



curious
minds

Discover STEM

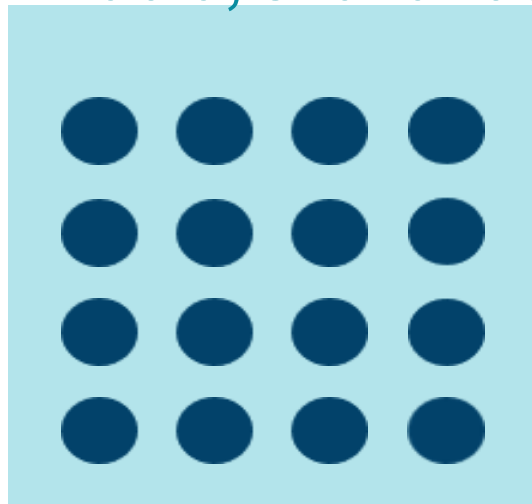
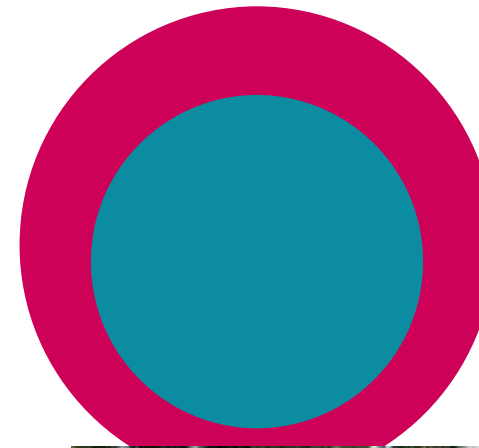


Curious Minds Award 2022/23

Log of Evidence

Gold Award

Scoil Fionntáin Naofa, Shanahoe, Abbeyleix



Step 1: Science

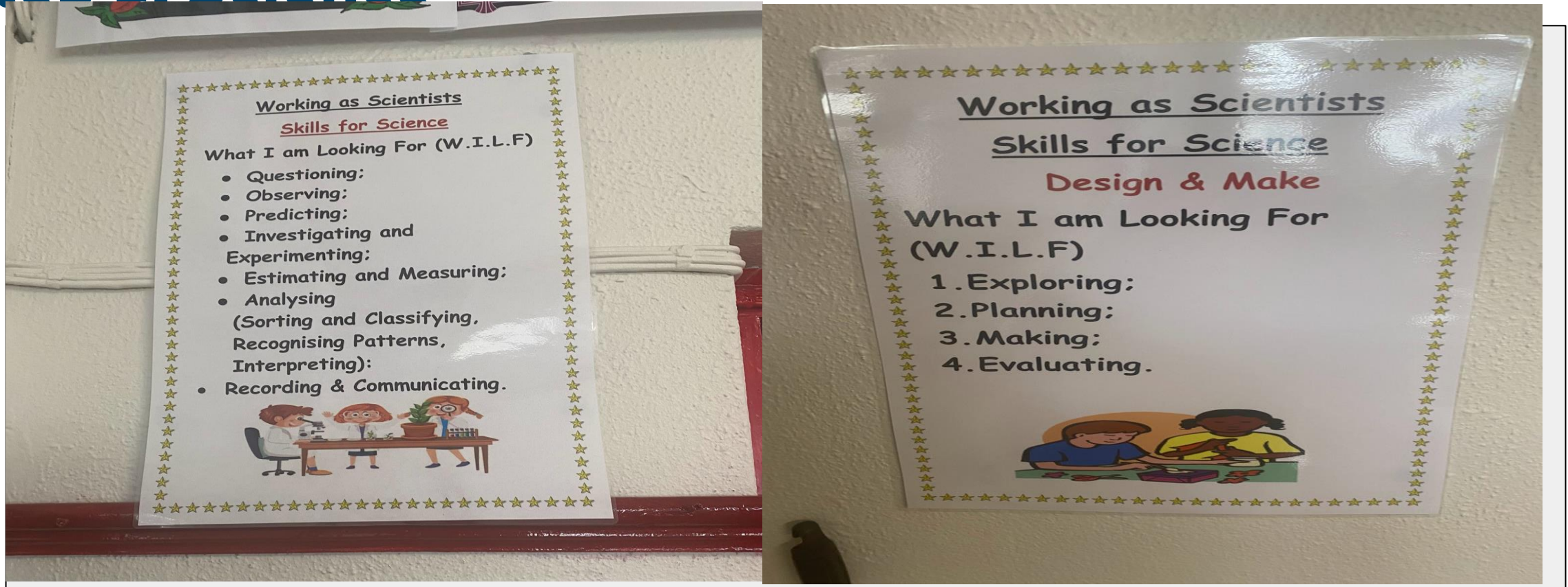


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Gold Award

Step 1: Science

Skills and WILF



We created anchor charts for our classrooms this year with the skills from the Science Curriculum outlined on them to ensure that we are actively using a range of Science related skills during different lessons, investigations and experiments. These form part of the 'Success Criteria' or 'WILF' at the start of our Science lessons.

