Core Skills Analysis

Science

- Logan learned about the physical properties and mixtures by experimenting with materials such as corn syrup, red dye, glue, gelatin, and vegetable oil to create different textures and effects (e.g., fake blood and burns).
- He engaged with concepts of states of matter and phase changes, particularly by melting gelatin crystals with heat and observing how the mixture sets into a jelly-like solid.
- By researching and preparing 'jelly coke,' Logan practiced applying scientific knowledge about dissolving substances and cooling processes to create a gelled beverage.
- The activity fostered observational skills as he assessed texture, drying times, and layering effects to simulate peeling skin and realistic burns.

Literacy and Research

- Logan developed skills in following sequential instructions accurately to create chemical mixtures safely and effectively.
- He enhanced his ability to gather information independently through researching how to make 'jelly coke,' interpreting procedural text and synthesizing that knowledge into a practical task.
- The activity promoted vocabulary enrichment, especially with subject-specific terms such as 'gelatin,' 'plasma,' and 'dye,' expanding his understanding of scientific language.
- He demonstrated comprehension by applying researched steps to real-world-like experiments involving mixtures and transformations.

Fine Motor and Artistic Skills

- Logan used fine motor skills to carefully spread glue and paint on his arm for the fake burns, showing control and deliberate movement.
- The layering technique for the peeling skin effect required patience and precision to achieve a believable texture.
- He explored artistic expression by combining visual effects like color (red dye as blood) and texture (gelatin and glue) to create a realistic and imaginative zombie effect.
- Using a paint brush to dab fake blood illustrated his ability to integrate tools to enhance sensory detail and visual impact.

Tips

To deepen Logan's learning, you could encourage him to keep a science journal documenting each stage of his experiments, including observations about texture, color changes, and solidification time to build his scientific inquiry and writing skills. Introduce related chemistry concepts such as mixtures versus solutions and physical changes versus chemical reactions using simple, hands-on activities, for example experimenting with cornstarch and water mixtures. Further exploration of the biology of blood components and skin layers through drawing or model-making could integrate science with art. Finally, creating a short presentation or video explaining his zombie science creations would build communication skills and confidence.

Book Recommendations

- Ada Lace, Scientist: The Ghost Experiment by Emily Calandrelli: A mystery story that combines real scientific concepts with fun experiments children can try at home, ideal for stimulating curiosity about science.
- The Science of Monsters: Decoding the Science Behind Your Favorite Monsters and Creatures by Joseph A. Michael: Explores scientific ideas behind monsters and mythical creatures with approachable explanations suitable for young readers.
- Awesome Science Experiments for Kids by Crystal Chatterton: A book full of simple, exciting

experiments exploring chemistry, physics, and biology that kids can perform safely at home.

Learning Standards

- CA1-VIS-01: Using materials and techniques (corn syrup, dye, glue, gelatin) to represent ideas (fake blood and skin).
- STE-SCI-01: Identifying properties of materials and movement (melting gelatin, mixing liquids).
- ST1-PQU-01: Posing questions and investigating cause and effect through experiments with mixtures.
- EN2-OLC-01: Communicating and understanding steps by researching and following instructions.
- EN1-CWT-01: Creating texts (instructions, observations) to communicate ideas and understanding.
- PH1-SMI-01: Demonstrating self-management skills like patience and attention during experiments.

Try This Next

- Worksheet: Label the ingredients and steps involved in making fake blood and describe the physical changes observed.
- Drawing task: Create a step-by-step comic strip illustrating the process of making zombie burns and fake blood, including thought bubbles with scientific observations and questions.
- Experiment prompt: Test different quantities of red dye to see how the color intensity changes and record the findings in a chart.

Growth Beyond Academics

This activity likely fostered Logan's curiosity and independence as he researched and applied new knowledge. The creative aspect of making his own zombie effects may have boosted his confidence and self-expression. Patience and focus were required for mixing, layering, and waiting for gels to set, supporting self-regulation and attention to detail.