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*Balloon Rockets*

The first rockets were believed to be built by the Chinese. The first modern type of rocket was built by Robert Goddard in 1935 in the United States. It never made it into space, and it used liquid fuel. Wernher von Braun worked with Hermann Oberth of Germany during World War II to make the V2 war rocket. This rocket was used to destroy southern parts of England during the war. By 1950, Oberth had developed a solid fuel source. The space shuttles of today use Hydrazine ( $N_2H_4$ ) in its fuel mixture. The fuel for our balloon rockets was expelled air or our breath. We breathe out carbon dioxide, water, and ATP (adenosine triphosphate) which is energy. The chemical formula for aerobic respiration is:  $C_6H_{12}O_6 + 6O_2 \rightarrow 6CO_2 + 6H_2O + 38$  Molecules ATP energy. We hypothesized that the balloon with the most air would go the furthest and our tests proved it correct. However, we did have some balloons that were “flops” and the project took a lot more work than we thought at first. We have some new questions, and are trying to find ways to get our answers.