Gold Award

Step 1: Science *Living Things-Plants*



5th & 6th Class planted containers with grasses and Winter bedding plants in the Autumn and they were ably assisted by a trainee gardener from our Sonas Class!



Gold Award

Step 1: Science *Living Things-Plants*



Pupils from the Senior Room planted up the new containers made from recycled materials outside the front gate of the school.



Gold Award

Step 1: Science *Living Things-Plants*



The 'head gardeners' in 5th Class planted a Cherry Blossom Tree to replace a former tree that had to be removed.



Gold Award

Step 1: Science *Living Things-Bulbs*



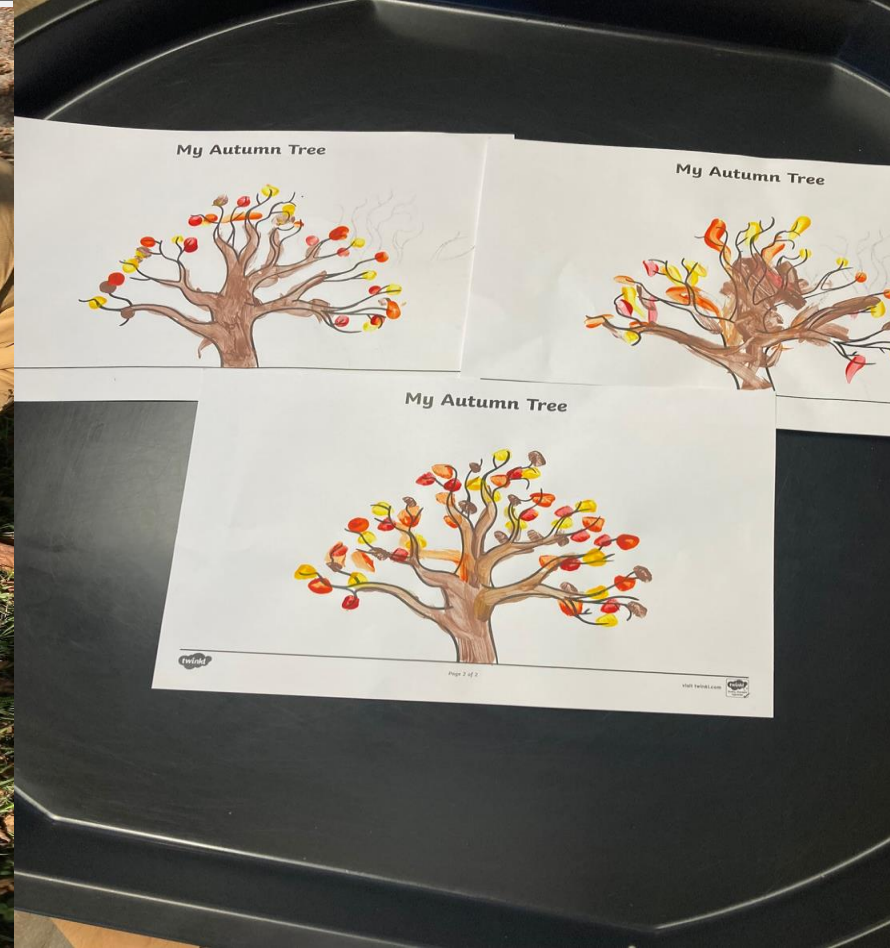
The Senior Room planted yellow crocus bulbs as part of their participation in the *'The Crocus Project'* to commemorate the children who list their lives in the Holocaust.



Gold Award

Step 1: Science

Living Things-Trees



The pupils from the Sonas Class went on a tree hunt in the school grounds for 'National Tree Day'. They then created lovely Autumn fingerprint trees.



Gold Award

Step 1: Science

Living Things-Trees



The pupils from the Junior and Middle Rooms did a collaborative tree hunt in the school grounds on *'National Tree Day'*.



