

BLACKROD PRIMARY SCHOOL


Project Reflection – Spring 1

Design Technology – Using Cams

We looked at moving toys and explained what a mechanical system is, which uses cams, to make their animals move

DWTDS Friday 4th February 2022

Mechanisms - disassemble



A cam is a rotatory disk shaped to convert rotatory into linear or rotatory.

A follower is something that follows the cam's movements.

1-rotatory
2-linear

I like the boat because it moves how it does on the ocean and it's really cool.

I like the instrument one because it is spins around but it can get boring.

I think the boat would be for a toddler because I think they would be really entertained for at a bit.

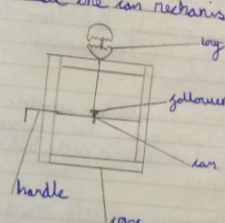
I think it is for a person who owns could use it for furniture.

by adding more colour

colour's to the bottom parts because the bottom parts are all one color colour

07.02.22

Draw and label one cam mechanism seen in the clip

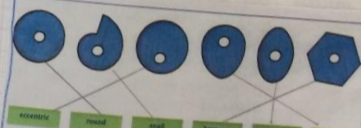


A cam mechanism helps something move up and down spinning around (by using the handle) and forcing the follower making it to go up and down.

A super disassemble

Monday 7th February 2022

Focus practical task



Snail

This cam it is called the snail. This cam has a sudden drop then it rises back up slowly. This cam is very exciting and entertaining.

Example.

This cam is called the eccentric. This cam is smooth and it has a higher turning point. It looks like a circle but it actually isn't.

Round.

This cam is called round. This cam always stays at the same level and it is very simple. This cam is very boring and plain.

Ellipse

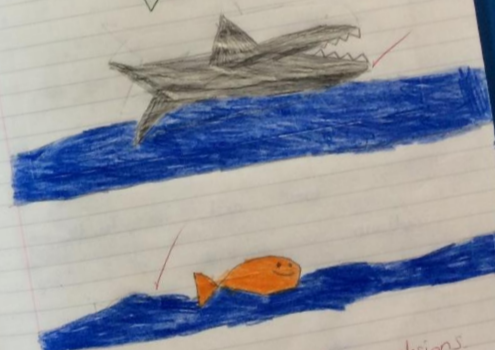
This cam is called ellipse. It is interesting, so smooth and round. The cam is lower when it's on its side and higher at the point.

I kept safe whilst using scissors by holding them correctly, sharp bits going downwards and by not swinging them around because it they right but someone and they could get hurt.

wonderful focused practical tasks.

Design brief

To create a collection of appealing moving mechanical character models that will captivate people's interest



Well done, lovely colourful designs.

Vocabulary

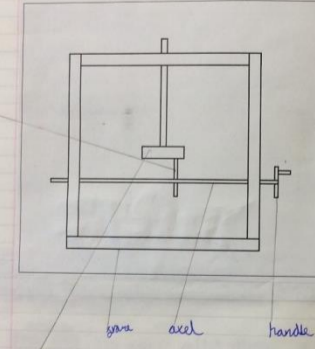
Disassemble

Design

Rotary motion

Cams

Mechanisms



- lots of color and big and colourful pictures.
- Its questions are that my picture will go up and down.
- Using the right cam, the right colour and by using a strong lolly stick.
- Very easy, why? How? It will be very easy because all the parts are simple and the toy will be fun.
- It will relate to the water environment because my toy will be a shark in the ocean.
- I will make sure my toy is safe by sanding the sharp edges of my toys so no one gets cut. *well done*

Resources I will need.

Cam Cardboard for the frame, thin wood for the axle, pencil and the part above the follower and card for the picture in pulling on my toy.

The cams I will use: I will use the snail cam.

