SUPPORTING EARLY SCIENTIFIC THINKING THROUGH CURIOSITY IN THE EYFS

The Early Years Foundation Stage (EYFS) framework in England sets standards for children's learning, development, and care from birth to five, emphasising curiosity, exploration, and critical thinking. Supporting early scientific thinking through curiosity is closely aligned with these principles and goals.

1 EYFS Principles and Child Development:

The EYFS recognises each child's uniqueness, with learning driven by curiosity. Scientific thinking taps into this, enabling exploration and understanding. Practitioners tailor activities to individual interests.

2 Understanding the World:

"Understanding the World" involves exploring nature, observing any changes, and investigating how things work. Their curiosity should prompt "Why?" and "How?" through experimentation, prediction, and observation – key early scientific skills.

3 Communication & Language:

Curiosity drives more questions and communication, aligning with EYFS language development. Children articulate ideas, describe observations, and gain vocabulary (e.g., "float," "sink").

4 Physical & Mathematical Links:

Hands-on scientific activities develop motor skills. Exploration involves a variety of skills: measuring, comparing, counting, and patterns which strengthen the link to early numeracy.

5 EYFS Principles and Child Development:

- **Playing & Exploring:** Curiosity helps drive investigation and experimentation.
- **Active Learning:** Curiosity leads to problem-solving, persistence & engagement.
- **Creating & Thinking Critically:** Scientific thinking encourages connections, testing, and theory development.

6 Practitioner's Role:

- **Facilitating Curiosity:** Create enabling environments with diverse resources, supporting investigations and posing open-ended questions.
- **Extending Learning:** Observe children's interests and extend learning by introducing challenges and resources to deepen scientific thinking.

7 Real-World Connections & Examples:

EYFS encourages real-life learning. Scientific thinking helps children understand everyday phenomena.

- **Nature Walks:** Encouraging children to observe and ask questions about plants, insects, and weather.
- **Experiments:** Simple activities like mixing colours, exploring floating and sinking, or growing plants.
- **Sensory Play:** Making use of water, sand and other materials to explore textures, cause and effect, and changes in state.

Building Foundations for Scientific Thought

Supporting early scientific thinking through curiosity is deeply embedded in the EYFS framework. It aligns with principles, learning areas, and characteristics of effective learning, helping children develop critical thinking, problem-solving, and a lifelong love of learning. By fostering curiosity, practitioners create a foundation for scientific understanding that supports children's overall development.