Gold Award

Step 1: Science *Living Things-Trees*



The Senior Room went on a 'Tree Hunt' around the village on 'National Tree Day'. They identified different species of trees from their leaves, nuts and fruits. They used identification sheets from the 'Woodlands Trust' to assist them with the task at hand.



Gold Award

Step 1: Science *Living Things-Trees*



A pupil's leaf/tree hunt identification sheets from the 'Woodland Trust'.



Gold Award

Step 1: Science

Living Things-Trees



During their walk on 'National Tree Day', the pupils in the Senior Room also collected samples of leaves, nuts and fruits from the trees, hedgerows and from the ground underneath/around.



Gold Award

Step 1: Science

Living Things-Leaves



Using the leaves, nuts and Autumn fruits that they had gathered, the pupils from the Senior Room created very imaginative designs. Can you work out what their creations are?!



Gold Award

Step 1: Science *Living Things-Leaves*



The pupils in the Senior Room then printed in an Autumn palette using the leaves that they had collected. Wonderful overprinting effects were achieved!



Gold Award

Step 1: Science *Living Things-Heart*



The pupils in the Senior Room learned how to take their pulse. They took their pulse prior to undertaking exercise and after undertaking exercise and they then compared and contrasted their pulse rates (i.e pre and post exercise). They then discussed the impact of exercise on pulse rate.



Gold Award

Step 1: Science

Biodiversity



We have developed a biodiversity area/'Bee Garden' in an area of the school grounds this year. This is being done in tandem with our application for a Green Flag for Biodiversity this year. This area was planted with various varieties of wildflower seeds in mid April 2023. We incorporated our existing 'Bug Motel' into this space. We hope that it will become 'pollination central'. Many thanks to parent volunteer and Green Schools committee member Tony for all of his great work on this area.



Gold Award

Step 1: Science *Living Things-Birds*



The pupils in the Senior Room fed the birds during the Winter months. They regularly observed what birds were coming to the feeding stations and they used the excellent resources from *'BirdWatch Ireland'* to help them to identify the different species of birds.



Gold Award

Step 1: Science

Design and Make



The pupils in the Senior Room Designed and Made bird feeders using recycled materials.



Gold Award


Step 1: Science

Living Things-Birds

Tuesday 7th

Name: Róisín
Gold Finch

My Fact-file on a Garden Bird



Name of bird: Gold Finch

Irish name: Lasair Choille

Bird family: Finches

Status: Stable

Identification:
Adult males are bright yellow with a black forehead in spring and early summer. They also have black wings with white markings, and white patches above their tail and beneath. Adult females are duller yellow beneath but olive above. In winter they are more drab in colour.

Voice: high pitch and cheery

Diet: Gold Finch like seed from flowers, insects and invertebrates

Breeding:
The male displays brightly coloured plumage during the breeding season to attract a mate. Males chase after females.

Wintering: in winter gold finches group together to form flocks of up to 40 birds

Monitored by:
Countryside Bird Survey and Garden Bird Survey

Any other facts/information:
In the early 18th century the word Goldfinch was used as slang for a very wealthy person. Male goldfinch have longer beaks than females