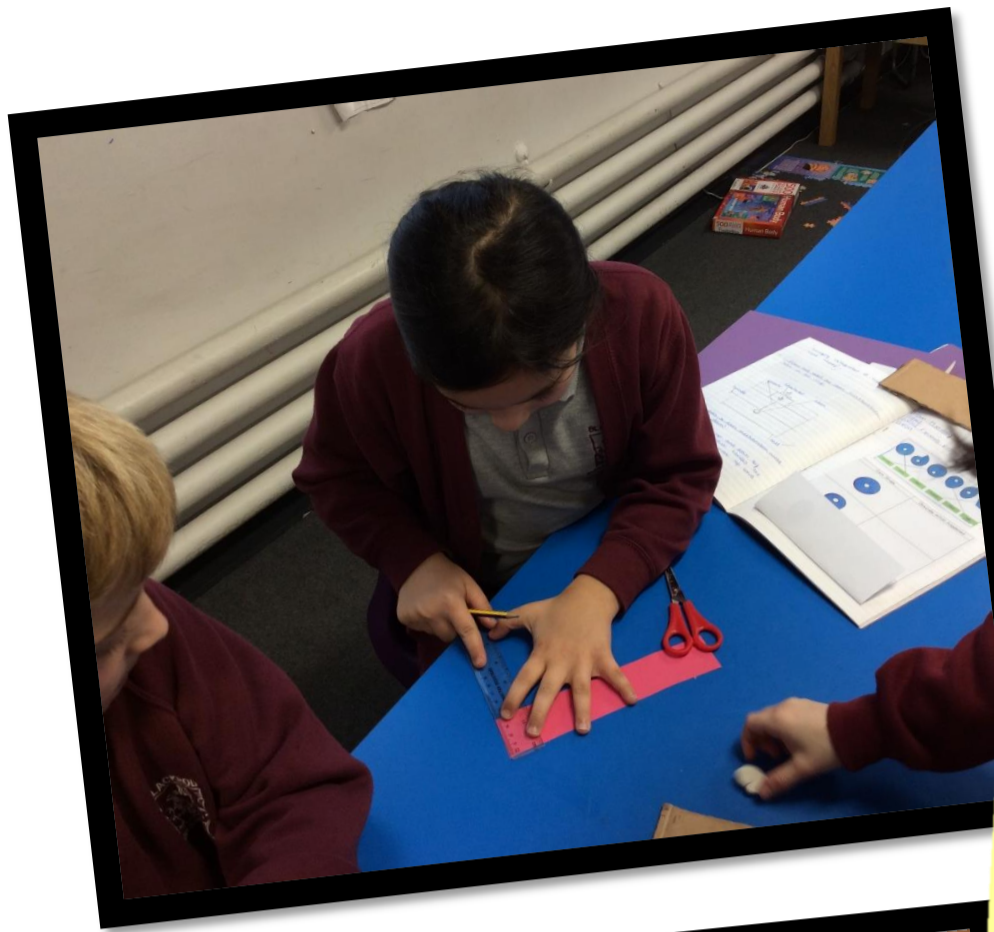
A fantastic design!

CAFQUES

Customer - Who is the product intended for?
Aesthetics - What appealing features will it have?
Function - What are its functions?
Quality - what design and manufacturing features will ensure a quality product?
Usability - How easy is the product to use?
Environment - How will the product relate to the environment?
Safety - How will you ensure the product is safe?

5-6 year olds.

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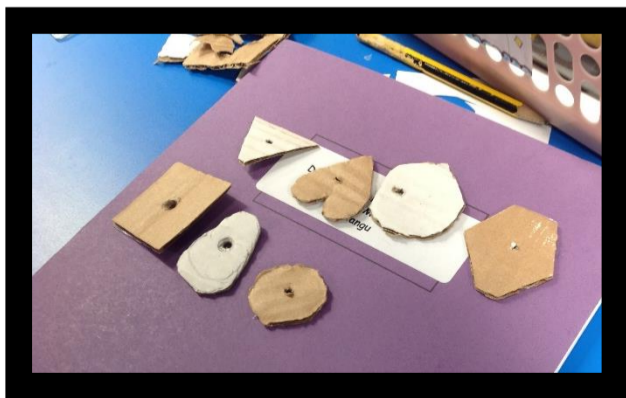


Next we had to learn the skills to make our moving toys. We had to decide which type of cam we wanted to use. We could use an egg shaped cam or a snail shaped cam.

