



**Wood End Park
Academy**

Year 4

Spring 1 D.T

Mechanisms

Intent of the unit:

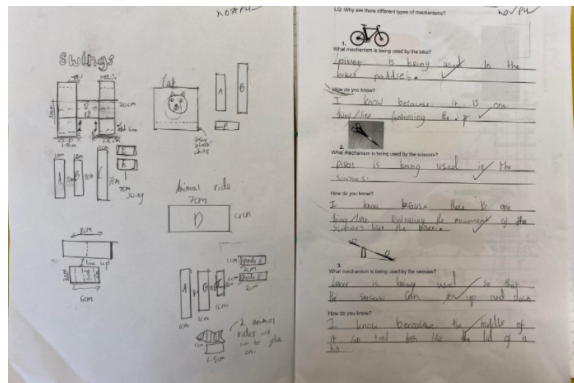
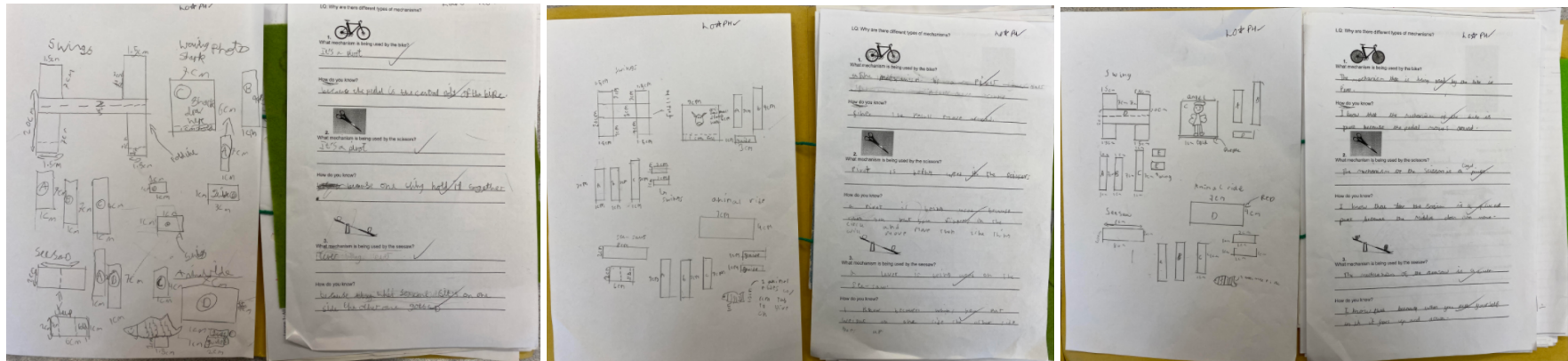
During this unit, students will explore different mechanisms and how these can be used to create various different movements. Students will look at real-life examples of mechanisms and use these plus example plans to help create their own plans for their playground encouraging a level of originality.

Students will use their learning to create mechanisms that will allow them to have moving rides in their pop-up playground.

Finally, they will evaluate the products they have created and use this evaluation to consider future improvements.

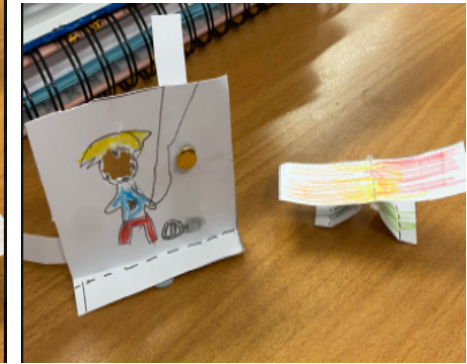
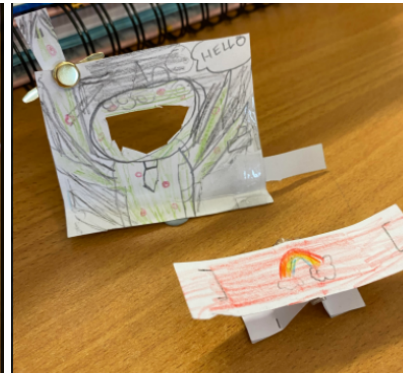
LQ: Why are there different types of mechanisms?