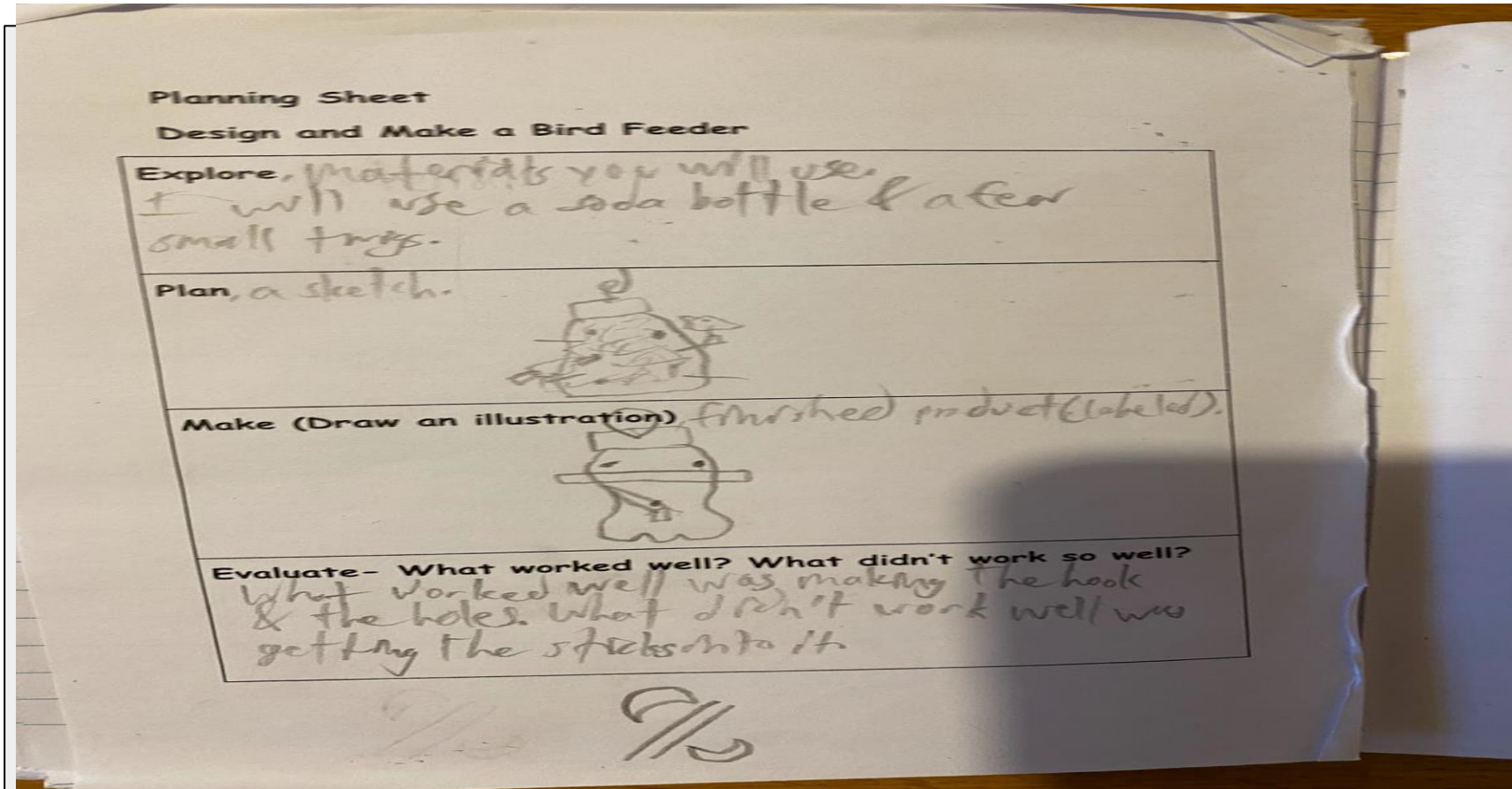
A pupil's factfile on a Garden Bird namely the Goldfinch (An Lasair Choille).



Gold Award

Step 1: Science

Design and Make



Planning sheet for Designing and Making a Bird Feeder from Recycled Materials incorporating the Design and Make Skills of 1. Exploring 2. Planning 3. Making 4. Evaluating



Gold Award

Step 1: Science *Energy and Forces-Light*



As part of their unit of work on the strand unit Light, the pupils in the middle room designed and made their own kaleidoscopes. They now see the world in a whole new light!



Gold Award

Step 1: Science *Energy and Forces-Light*



Pupils in the Senior Room conducted the experiment 'Floating Finger' to determine how light affects how we perceive things.