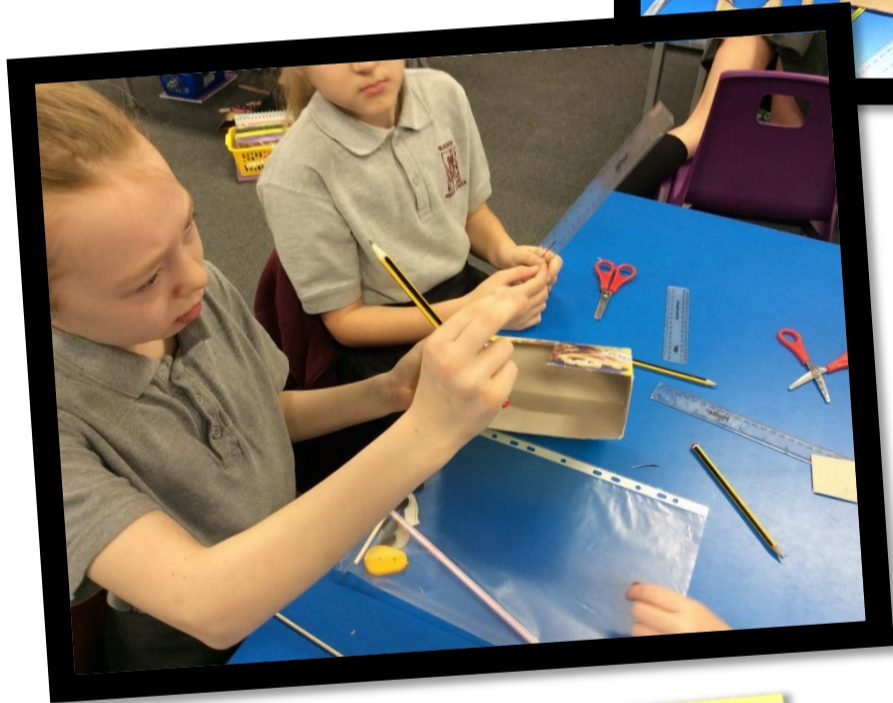
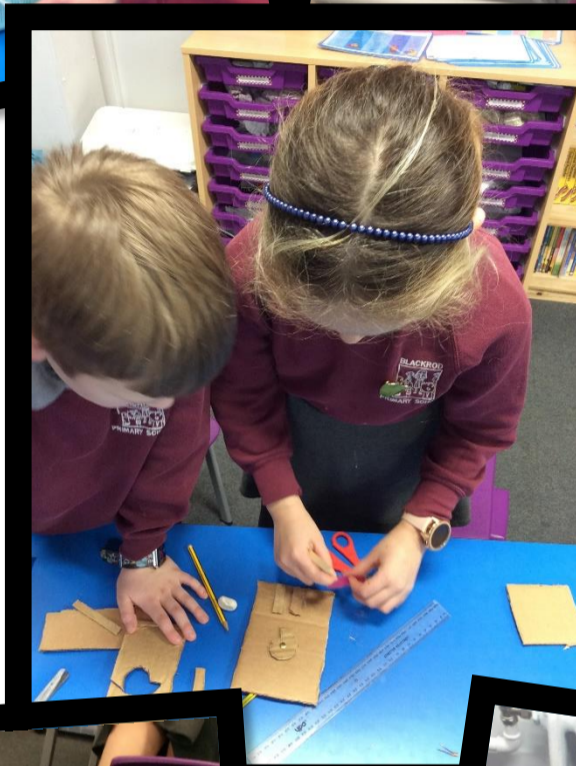
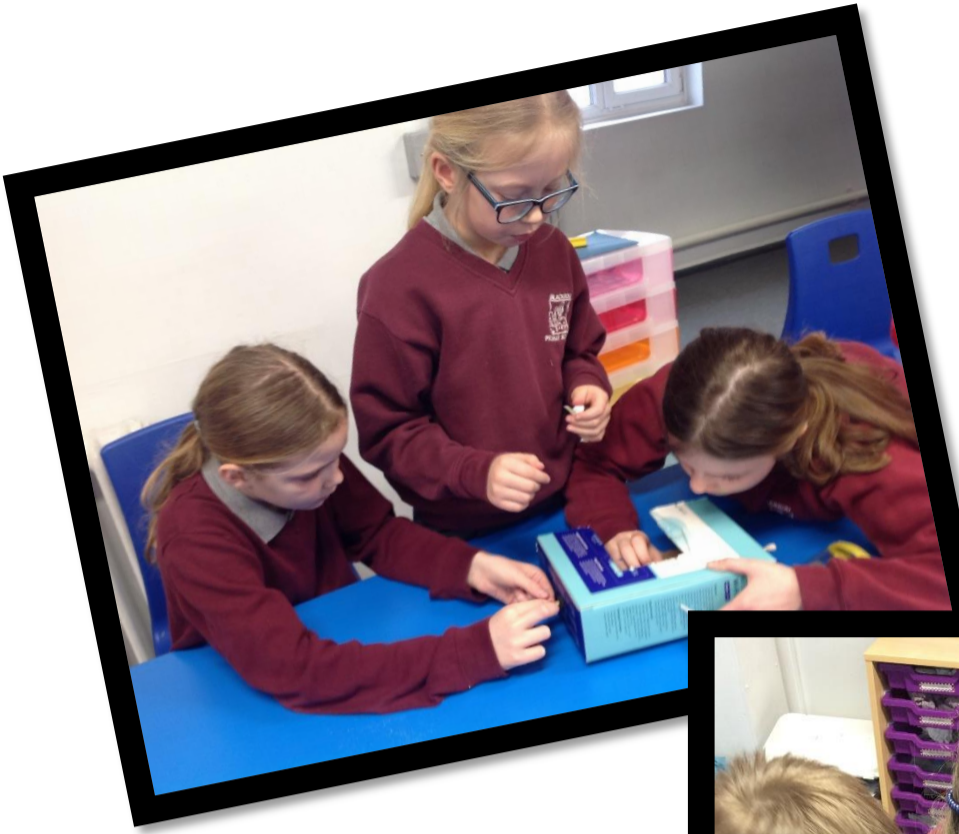
Once we had decided which cam to use we created a background and a character for our moving toy.



