Teacher/Parent Note: This lesson is designed to be interactive and discussion-based. Adapt the questions and activities to Cora's responses and interests. The timings are approximate.

Time: 40 Minutes

Part 1: Welcome, Eco-Detective Cora! (0-5 minutes)

Hello Cora! Today, we're going on an exciting mission to become Environmental Health Detectives! Have you ever wondered how the world around us – the air we breathe, the water we use, even the sounds we hear – can affect how we feel and stay healthy? Our environment plays a big role in our well-being, and today we'll investigate how!

Part 2: The Case of the Pesky Pollutants! (5-15 minutes)

Every good detective needs to know the culprits! In environmental health, some of the main culprits are different types of pollution. Let's investigate a few:

- Air Pollution: Our Invisible Foe! Imagine a big city with lots of cars and factories. What do you think might be in the air? (*Guide towards smoke, exhaust fumes*). This is air pollution. **Detective Question:** If the air is smoky or dusty, how might that make someone feel? (*e.g., cough, trouble breathing, itchy eyes*).
- Water Pollution: Murky Waters! Picture a river with trash floating in it, or a lake where yucky stuff from a pipe is flowing in. This is water pollution. **Detective Question:** If water is polluted, what problems could it cause for people or animals? (*e.g., can't drink it, fish get sick, tummy ache if someone drinks it*).
- Land Pollution: Messy Grounds! Think about a park where people have left their picnic trash, or a big pile of garbage. This is land pollution. **Detective Question:** How does land pollution impact our health or the environment? (*e.g., looks bad, attracts pests, animals might eat harmful things*).
- Noise Pollution: Too Loud! Imagine trying to read a book next to a really loud construction site or a busy road with lots of honking. This is noise pollution. **Detective Question:** How can very loud noises affect us? (*e.g., headaches, hard to focus, feeling stressed*).

Great job, Detective Cora! You're spotting the clues already!

Part 3: Our Super Shields & Planet Powers! (15-25 minutes)

Now that we know about these pollution culprits, the good news is we have "Super Shields" to protect ourselves and "Planet Powers" to help fight back!

Your Personal Super Shields:

- **Sun Shield:** What can we use to protect our skin and eyes from too much sun? (*e.g.,* sunscreen, hat, sunglasses, long sleeves). Why is this important? (*Prevents sunburn, keeps skin healthy*).
- **Bug Shield:** If you're playing outside where there are lots of mosquitoes or ticks, what can you do? (*e.g., bug spray, wear long sleeves/pants*). Why? (*Avoid itchy bites, prevent sickness bugs might carry*).
- Air Quality Shield: On days when TV news says the air quality is poor, what's a smart thing to do? (*e.g.*, *play indoors*, *avoid running hard outside*).
- **Temperature Shield:** What do we do to protect ourselves in very hot or very cold weather? (e.g., drink water & find shade in heat; wear warm clothes in cold).

Planet Powers: The Awesome 3 R's! (Reduce, Reuse, Recycle)

We can also help the planet, which in turn helps our health! Let's use our creativity for this:

Creative RRR Challenge! I have a [*mention one of the collected household items, e.g., 'an empty plastic bottle' or 'an old cereal box'*]. Instead of just throwing this away, how could we **REUSE** it for something new and fun, or **REDUCE** the need for new things by using it? Or how could we make sure it gets **RECYCLED** properly?

(Brainstorm ideas with Cora. Encourage silly or inventive ideas! For example, a plastic bottle could become a planter, a piggy bank, or part of a craft. A cereal box could become a drawer organizer or a puppet theater.)

Part 4: Smart Shopper Superpower! (25-35 minutes)

Detective Cora, you have another amazing power: your choices when your family shops! Sometimes, big companies that make things can cause a lot of pollution.

Detective Question: If many people choose to buy products from companies that try hard to protect the environment, or if people decide to buy less stuff they don't really need, what message does that send to the companies?

(*Guide discussion towards: companies might change to be more eco-friendly, less demand means less production and potentially less pollution*).

Here are some smart shopper clues:

- Look for things with less plastic packaging.
- Can something be fixed instead of buying a new one?
- Think: "Do I really need this, or just want it?" Buying less means making less trash.
- Supporting local farmers and makers can sometimes mean less pollution from long-distance shipping.

Your mission: Can you think of one small way your family could be even smarter shoppers to help our planet's health?

Part 5: Case Closed & Your Eco-Action! (35-40 minutes)

Amazing work, Detective Cora! You've investigated different types of pollution and their effects on health, discovered your personal "Super Shields," and learned how the 3 R's and smart shopping are powerful tools to protect our environment.

Remember, every action, no matter how small, makes a difference! What's one thing you learned today that you could try to do this week to be an Environmental Health Hero?

(Encourage Cora to state a simple, achievable action. This could be verbal, or she could draw it. For example: "I will try to turn off the water when I brush my teeth," or "I will help sort the recycling," or "I will remember my hat when I play outside.")

You're officially a Super Environmental Health Detective! Great job!