STEM skills – the individual skills needed to do science, mathematics, and engineering, and those needed to use technology effectively.

We use these in every subject, not just exclusively STEM ones, but explicit reference needs to be made so children can see where they are using them across the curriculum.

Problem Solving - how to approach a task.

STEM problems mean you have to work quickly and come up with a method that would work to solve a problem.

Creativity - think outside the box.

This STEM skill is the ability to look at and come up with solutions to a problem through different approaches. In STEM, mistakes and failed attempts are positive experiences, offering opportunities for deeper learning.

Inquiry Skills - questioning why something is as it is.

Students are the drivers of solutions and should be asking the questions, proposing the ideas, generating and testing solutions, and making decisions based on data to understand how to refine ideas further.

Observation - looking closely.

In order to work effectively, it is important to observe what happens, record it and then look to see if you could explain what you have just seen.

Flexibility - change the way you try things if it doesn't work.

STEM learning means trying to solve a problem one way, and then changing your idea or method if it doesn't work first time, never giving up.

Collaboration - working together.

Big challenges are rarely solved by individuals. Working on STEM problems also involves learning to work as a productive part of a team.

STEM

Learning skills

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