The children learned about different mechanisms and how they are used in general daily products, as well as planning their pop-up playground.



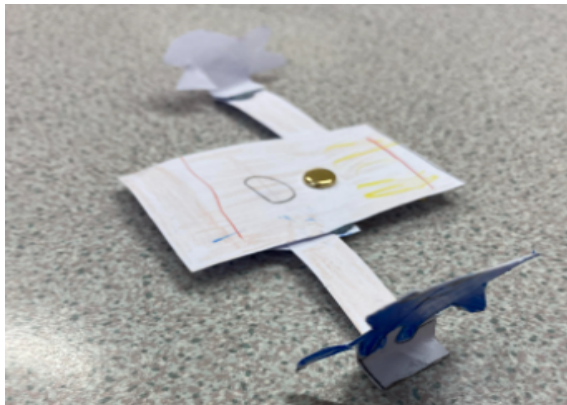
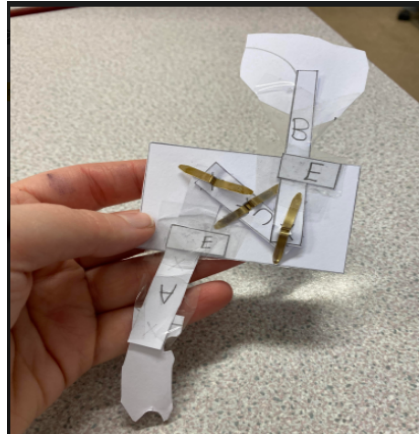
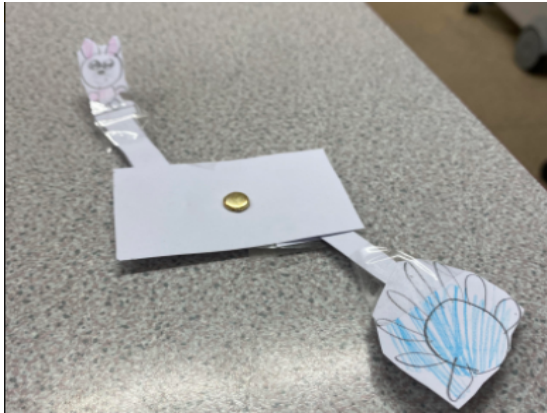
LQ: Do sliders and a pivot create a moving mechanism?

In this lesson, children made a seesaw and waving alien mechanism for their playgrounds which involved using levers, pivot points and linkages. This also allowed them to use their design and creating skills as they had to draw the individual pieces correctly before being able to construct a working product.



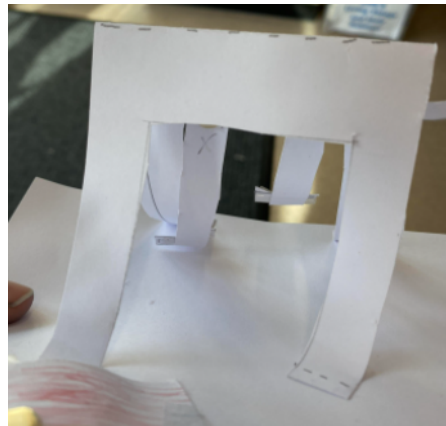
LQ: How effective is a linkage at creating movement?

In this lesson the focused on creating a linkage for a moving animal ride, honing on the necessary elements for a successful linkage such as even pieces, smooth movement, securely attached components.



LQ: Could a mechanism be used to create two simultaneously moving things?

In this lesson, the children explored how we could use linkages and pivots to create a ride where two elements move smoothly at the same time. They then added all of the rides onto their playground base.



LQ: Can I use my evaluations to improve my product?

During this lesson, pupils think about what they liked or conversely, didn't like about their products and what they would change in the future and why. They also reflect on the ease of making the product and how effective the mechanisms are.