Name:Leighton K. Tjaden_____

CASE

Presentation Notes

Presentation The Processes of Science Lesson 3.2

Notes from Presentation:

Exploring Science: Scientists ask questions and solve problems to understand the world around them better. This is referred to as scientific inquiry. There are many processes used in inquiry.

Basic Processes: Observing, predicting, classifying, measuring, communicating, experimenting, inferring.

Observing: Looking for characteristics, similarities and identifying features of objects. Using the five senses to discover information. Sight, touch, hearing, taste, smell.

Predicting: Developing an assumption of the expected outcome. Extension: from a hypothesis.

Classifying: grouping and ordering objects. Sorting by similar characteristics. Dichotomous key. A method for determining the identity of something by going through a series of choices that leads the user to the correct name of the item.

Classifying using dichotomous keys: each step involves making a choice between two characteristics. Each statement should lead to the next step to narrow the selection. Each step will either identify the item or direct you where to go next. EX: if the object is used for writing, go to 2. If the object is used for organizing go to 3. The object makes a gray mark… pencil. The object makes a blue mark… pen. The object is metal… paper clip. The object is elastic… rubber band.

Measuring: comparing unknown quantities to a standard of reference. Length, mass, temperature, volume.

Experimenting: following clear procedures. Verifiable and repeatable. Provides data. Qualitative, descriptions, observed, but not measured. Quantitative, uses numbers, measured.

Communicating: sharing findings and results, graphs, charts, reports, presentations.

Inferring: Forming ideas to explain observations Analyzing the results to form conclusions

AFNR Reflection Page

List five key points that are important to remember from this presentation.

1. Scientists ask questions and solve problems to understand the world around them better.
2. This is referred to as scientific
3. There are many processes used in inquiry.
4. Inferring: Forming ideas to explain observations Analyzing the results to form conclusions
5. Communicating: sharing findings and results, graphs, charts, reports, presentations.

List three ideas or concepts that this new information has in common with previous things learned.

1. Communicating: sharing findings and results, graphs, charts, reports, presentations. Like in class
2. Experimenting: following clear procedures. Verifiable and repeatable. Provides data. Qualitative, descriptions, observed, but not measured. Quantitative, uses numbers, measured. Like in science
3. Measuring: comparing unknown quantities to a standard of reference. Length, mass, temperature, volume. Like in math

List questions or ideas that remain unclear about the information presented that should be asked for clarity at the appropriate time. NOOOONE