We then created our own focused practical tasks



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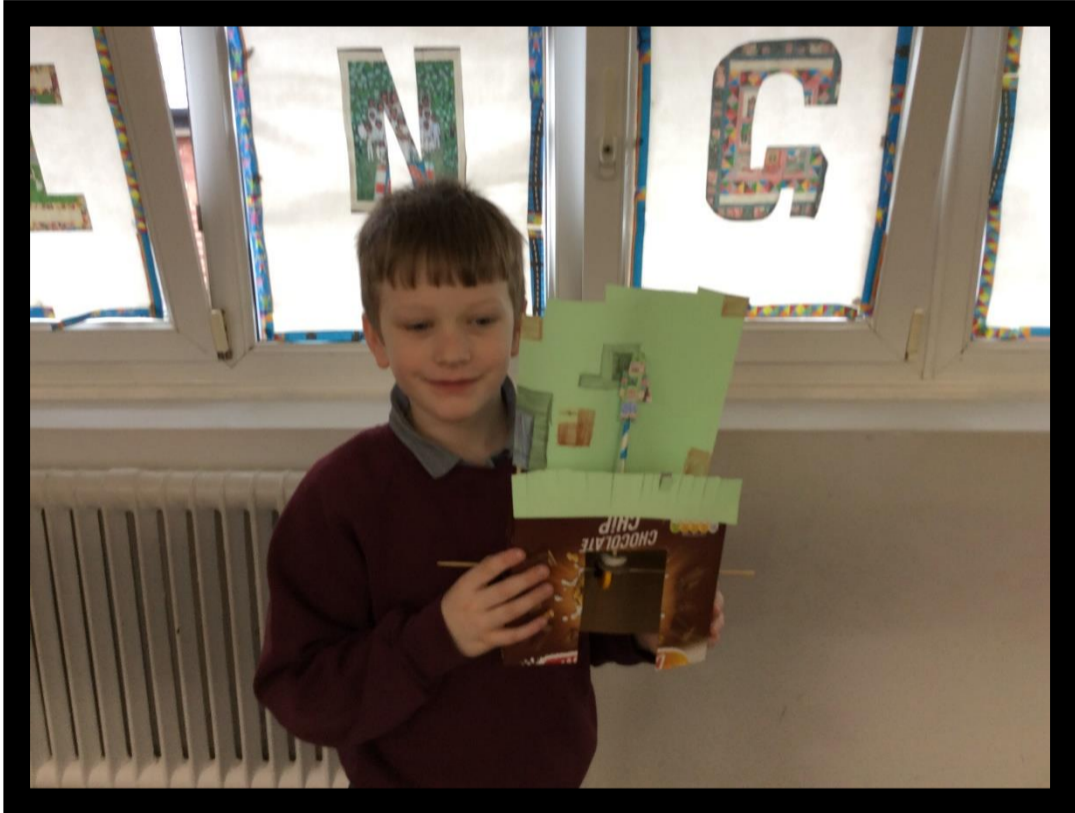
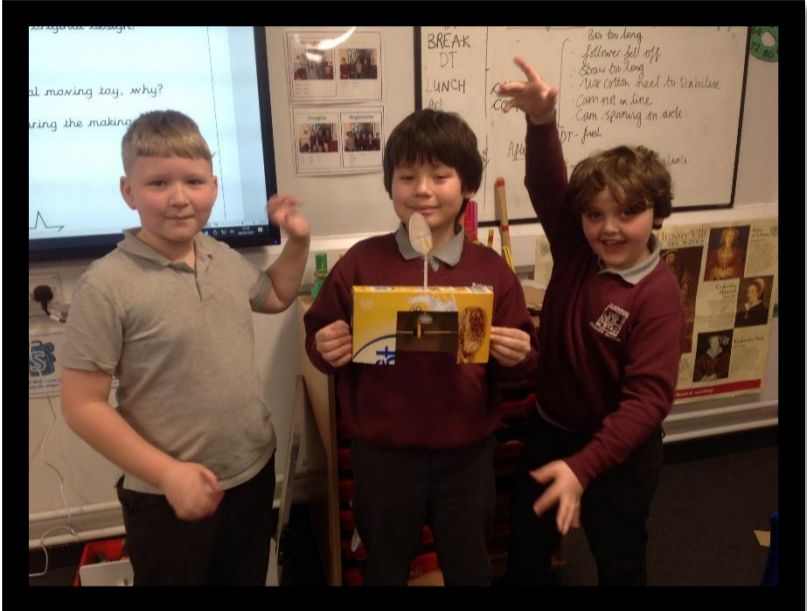
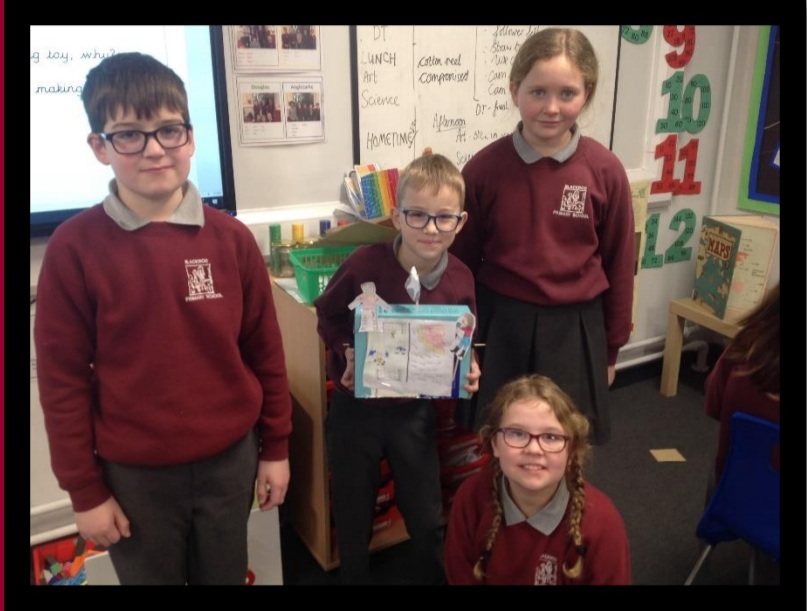


