**Mary Dean’s CE Primary School’s Knowledge Rich Curriculum**

**Science Subject area**

**Intent, Implementation and Impact**

A School Family Learning for Life in all its Fullness

**Intent**

Science is taught in accordance with the National Curriculum .

The most important aim is to enthuse and inspire children to acquire a love of science. Asking questions and closely observing the natural world is actively encouraged. Practical activities should be enjoyable and increase children’s experience of the natural world. Over-zealous planning and recording of practicals is discouraged; diagrams, charts and photographs should be used to limit the amount of time spent providing evidence for inspectors. It is what is in the children’s heads that is important. Above all, science learning should be FUN.

**Implementation**

A two year rolling-progamme ensures coverage for mixed year group classes.

Each phase plans for the classes within the phase. Termly planning is presented as a week by week outline for each half term. Knowledge Organisers present the information to be learnt in a child friendly, compact form. This enables children to review and consolidate their learning as the term progresses. At the end of each half term unit a quiz is used to assess learning.

In additional to the formal science teaching in accordance with the national curriculum, the whole school will come together to celebrate and foster a love of science. This will be achieved through assemblies, special focus days, visitors and nature walks.

**Cross-curricular Links**

There are many links with others subjects, most notably:

* Maths – measurement, charts, data
* English – clear expression (both verbal and written), organisation, use of technical vocabulary
* PHSE – life cycles, health (including diet, exercise and use of drugs)
* RE/SIAMS – awe and wonder at the natural world

**Impact**

End of unit quizzes provide formal summative assessment and the results are collected and collated. However, the most compelling evidence for good science learning is in the children’s heads. By Y6, children are able to suggest and execute interesting investigations, using scientific language as evinced by teacher assessment.

Mixed age and ability assessment tasks, with small representative groups of children, are to be carried out as part of the subject leader scrutiny to ensure that investigation skills are integrated into science learning throughout the school.

Annually, science co-ordinators will visit each class to observe teaching, in particular, practical sessions.

In addition, there will be a termly science day when the co-ordinators visit each class for 20mins to assess the impact of the spiral curriculum through short, whole class activities. There is a two year rolling programme outlining the topics for these days.