Lesson Outline Plan 1: How Do Drugs Affect the Brain?

Objective:

By the end of the lesson, 8th-grade students will understand how drugs can affect the brain's functioning, including both prescription and illegal drugs, and will conduct basic research to explore the effects of specific drugs on behavior and health.

Materials:

- **TedEd Video**: "How Do Drugs Affect the Brain?" by Sara Garofalo
- **Computers or tablets with internet access**
- **Worksheet**: To be created by the teacher for students to record their findings in a simpler, more structured format

Lesson Duration:

1-2 class periods (60-90 minutes total)

Instructional Steps:

1. Introduction to the Topic (10 minutes):

- **Video Viewing**: Start the lesson by showing the TedEd video "How Do Drugs Affect the Brain?" by Sara Garofalo. The video explains in simple terms how drugs interact with the brain, affecting how people think, feel, and behave.

2. Class Discussion (10 minutes):

- **Guiding Questions**:
  - What does the video say about how drugs can enter the brain?
  - How do drugs change the way the brain sends messages between cells?
  - Can you think of any examples of how drugs might make someone feel or act differently?
- **Reflection**: Ask students to share what they found most interesting or surprising from the video. Discuss the importance of understanding how drugs affect the brain, especially at a young age.

3. Research Activity (20-30 minutes):

- **Research Topic**: Instruct students to choose one type of drug to learn more about. They can choose a common prescription drug (like those used for ADHD) or an illegal drug (like marijuana or cocaine). Emphasize that they will learn about how this drug affects the brain and body.
- **Simplified Research Questions**: Provide students with questions to answer:
    - What does this drug do to the brain?
    - How might this drug change how someone feels or acts?
    - What are some dangers or side effects of using this drug?
- **Online Research**: Guide students to safe and age-appropriate websites where they can find basic information about their chosen drug. Encourage them to write down their answers on the worksheet.

4. Group Sharing (15 minutes):

- **Pair and Share**: Have students pair up or form small groups to share what they learned about the drugs they researched. They should explain in their own words how the drug affects the brain and what risks it might have.
- **Class Discussion**: Bring the class back together to discuss some of the key points shared by the groups. Highlight any common themes or important takeaways.

5. Creative Activity (Optional, 20 minutes):

- **Poster or Slide Creation**: If time allows, have students create a simple poster or slide that explains how their chosen drug affects the brain. They can include pictures, key facts, and a short message about why it's important to understand these effects.
- **Presentation**: Students can present their posters or slides to the class, giving them a chance to practice public speaking and reinforce their learning.

6. Conclusion and Reflection (10 minutes):

- **Reflection**: Ask students to think about why it's important to know how drugs affect the brain. How can this knowledge help them make safer choices in the future?
- **Conclusion**: Summarize the key points from the lesson, reminding students that drugs can have powerful effects on the brain and body, and that understanding these effects is important for making informed decisions.

Assessment:

- **Research Completion**: Check that students have completed their research worksheets, focusing on their ability to identify basic facts about how drugs affect the brain.
- **Participation in Discussions**: Assess students' engagement during group discussions and their ability to share their findings with others.

- **Creative Activity**: If the creative activity is included, evaluate the effort and understanding shown in their posters or slides.