Lesson Plan Template

# Breakthrough Denver

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| **Getting Yourself Ready** | | | | |
| **Materials**: Pencil, Notebook, Hypothesis worksheet, | | **Your Preparation**: Creating a comfortable academic environment where students feel as if they can succeed | | **Agenda (w/times)**: Teaching (55 minutes) |
| **Getting Your Students Ready** | | | | |
| \***Do Now**: Think of a question that you have, now try to form it into a hypothesis | | | | |
| **Objective**: *Today you will be able to… have a detailed understanding of the scientific method* | | | **Proving behavior**: *by… Using the information from our pulse lab yesterday to produce a correct hypothesis* | |
| **Purpose**: *We are doing this because… Science is fun! It helps us out in the daily world and we would not be here in this class today without it!* | | | | |
| **Teaching** | | | | |
| Step 1: | Say: Give an example of when I had to use the Scientific Method (Dougie Dance)  See: When I first learned about the dance I struggled with it then I watched the YouTube video called “Teach Me How To Dougie” and my dance got better  \*Do: Now I want you to think of a problem or an issue that you have and try to formulate a question that will help answer your problem. | | | |
| Step 2: | Say: There are certain words that you have to use to formulate an hypothesis (If, Then, and May) When you use these words to help formulate a question then you have an educated guess also a hypothesis  See: Write hypothesis on board If I watch the teach me how to Dougie dance a few times on YouTube then my Dougie dance may be better  \*Do: Write a hypothesis | | | |
| Step 3: | Say: Materials are what we need next. Have students write the materials that they used for the pulse lab experiment  See: Show an example of a lab experiment and have the students write the materials that would need to be used.  \*Do: Have students write an experiment and identify the materials that will be used | | | |
| Step 4: | Say: Experiment, self-Explanation. Explain to students what happens as a result of the experiment.  See: YouTube Science experiment.  \*Do: Discuss how a science experiment relates or fits in the scientific method. | | | |
| Step 5: | Say: Explain results and analyze how results and analyze fits into the scientific method  See: N/A  \*Do: the results/analyze of the pulse experiment. | | | |
| Step 6: | Say: Conclusion, what a conclusion is and how it closes out the scientific method.  See: N/A  \*Do: Conclusion for pulse experiment. | | | |
| **Practice** | | | | |
| \***Structured Practice** (3-4 additional examples led by teacher with gradually quickening pace, helping students approach automaticity by manipulating time, materials, and group size) | | | | |
| Time:  Materials:  Group Size: | Example 1: Using a bubble map think of an educated question among the group. Try to form a hypothesis from the question. | | | |
| Time:  Materials:  Group Size: | Example 2: What would be an ideal experiment that you would use for the hypothesis that you made. Explain experiment step by step. | | | |
| Time:  Materials:  Group Size: | Example 3: Estimate the results of your experiment and give effective reasoning to go along with your answers. | | | |
| Time:  Materials:  Group Size: | Example 4: Present your experiment to the class | | | |
| \***Guided Practice** (the proving behavior of the objective monitored by the teacher) | | | | |
| Assignment: (from proving behavior)  Write a short paragraph about how you can use the scientific method in your everyday life. | | | Criteria for Mastery:  Make a correct example of a hypothesis. | |
| Independent Practice (Homework) | | | | |
| Explain Homework:  Your homework for tonight will be to write up a lab using the scientific method. From Problem-Conclusion. | | | | |
| **Closure** | | | | |
| Explain Closure: The Scientific method is used all around us! We may not always see it firsthand but it is there. | | | | |

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| **VIP** | | |
| Problem | Hypothesis | Materials |
| Experiment | Results/Analyze | Conclusion |