I am a designer

Intent: At Frome Vale Academy it is our intention that when children study Design and Technology they will have hands on, practical experience of designing, making and evaluating products. Children will have freedom to use their creativity and imagination to design and make products that solve real and relevant problems, from a range of contexts whilst considering their own and others' needs, wants, interests and opinions. They acquire a broad range of subject knowledge and apply learning from other areas such as maths, science, computing and art. Children learn how to, and are happy to, take risks, becoming resourceful and innovative. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world.

Implementation: Children will be given opportunities to design and make products based on a certain design criteria through design and technology projects. This will link to their wider learning within history/geography curriculum. They will have the opportunity to work collaboratively, sharing ideas and knowledge and supporting each other's learning journey. They will be given opportunities to explore and evaluate a range of existing products and use what they learn from these when designing. They will have opportunities to explore materials and tools, and be taught certain skills which they can use when making their product (eg. Cutting, shaping and joining materials). The design criteria should reflect the year group, with more challenging criteria as the children progress through the school.

Impact: Children at Frome Vale will be able to design purposeful and functional products based on a certain design criteria and be able to generate, develop and communicate their ideas through talking, drawing, models or templates using ICT (if applicable). They will be able to select and use the tools required, and select and use appropriate materials according to their characteristics, in order to make what they have designed. They will then evaluate their design against the design criteria and think of ways they could improve their work. This would include applying their technical knowledge eg how to stiffen things or make it stronger, use mechanisms such as gears or pulleys, include electrical components such as switches or motors and use knowledge of computing to program, monitor and control their product. They will also understand how key events and individuals in design and technology have helped shape the world.