After that, we set to work using cams, axel and cardboard. We had to use a glue gun to secure some areas and use sand paper to make sure the edges weren't rough. This ensured they were safe for our users.

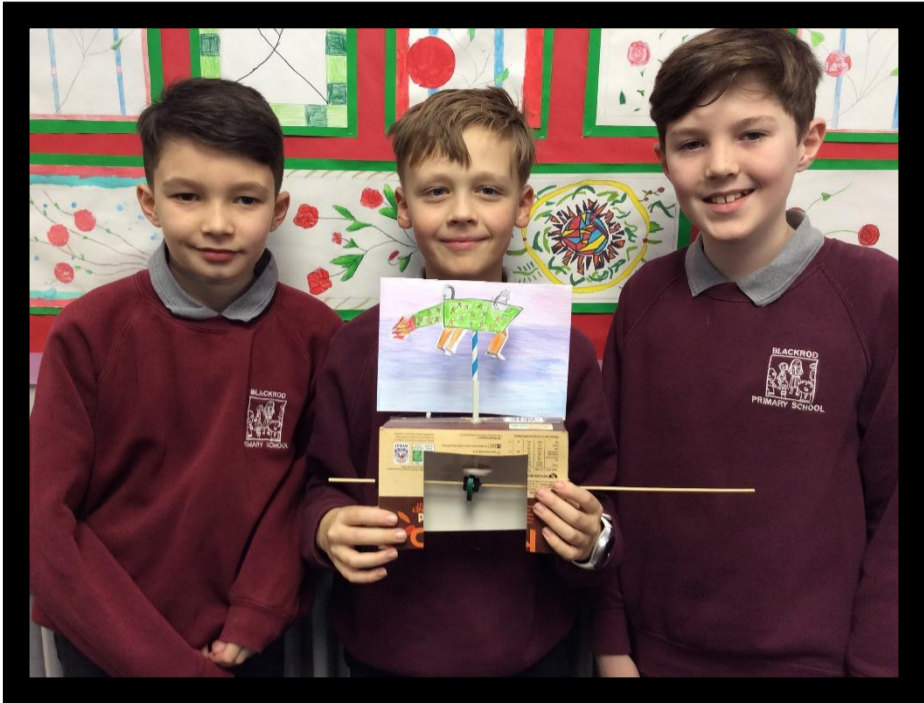


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Here are our moving toys!



