QUESTIONS A

How do we formulate a hypothesis?

ESSENTIAL QUESTIONS B

We conducted our experiment, why did we get the data we did? How could we get different data?

ESSENTIAL QUESTIONS C

Why is observation important? How does one collect data?

VOCABULARY A

Hypothesis, research

VOCABULARY A

Experiment, conclusion

VOCABULARY A

Observation, data

ADDITIONAL INFORMATION/MATERIAL/TEXT/FILM/RESOURCES

Kneidel, Sally Stenhouse. *Creepy crawlies and the scientific method: more than 100 hands-on science experiments for children.*

Levy, Joel. *Incredible elements: a totally non-scary guide to chemistry and why it matters.*

BBC. "Brian Cox visits the world's biggest vacuum chamber - Human Universe: Episode 4 Preview - BBC Two."