Gold Award

Step 1: Science *Energy and Forces-Light*

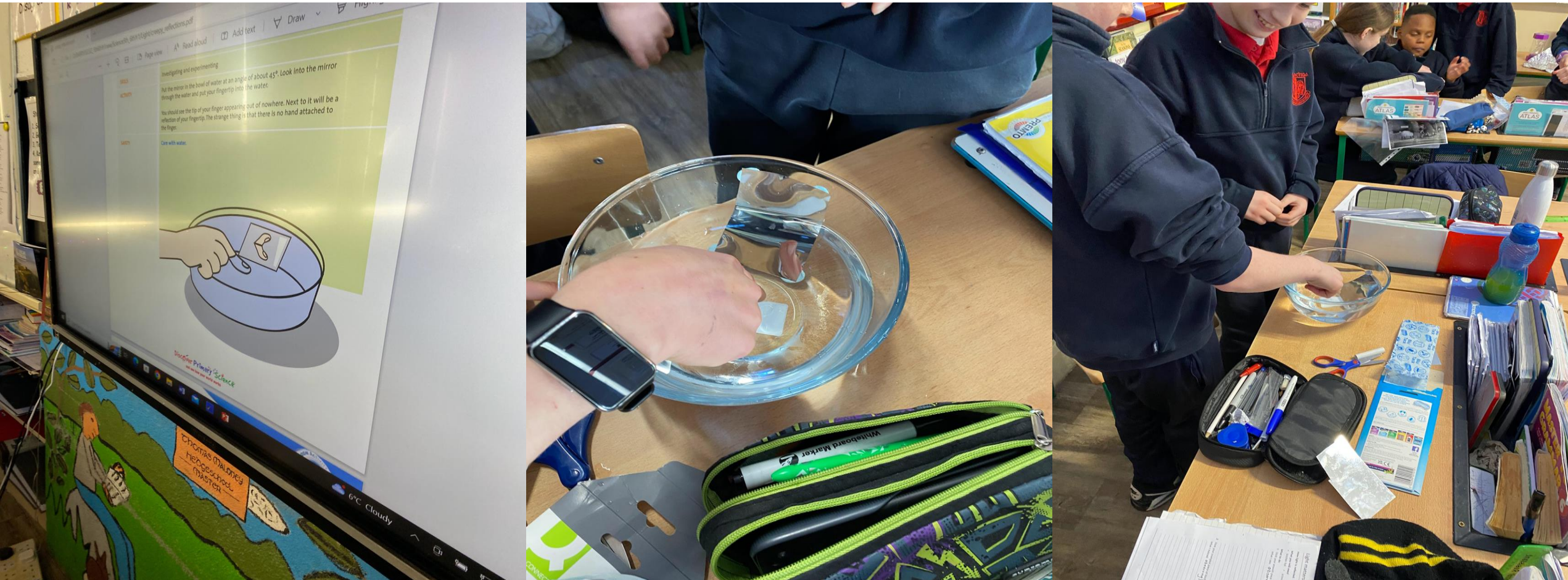


The pupils in the Senior Room enjoyed exploring the reflection of light using tinfoil!



Gold Award

Step 1: Science *Energy and Forces-Light*

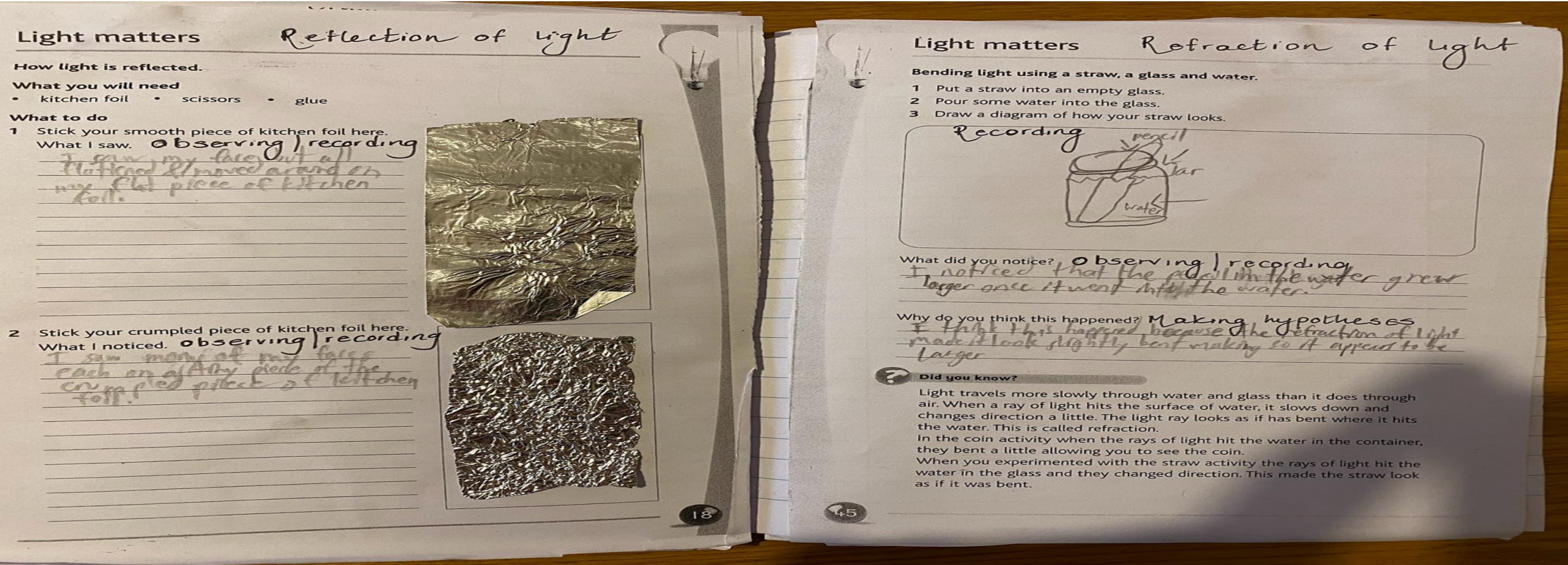


The Senior Room pupils explored the refraction of light by conducting the investigation 'Creepy Reflections'. Refraction is the effect of light travelling through water.