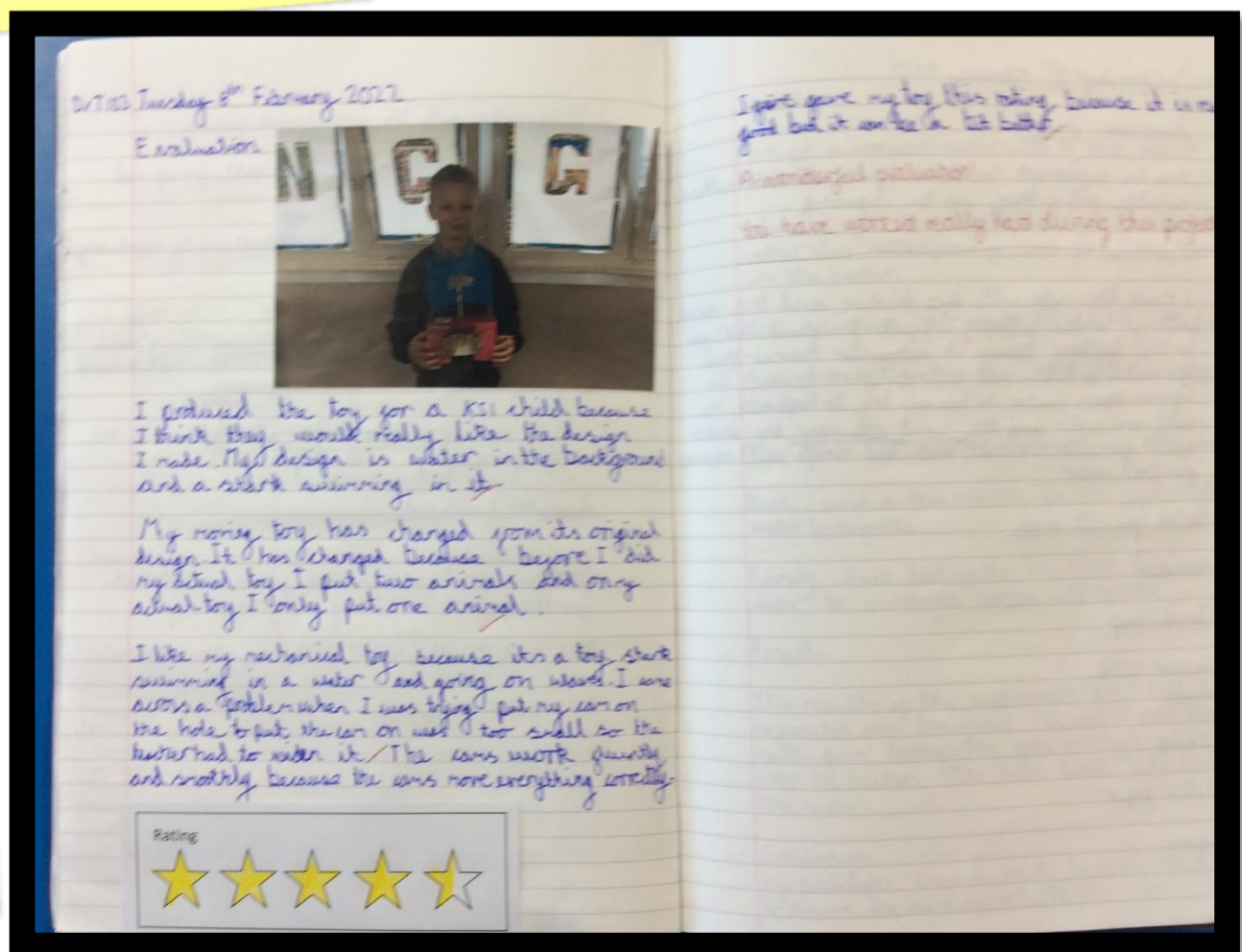
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Finally we evaluated our moving toys.

Reflections -
home learning
links

<https://www.bbc.co.uk/teach/class-clips-video/design-challenge-make-moving-shop-window-display/z7ytscw>



2/7/22 Tuesday 8th February 2022

Evaluation



I finished the toy for a KS1 child because I think they would really like the design. I made the design in water in the background and a shark swimming in it.

My moving toy has changed from its original design. It has changed because before I did my actual toy I put two animals and only actual toy I only put one animal.

I like my mechanical toy because it's a toy that swims in a water tank and goes on wheels. I saw a problem when I was trying to put my car on the hole to put the car on wheels I was too small so the teacher had to help it. The cars work quickly and smoothly because the cars move everything correctly.

Rating



I gave my toy this rating because it is so good but it was a bit hard.

A wonderful evaluator!

We have worked really hard during this project.