# Mirabelle's Introduction to Science Adventure (3-Day Plan)

## Day 1: What is a Scientist? Meet Albert Einstein!

### Materials Needed:

- Twinkl: "All about Einstein" PowerPoint
- Twinkl: "All about Einstein" Flip Book (printed and stapled)
- Twinkl: "Science Lab Role Play Kit" (print and cut out a few key items like the lab coat, goggles, a beaker, and a test tube to start)
- Crayons, markers, or colored pencils
- A small corner or table designated as the "Science Lab"
- Tape or safety pins to attach the paper lab coat

### Lesson Plan (Approx. 25-40 minutes)

#### Part 1: The "Let's Talk" Introduction (10-15 minutes)

1. **Set up the "Science Lab":** Before you start, tape the science lab printables in your designated corner. Say something exciting like, "*Mirabelle, today we are going to become scientists! I've set up a special Science Lab just for us. Let's put on our official lab coats and goggles so we can do some important work.*" Help her put on her paper lab coat and goggles from the role play kit.
2. **Ask a Big Question:** Sit down with her and ask, "*What do you think a scientist does?*" Listen to her ideas. Guide the conversation by saying things like, "*That's a great thought! Scientists are very curious people. They ask lots of questions about the world, like 'Why is the sky blue?' or 'How do plants grow?' They are like detectives for nature!*"
3. **Introduce Einstein:** Say, "*We are going to learn about a very famous scientist named Albert Einstein. He was super curious and had some amazing ideas!*" Go through the "All about Einstein" PowerPoint. Keep it simple and engaging. For each slide, ask a question like, "*Wow, look at his hair! What do you notice about him?*" or "*He liked to ask big questions. What's a big question you have about the world?*"

#### Part 2: The "Let's Do" Activity (15-25 minutes)

1. **Start the Flip Book:** Bring out the "All about Einstein" flip book. Say, "*Now that we know a little about Albert Einstein, let's create a special book about him. This will be proof of your amazing work as a scientist today!*"
2. **Work Together:**
    - **Cover Page:** Have her write her name and color the picture.
    - **Portrait Page:** Say, "*Let's draw a picture of Albert Einstein. What do you remember most about what he looked like?*" (She'll probably remember his hair!)
    - **Characteristics Page:** Ask, "*What kind of person was he? Was he curious? Smart?*" Help her write one or two words, like "smart" or "curious." She can also draw a picture of a lightbulb to show he had great ideas.

   **Teacher Tip:** Don't worry about finishing the whole flip book today. The goal is to get started and have fun. You can finish the "accomplishments" section later in the week if she's interested. The

drawing and simple words are perfect for her portfolio.

---

# Day 2: What are a Scientist's Tools?

## Materials Needed:

- Twinkl: "Science Tools and Equipment Read and Write the Room Activity" (print, cut, and tape the picture cards around the room before the lesson)
- The student worksheet from the "Read and Write" activity, attached to a clipboard
- A pencil
- Real science tools: magnifying glass, ruler, thermometer
- A few interesting objects to inspect (a leaf, a rock, a favorite small toy, a glass of cool water)
- Your "Science Lab" corner from Day 1

## Lesson Plan (Approx. 20-30 minutes)

### Part 1: The "Let's Talk" Introduction (5-10 minutes)

1. **Get in Character:** Start in your Science Lab. Say, "*Good morning, Scientist Mirabelle! Welcome back to the lab. Yesterday we learned that scientists ask questions. But how do they find the answers? They use special tools! Just like a builder needs a hammer, a scientist needs tools to help them explore.*"
2. **Introduce the Real Tools:** Show her the real tools you have.
    - **Magnifying Glass:** "*This is a magnifying glass. What do you think it does?*" Let her look through it. "*That's right! It makes things look bigger so we can see tiny details.*"
    - **Ruler:** "*What about this? It's a ruler. We use it to measure things—to see how long or tall they are.*"
    - **Thermometer:** "*This is a thermometer. It has a special job: it tells us if something is hot or cold.*" Place it in the glass of water and watch the line move.

