Science Learning Progression

FOSS Magnetism and Electricity, Inv. 1 **Grade level: 4-5**

Prerequisite skill: 2-3 INQ
Carry out different kinds of investigations collaboratively with support from the teacher.

Collaborate to make *observations* and gather *evidence* in order to answer *questions*.

I can work with others to carry out an *investigation.*

- FOSS Student Sheet #3 "Magnetic Observations" – Student gathers and provides evidence to answer a question.
- Teacher/peer/ self - evaluation – Student works collaboratively.

Keep all things that might change the outcome of a *controlled experiment* the same. Report the results honestly.

4-5 INQ C&I

I can conduct a *controlled experiment* and honestly report my findings.

T-Chart – Student correctly records attract/repel magnetic interactions.

Collect and record relevant *observations* and *data* while conducting a scientific *investigation.*

4-5 INQ D

I can gather, record, and organize *data* from my *investigation*.

Data table – Student collects, organizes, and records data from an investigation on a table.

****Investigations*** include: open ended explorations, controlled experiments, field studies, models and simulations, systematic observation.

Communicate the results of an *investigation* verbally and *graphically.*

4-5 INQ H

I can show the results of my investigation using a *graph* to accurately present the *data*.

Graph – Student creates an accurate and meaningful graph to display data.

Explain *investigation* results based on *evidence* and known scientific *principles*.

4-5 INQ G&I

I can use the results of an *investigation* to generate a *conclusion*.

Written conclusion – Student generates a conclusion based on evidence gathered from an investigation.

Collaboratively **carry out the appropriate kind of *investigation* to match a given research question and accurately report results based on *evidence.***
4-5 INQ

Later big ideas that build on this big idea include:
6-8 INQ

- Revise a question so it can be answered scientifically, design an appropriate investigation to answer the question, and carry out the study
- Critique own findings and the findings of others.

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Northwest Educational Service District 189
Together We Can
Math & Science Collaborative Inquiry Project