



### **Light Up Glow Spheres, Cylinders and Bricks (EY11831)**

*In this case study, Hannah Worrall, from Clarendon Primary School, discusses the different ways in which the Light Up Glow Spheres, Cylinders and Bricks were used with the children in Reception and the learning that took place.*



#### **Background Information**

At Clarendon Primary School, we have a large percentage of children that have English as an additional language (EAL), additional sensory needs and many of the children are from disadvantaged backgrounds. Our key focus is on vocabulary and building the children's communication and language skills. Our main reason for wanting these resources was because we wanted to find a resource that was adaptable and accessible to all children, with many open-ended opportunities. As well as developing our children's communication skills and building their vocabulary, we also wanted to enhance investigation skills and encourage imagination. The main learning outcomes we aimed to achieve through using the resources in our Reception class included:

- Teaching and learning of new vocabulary, asking questions to find out more, to articulate their ideas and thoughts, connecting one idea or action to another, using talk to work out problems, to organise their thinking and explain how things work.
- To develop children's ability to subitise, understand one more/one less, talk about and identify the patterns around them and to continue, copy and create repeating patterns.
- For the children to explore how things work and talk about what they see, using a wide vocabulary.
- To explore different materials freely, in order to develop their ideas about how to use them and what to make.

#### **How was the resource used?**

The resources were presented to the children with no explanation. Instead, we observed the children's reactions and watched what they began to do with them. Our children with additional needs were intrigued by the resources and quickly worked out that you had to bang them to get them to light up.

The children used their senses to explore the resources, and some children began to build a tower with the bricks.

The children began to roll the spheres along the carpet to their friends. As a group, we came together to explore the resources after the initial independent play. We focused on making repeating patterns as this has been a focus in our maths sessions. We also used them to consolidate one more and one less. The children enjoyed using their imagination to create their own bridges for the spheres to roll under. We created different ramps at various heights to see which rolled down the fastest and we tested different surfaces to see how friction slowed the spheres down. Finally, we rolled the spheres in sand to see what marks they left behind.

We used the resource inside only due to the weather conditions. However, on a dry day these could be used and incorporated into large construction building and other gross motor opportunities.

### **Impact and outcomes**

The children thoroughly enjoyed participating in the activities and were engaged throughout. Whilst independently exploring the resources, the children displayed curiosity and used a range of investigative techniques to decide what to do with them. This then led the children to use a range of vocabulary and develop their communication skills. Vocabulary that we heard through the investigation included, 'stack', 'build', 'tall', 'taller', 'bigger', 'glow' and 'light'.

The resources impacted the children's holistic learning in a positive way and as a result the children achieved a range of learning outcomes as listed above. Our children with additional needs were particularly drawn to the sensory aspects of the resource and this allowed for a calming circle session with these children exploring the resources.

With thanks to Hannah Worrall from Clarendon Primary School for writing and sharing this case study with us.



### **Light Up Glow Spheres, Cylinders and Bricks (EY11831)**

*In this case study, Ellie Fox, Nursery Manager at Think for The Future Tots Nursery, discusses the different ways that the glow resources were used to develop skills in the Early Years.*



#### **Intent:**

The nursery staff at TFTF Tots recognised the potential of the Light-Up Glow Spheres, Cylinders, and Bricks to support speech and language development, technology understanding, and imaginative thinking. They implemented a free play approach, allowing the children to follow their own ideas and explore the various possibilities offered by the resource.

#### **Implementation:**

During free play sessions, the children were encouraged to engage in a range of activities with the glow spheres, cylinders, and bricks. Some examples of these activities included:

- **Building Structures:** The children were given the freedom to build structures using the glow spheres, cylinders, and bricks. This activity not only enhanced their imaginative thinking but also provided opportunities for problem-solving and critical thinking. The children quickly discovered that placing the cylinders inside the bricks helped to stabilise their structures, promoting their understanding of balance and stability.
- **Colour Recognition:** The glow spheres, cylinders, and bricks come in different colours, providing an excellent opportunity for the children to practice colour recognition. The staff encouraged the children to sort and match the objects based on their colours, enhancing their ability to identify and recognise different colours.
- **Technology Exploration:** The nursery staff introduced the concept of technology by discussing how the glow spheres, cylinders, and bricks light up. The children were encouraged to explore the different resources and discover how they could activate the

lights. This activity helped develop their understanding of cause and effect and introduced them to basic technological concepts.

### **Impact:**

The implementation of the Light-Up Glow Spheres, Cylinders, and Bricks had several positive impacts on the children's learning outcomes at TFTF Tots.

- **Technology Understanding:** Through their exploration and play with the glow spheres, cylinders, and bricks, the children developed a better understanding of technology. They learned that the objects could be activated to emit light and began to grasp the cause and effect relationship between their actions and the resulting light.
- **Colour Recognition:** The use of the glow spheres, cylinders, and bricks facilitated colour recognition among the children. By engaging in activities that involved sorting and matching the objects based on their colours, the children improved their ability to identify and differentiate between them.
- **Critical Thinking and Problem Solving:** The building activities with the glow spheres, cylinders, and bricks encouraged critical thinking and problem-solving skills. The children had to investigate and experiment with different arrangements to create stable structures. The use of the cylinders inside the bricks to enhance stability demonstrated their ability to think creatively and find solutions to challenges.

### **Conclusion:**

The implementation of the Light-Up Glow Spheres, Cylinders, and Bricks at TFTF Tots proved to be highly beneficial in supporting speech and language development, technology understanding, and imaginative thinking among the children. The free play approach allowed the children to follow their own ideas and explore the various possibilities offered by the resources. Through activities such as building structures, colour recognition, and technology exploration, the children developed their critical thinking, problem-solving, and speech and language skills.

With thanks to Ellie Fox from Think For The Future Tots Nursery for writing and sharing this case study with us.