### Part 2: The "Let's Do" Activity (15-20 minutes)

1. **Tool Scavenger Hunt:** Say, "*I've hidden pictures of science tools all around the room! Your mission, should you choose to accept it, is to find them, and write down what they are called on your special scientist clipboard.*"
2. **How to Play:** Give her the worksheet and clipboard. She will walk around the room, and when she finds a card (e.g., the picture of the magnifying glass), she finds the matching picture on her worksheet and practices writing the word "magnifying glass" in the space provided.
3. **Teacher Tip:** For a 6-year-old, writing long words can be tiring. Encourage her to just try her best. It’s more about identifying the tools and practicing letter formation. You can write the word lightly in pencil for her to trace over if needed. Celebrate each one she finds!
4. **Free Exploration:** After the hunt, let her use the real magnifying glass and ruler to explore the interesting objects (leaf, rock, toy). This hands-on time is key to connecting the tools to their purpose. Ask questions like, "*What new things can you see on the leaf with the magnifying glass?*" or "*How many inches long is your toy?*"

---

# Day 3: How Does a Scientist Work? Let's Experiment!

## Materials Needed:

- Twinkl: "Scientific Method Poster" (display in your Science Lab)
- Twinkl: "Scientific Method Experiment Template for Homeschool" (one copy)
- A clear bowl or container filled with water
- A collection of small, waterproof objects from around the house. Suggestions: a crayon, a small plastic toy, a coin, a leaf, an apple slice, a rubber band, a rock, a piece of a sponge.
- A towel for spills
- A pencil and crayons
- Your "Science Lab" corner from Day 1

## Lesson Plan (Approx. 30-45 minutes)

### Part 1: The "Let's Talk" Introduction (10 minutes)

1. **Review the Method:** In your Science Lab, point to the Scientific Method Poster. Say, "*Scientist Mirabelle, today we are going to do our very first experiment! To make sure we do it like real scientists, we will follow a special set of steps called the Scientific Method.*"
2. **Explain the Steps Simply:**
    - (Point to **Question**) "*First, we ask a question. Our question today will be: 'Will it sink or will it float?*'"
    - (Point to **Hypothesis/Guess**) "*Next, we make a smart guess. That's called a hypothesis.*"
    - (Point to **Experiment**) "*Then, we do a test to see if our guess was right!*"
    - (Point to **Observation/Conclusion**) "*Last, we watch what happens and talk about what we learned.*"

### Part 2: The "Let's Do" Activity (20-35 minutes)

1. **Set up the Experiment:** Bring out the bowl of water, the objects, and the "Scientific Method Experiment Template." This completed worksheet will be your main portfolio piece for the unit.
2. **Fill out the Worksheet Together:**
    - **Question:** Help her write (or you write and she traces) the question: "Will it sink or float?"
    - **Hypothesis (Guess):** Choose an object, like the crayon. Ask, "*What is your hypothesis? Do you guess the crayon will sink to the bottom or float on top?*" On the worksheet, have her draw the crayon and circle her guess (a happy face for float, a sad face for sink, or whatever simple symbols you choose). Do this for 3-4 objects before you start testing.
    - **Experiment (Test):** Say, "*Time to test it!*" Have her gently drop the crayon into the water.
    - **Observation (Results):** Ask, "*What happened? Did it sink or float?*" On the worksheet, have her draw what actually happened and circle the result. Compare it to her guess. Say, "*It's okay if our guess was wrong! The most important part of being a scientist is finding out the real answer!*"
3. **Repeat:** Continue this process for each of your chosen objects. Let her have fun dropping the items in and recording the results.
4. **Conclusion (Wrap-up):** After testing all the items, look at the completed worksheet. Say, "*Look at all this amazing science we did! We asked a question, made guesses, and tested them to find the answers. You are officially a scientist! You did an amazing job today.*"