Year 8 Science
Spring 1 Level Ladder

All students are expected to master at least the Level 5 content by the end of the half term.

Check Arbor or ask your child what their current working and target level is in science

Topics: Rocks & Practical Skills

EG:
5A - mastered all of the Level 5 content
5B - mastered some of the Level 5 content
5C - mastered all of the Level 4 content and beginning to master some Level 4 content

Level	Sample tasks
4	Knowledge of Rocks: 1. Describe the three different types of rocks - sedimentary, igneous and metamorphic. 2. Describe the characteristics of the rock below and say why it is sedimentary.  3. Describe how this rock is formed, using key words such as pressure. Practical skills: **Describe** the independent and dependent variable in your experiment. **Describe** 3 ways to make sure your experiment is a fair test. **Explain why** you repeat your experiment 3 times.

5	Knowledge of Rocks: 1. Explain why some rocks have larger crystals than others. 2. Explain how limestone is affected by acid and where this might happen in nature. 3. Explain how one rock might change into another type and where this happens. Practical skills: **Explain** what your results show you. **Draw** a table of results, with headings and units. **Explain** whether your results have any anomalies in them and how you know. **Calculate** the mean (ignoring any anomalies).
6	Knowledge of Rocks: 1. Link topics together, for example by using your knowledge of acid rain to discuss how pollution affects statues. 2. Use your knowledge of rock types to explain where we are likely to find fossils and how fossils can be destroyed. Practical skills: **Evaluate** your experiment, **suggesting** ways to improve accuracy.
7	Knowledge of Rocks: 1. Suggest how our previous topic of reactivity can link to extraction of metals from ores. Practical skills: **Evaluate** your experiment, **suggesting** ways to improve precision. **Create** an alternative method to test your hypothesis, **evaluating** its merits.

During spring, students will briefly finish off the topic of genetic diseases in week one before moving on to study rocks for 3 weeks.

At KS3, this topic forms an important foundation for when students study limestone and hydrocarbons in detail at GCSE.

They will then spend 1 week doing what is called a *controlled assessment*.

This will give them a chance to practice certain skills which are needed for practical work and which are assessed at GCSE.

This is done within the context of a topic the students have studied so as to also test their understanding of the theory and give them a chance to apply this understanding.

The assessment level in the first half term will be based on the controlled assessment.