Gold Award

Step 1: Science *Energy and Forces-Light*



A pupil's recordings of their investigations/experiments on the reflection and refraction of light.



Gold Award

Step 1: Science *Energy and Forces-Light*



The Senior Room pupils explored the Spectrum of Light by creating rainbow spinners.



Step 1: Science *Energy and Forces-Light/The Eye*

Investigation/Experiment: How does the Eye Work? How do we see?

Apparatus/Materials:

- Wax paper;
- Paper clip;
- Paper cup;
- Rubber band

Method/Instructions (Investigating and Experimenting)

1. Using the paper clip, poke a small hole in the centre of the bottom of the paper cup;
2. Place a piece of the wax paper over the mouth of the cup;
3. Use the rubber band to hold the wax paper in place;
4. Point the bottom of the paper cup at a bright light from about two to three feet away;
5. Slowly walk towards the light;

Observing

What did you notice? What happened?

AS I got closer to the light it got brighter

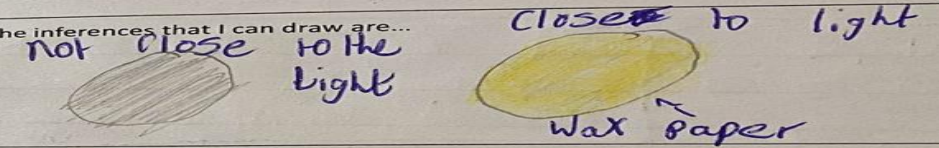
Hypothesising-why do you think this happened?

I think this happened because the light is getting brighter as the wax paper is closer to the eye

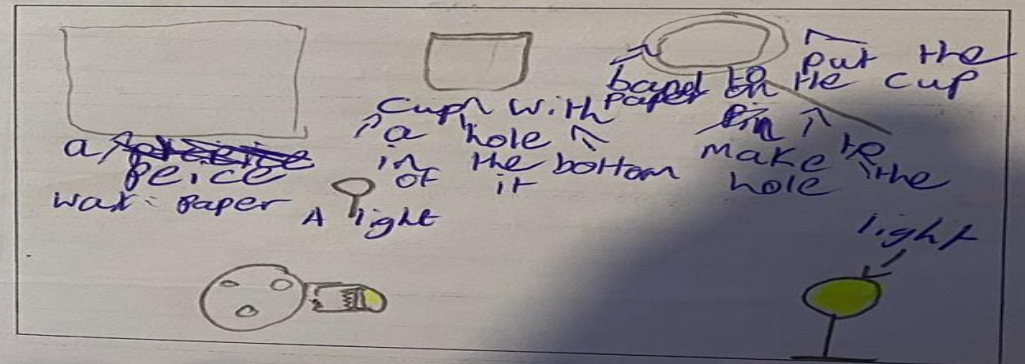
Recording and Communicating- what inferences can you draw.

The inferences that I can draw are...

