# **Core Skills Analysis**

### **Art and Design**

Frankie engaged in a hands-on creative activity by constructing a bee model using foam and pipecleaners. They first followed standard instructions, demonstrating an understanding of basic design and assembly skills. Then, by choosing to create a 'mutant bee' with an extended body and a uniquely drawn head, Frankie exercised imaginative thinking and artistic skills. This involved planning a new structure, manipulating materials creatively, and applying fine motor skills to draw and attach the custom head. Through this process, Frankie learned to combine following guidelines with personal innovation, enhancing their spatial awareness and artistic expression.

### Science (Biology)

Through making a bee model, Frankie explored aspects of insect anatomy in a tactile way. Initially, they replicated the typical bee form, implicitly learning about the parts of a bee's body such as the head and thorax. When altering the bee to create a 'mutant' version, Frankie demonstrated an understanding of biological concepts such as variation and mutation, although expressed imaginatively rather than scientifically. This kind of activity encourages curiosity about real-life insects and the diversity of living organisms, supporting foundational knowledge in biology related to structure, adaptation, and imaginative extension of these ideas.

#### **Tips**

To extend Frankie's learning, encourage them to research actual bee anatomy and different species to compare with their mutant bee creation. This could be combined with a simple life science lesson about insects' roles in ecosystems. Next, prompt Frankie to write a short story describing the mutant bee's special abilities and habitat, blending art with creative writing. Lastly, try a collaborative science-art project where they create other mutant insects and present their features and functions, fostering teamwork and deeper scientific imagination.

#### **Book Recommendations**

- <u>The Bee Book</u> by Imogen Russell Williams: An engaging exploration of bees' real lives, behaviors, and importance in nature, perfect for curious kids.
- <u>How to Draw Bugs</u> by Marcelo Soria-Rodriguez: A step-by-step drawing guide to insects that inspires kids to create their own bug art.
- <u>Mutation: How to Make a Monster</u> by Jennifer Boothroyd: A fun introduction to genetic mutations and variations presented in an accessible and imaginative way.

#### **Learning Standards**

- Art and Design: Use a range of materials creatively to design and make products (KS2 Art & Design 3a).
- Science: Identify and name the main parts of the human body and understand that animals, including humans, have offspring which grow into adults (KS2 Science - Animals, including humans).
- Science: Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago (KS2 Science Evolution and inheritance).
- English: Develop positive attitudes towards and stamina for writing by creating stories based on their mutant bee (KS2 English Writing 1a).

## **Try This Next**

Design a worksheet where Frankie labels the parts of a bee and then draws their own mutant

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bee variant, explaining the differences.

- Create a quiz with questions about insect body parts, functions, and what a mutation might mean in biology.
- Draw or sculpt a series of mutant insects incorporating different changes and describe what effects these might have on their survival or abilities.