**Understanding the World**

**Intent:** As members of a diverse community, children are supported to question, reflect and embrace their own individuality, the diversity of a global society and their essential connection with nature. Scientific enquiry is an intended vehicle through which children will test theories and think critically. Through a creative indoor and outdoor curriculum we intend to teach children about their own history and to develop a sense of time in the context of life on earth. Our intention is to support children’s awareness of geographical concepts, promoting a love of their own daily environments and also global ecosystems. As children explore natural and manmade materials, and forces in nature, the innovative curriculum, based on metacognition and enquiry, is intended to support the development of technological thinking and the application of engineering skills. Through the lens of environmental sustainability, our intent is to provide children with an understanding of their life experience past, present and future.

**Implementation:** MetaSTEAM is a unique school based approach, designed to integrate music and rhyme into STEM subjects. Expert knowledge unpins the implementation of this and running throughout, is a metacognitive thread of connection. Knowledge and skill are developed with fluency and remain connected to the past, present and future life experiences of our children. Disconnection and misunderstanding is identified and effectively addressed, enabling long term memory to be positively impacted. Teachers ensure that children understand and embed key concepts, supporting the development of enquiry, critical thinking and creativity. As educated global citizens, MetaSTEAM supports children to think and reflect upon problems and solutions within their local and global communities. Need to add forest school statements- link to cultural capital?

Through our focus on cognitive challenge and high aspirations for all, our enhancement opportunities are as follows: Indoor STEM target sessions supporting different levels of attainment, MetaSTEAM focused group in the STEM Hive - concentrating on curriculum integration, Environmental Education through MetaSTEAM in the STEM Hive, Aspiration Group, Earth Elves – introductory forest school sessions for our younger children and whole day Forest School sessions.

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| MetaMaths and the EYFS - Alfreton Nursery School |

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| Progression Stages | **EYFS Assessment** | **Blocker** | **MetaMaths A - Z Progression Planning** |
| **Emerging** | **Secure** | **AMA** |
|   | **Birth to three years** |  |  |   |   |
| Repeat actions that have an effect. |   | **A B** | **H** | **P** |
| Explore materials with different properties. |   | **C D** | **G** | **J** |
| Explore natural materials, indoors and outside. |   | **C D** | **G** | **J** |
| Explore and respond to different natural phenomena. |   | **E Q R** | **F K** | **X** |
|   | Make connections between the features of their family and other families. |   | **C D** | **G** | **J** |
| Notice differences between people.  |   | **L** | **Z** | **I** |
| **3 and 4 year olds** |  |  |  |  |
| Use all their senses in hands on exploration of natural materials. |   | **L** | **Z** | **I** |
| Explore collections of materials with similar and/or different properties. |   | **C D** | **G** | **J** |
| Talk about what they see, using a wide vocabulary. |   | **E Q R** | **F K** | **X** |
| Begin to make sense of their own life-story and family’s history. |   | **A B** | **H** | **P** |
|  Show interest in different occupations. |   | **E Q R** | **F K** | **X** |
| Explore how things work. |   | **T U** | **W** | **M N Y** |
| Plant seeds and care for growing plants. |   | **O** | **S** | **V** |
|  | Understand the key features of the life cycle of a plant and an animal. |   | **T U** | **W** | **M N Y** |
| Begin to understand the need to respect and care for the natural environment and all living things. |   | **E Q R** | **F K** | **X** |
| Explore and talk about different forces they can feel. |   | **E Q R** | **F K** | **X** |
| Talk about the differences between materials and changes they notice. |   | **T U** | **W** | **M N Y** |
| Continue developing positive attitudes about the differences between people. |   | **C D** | **G** | **J** |
| Know that there are different countries in the world and talk about the differences they have experienced or seen in photos. |   | **L** | **Z** | **I** |

**Impact:** The metacognitive approach to Understanding the World leads to the acceleration of children’s capacity to understand and reflect on key concepts. Our application of MetaSTEAM drives children to expand their own depth of fascinations, experiencing learning from a position of growth mindset. The impact of teachers having a firm and common understanding of the curriculum intention and implementation, results in purposeful and aspirational teaching and learning. A consistent enquiry based culture, results in children achieving highly and this is reflected in their thinking, communicating and behaviours.