Not close to the light
Close to light
Wax paper



Draw a labelled diagram of the investigation/experiment and how you set it up

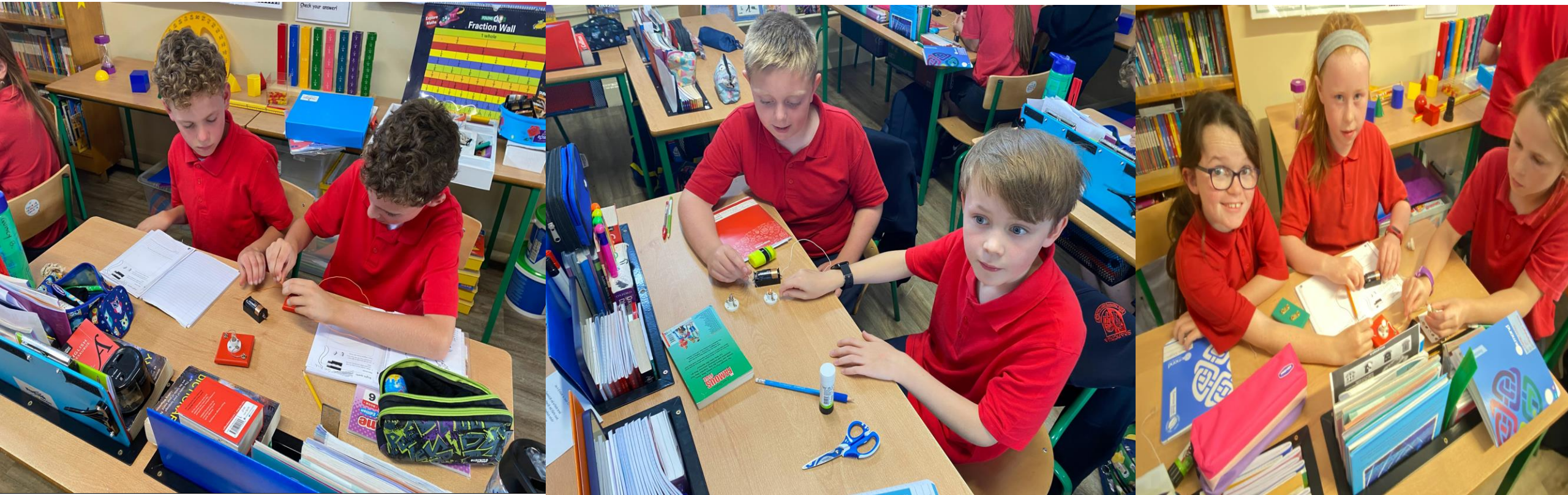


A pupil's recordings of their experiment to make a diagram of the human eye using wax paper, a paper cup and rubber band.



Gold Award

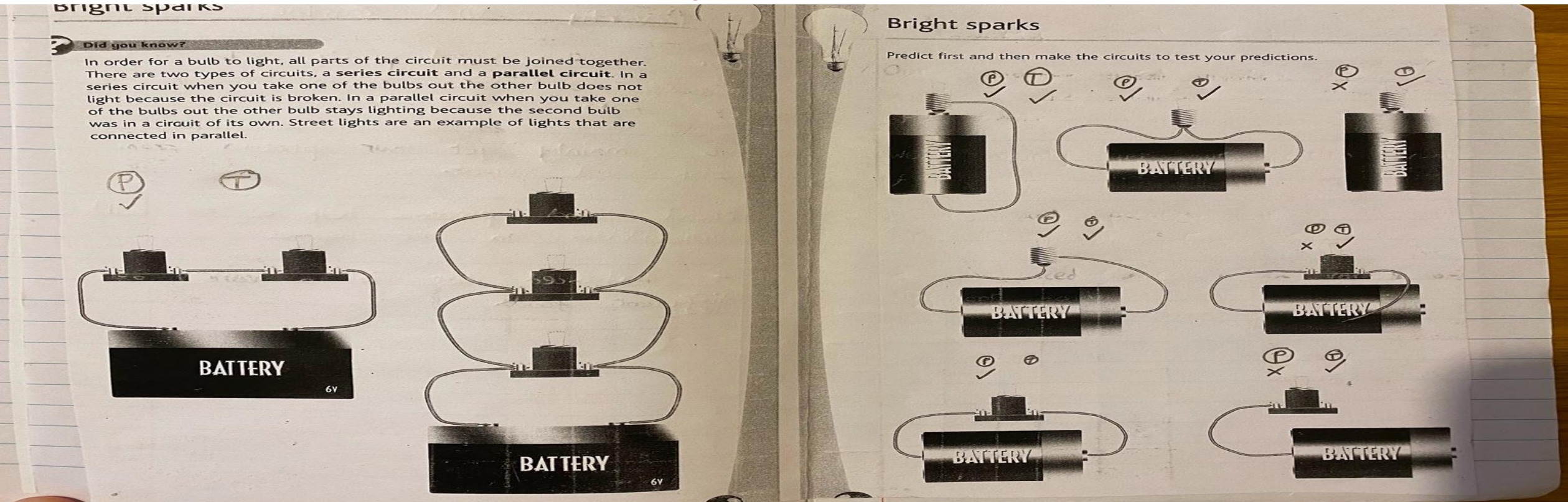
Step 1: Science *Energy and Forces- Electricity*



The pupils in the Senior Room explored different types of circuits during their study of the strand unit Electricity. They also created their own simple switches using different materials.



