

# Science Dept. 7<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup> grades Twin Spruce

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**-Pencil Dispenser-** to be attached to place in science wing so students can purchase pencils for classes.

**-Scientific Method 7** steps of Scientific Method as defined by group from Twin and Sage

- 7<sup>th</sup> grade:
1. Understand 7 steps of Scientific Method
  2. Guided Lab using Skittles or other as chosen by teacher

Vocabulary as related to Scientific Method  
1. question, hypothesis, materials, procedure, data, analysis,  
conclusion

Processes:

1. Estimating
2. Predicting
3. Data collection

Assessment:

1. Teacher observation of student
2. Lab report with Scientific Method correctly written, chart and graph

- 8<sup>th</sup> grade:
1. Student directed choice of Scientific Method Test
  2. Guided Lab using bubble gum, mythbusters or other as chosen by teacher

Vocabulary as related to Scientific Method  
1. variable, dependent variable, independent variable, control, reliability, validity

Processes:

1. Divergent and Convergent thinking
2. Journal
3. Predicting
4. Data collection- create own chart
5. Other factors that might affect data

6. Choose and create appropriate graph
4. Determine dependent and independent variables and control
5. Discuss reliability and validity of Scientific Method Test

Assessment:

1. Teacher observation of student
2. Research internet, books, people or others
2. Lab report with Scientific Method correctly written, chart and graph, identification of dependent variable, independent variable and control.
3. Validity and Reliability discussion

9<sup>th</sup> grade

1. Student directed choice of Scientific Method Test
2. Guided Labs automobile types in Gillette and reaction times

Processes:

1. Divergent and Convergent thinking
2. Predicting
3. Precise measurement/ numbers assigned to qualitative data
4. Data collection- create own chart
5. Choose and create appropriate graph
5. Determine dependent and independent variables and control
6. Discuss reliability and validity of Scientific Method Test

Assessment:

1. Teacher observation of student
2. Lab report with Scientific Method correctly written, chart and graph, identification of dependent variable, independent variable and control.
3. Validity, Reliability and Bias written paragraph