Step 1: Science *Energy and Forces- Electricity*

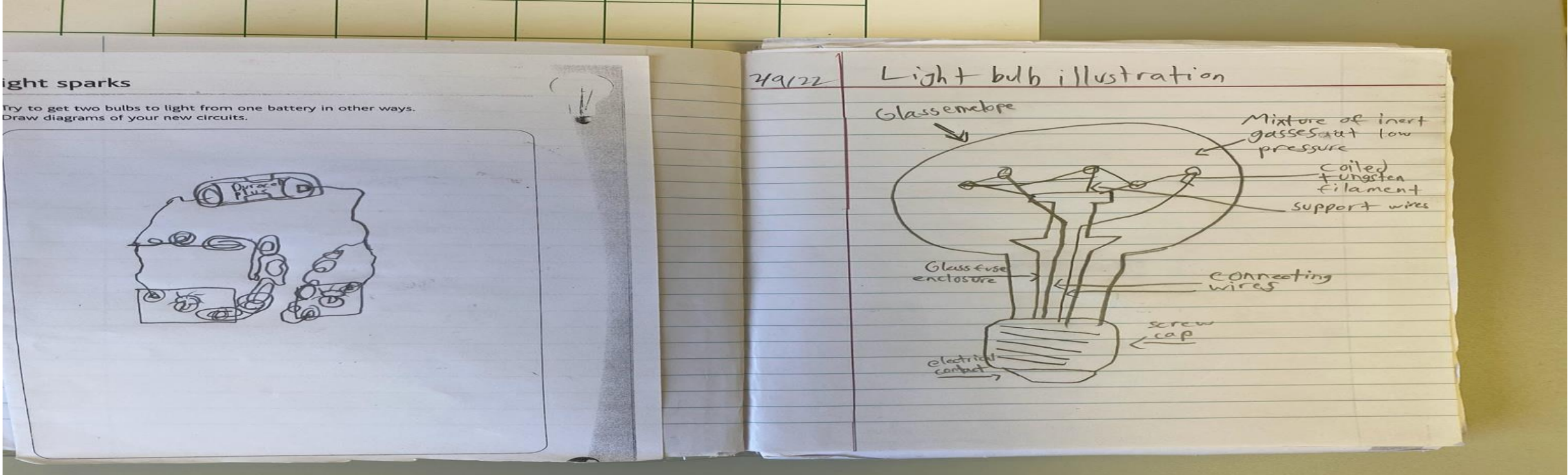


Pupils' recordings of investigations/experiments relating to circuits. They predicted which circuits would work and which wouldn't. They then tested and checked their predictions.



Gold Award

Step 1: Science *Energy and Forces- Electricity*



Recording our findings: A pupil's drawing of a circuit that they constructed and a detailed diagram of a light bulb.



Gold Award

Step 1: Science

Materials



Within the Materials strand of the curriculum, the pupils in the middle room Designed and Made a Safety Jacket for an egg. They used the Design and Make skills of Exploring, Planning, Making and Evaluating. They then tested the efficacy of their designs by dropping the eggs from a height!



Gold Award

Step 1: Science

Materials



The pupils in the Junior Room did great work in the strand Materials during 'Science Week'. They explored the effects of mixing different materials and they carefully observed the results. There were lots of fizzes and foams!



Gold Award

Step 1: Science *Environmental Awareness and Care*



All pupils in the school participate in the 'Picker Pals' Environmental Awareness and Care initiative throughout the year.



Gold Award

Step 1: Science *Environmental Awareness and Care*



Environmental and altruistic work as part of the '*Picker Pals*' initiative.



Gold Award

Step 1: Science

Science Activity 1



During Science Week in November, the pupils in the Senior Room visited Birr Castle and Demesne for a very interesting and informative workshop on Biodiversity with scientist Dr. Catherine McGuinness.



Gold Award

Step 1: Science

Science Activity 1



During the visit to Birr Castle, the senior room pupils did 'pond dipping' activities in the lake in the demesne to catch different species of pond life.



Gold Award

Step 1: Science

Science Activity 1



They then worked collaboratively indoors to identify the different species that they had found using reference sheets.



Gold Award

Step 1: Science

Science Activity 2



All of the pupils in the school worked with Beth Murphy from the 'Heritage in Schools' scheme to create a Willow Dome using the surplus foliage from our existing Willow tunnel. The excess foliage that was cut from the tunnel had to be graded to check for suitability. Then a suitable site for the new Willow Dome had to be chosen.



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Step 1: Science

Science Activity 2



Very meaningful lines of integration were opened up with the Maths curriculum, as the pupils in the Senior Room had to work collaboratively to calculate the circumference of the circle for the base of the Willow Dome using the formula $2 \pi R$ ($2 \times 3.14 \times$ radius of the circle)



Gold Award

Step 1: Science

Science Activity 2



The Finished Product in Use!

