



Science Blog



March 2020

EYFS Planting Beanstalks

In Nursery, we have enjoyed reading the story 'Jack and the Beanstalk', we planted our very own beanstalks to watch them grow over a period of time. The children really enjoyed watching the plant grow, and we discussed how plants need water and sun to grow.



March 2020

Retention afternoon

The children throughout school had an afternoon to focus on previous science teaching. They looked at topics they have covered this year and in previous years to recap using their science must knows. Each class did this in various ways through reading comprehensions, must knows quizzes or research tasks. The children really enjoyed it!

March 2020

Science Week

What a fantastic week! The children have worked like scientists to learn more about on this year's science theme 'Our Diverse Planet'. We discussed the world around us including diverse people and places.

Fundraising

As our Science week theme this year was 'Our Diverse Planet' as a school we dressed in blue, green or anything to do with our planet to raise some money.

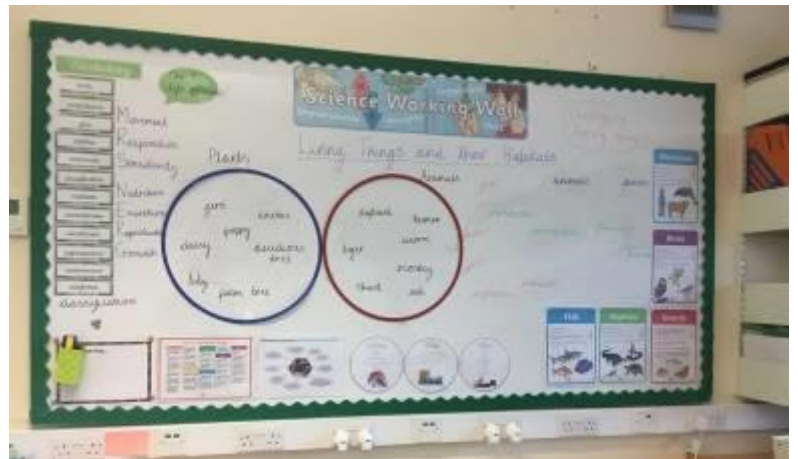
We raised **£82.35** which will be going to WWF to support our planet. Well done everyone!



March 2020

Wonderful Science Displays

Have a look at our superb science working walls in school. They show key vocabulary linked to the current topic, examples of what they are learning and how they are working scientifically as scientists.



March 2020

EYFS Caterpillars

In Nursery, we have been reading the story 'The Very Hungry Caterpillar'. We have been learning all about the lifecycle and we are very lucky to be able to look after our very own caterpillars. The children enjoyed watching them change and grow over a period of time, the children used their gentle hands and quiet voices as they showed care and concern for living things.



February 2020

Year 3 Rock Investigation

Year 3 have been investigating the properties of different igneous, sedimentary and metamorphic rocks. They tested the durability by carrying out the scratch test using sand paper. They also investigated permeability by adding a small amount of water to each rock and observing what happened over a set period of time. Density was tested using the sink or float experiment which was also observed over a set period of time.



February 2020

EYFS Mirrors Outside

Children used the mirrors outside to talk about why they are different and what makes them look different. They then talked about how differences are good and just because we are all different, we can all be friends and treat each other fairly and equally.



February 2020

Year 3 Fossilised Dinosaur Bones

Year 3 replicated the fossilisation process and sped this up by a few million years.



EYFS Seasons Calendar

This week the children have been making their very own calendars for 2020! We have based these on the different seasons, we talked about the different things that happen in each season, and the changes that happen around us. The children loved making them and can't wait to bring them home!



December 2019

EYFS Melting Ice

Children in EYFS have been looking at autumn and winter related objects. They have been talking about the changes in our surroundings during autumn and winter for example; the leaves changing colours. Miss Fudge explored ice with the children and they talked about how and why ice forms and melts. During this they also talked about how snow is formed and the different things they can do in the snow. The children loved this activity!



November 2019

EYFS Making Fruit Kebab

Today for healthy living day the children have enjoyed a variety of activities including playing in the dentist role play, using the dentist set in the play dough area, talking about what things make us healthy and what things don't and even making fruit kebabs. Some of the children even got to share these activities with their grown ups! Thank you to all the grown ups that attended. We have had lots of fun so far!



October 2019

EYFS Minibeasts

Last week the children showed an interest in mini beasts, to follow their interest we are using the magnifying glasses to hunt for mini beasts.



October 2019

Year 4 The effects of enamel on our teeth


Year 4 conducted a scientific experiment to observe the effects that different drinks have on the enamel on our teeth. They used boiled eggs to do this as the hard shell on the egg has similar properties to the enamel coating on our teeth. They observed the changes to the egg over 7 days and found that sugary drinks led to cracks and holes in the egg shells. They concluded that drinking too many sugary drinks can give us cavities and can wear down the enamel on our teeth!




September 2019

Whole School Must Knows:

This academic year we have introduced must knows to our science teaching. We start each topic with a copy of the must knows shown below. They include the vocabulary to be learnt and the key teaching. They use them every lesson to



Year 4 Spring Term - Science - Sound



Key Vocabulary

Sound - A noise made when an object vibrates and sends waves of energy (vibrations) to our ears

Ear - The part of this body used for hearing. Humans have one ear on each side of their head.

Vibrations - Quick movement back and forth or up and down. If it vibrates in a regular way it may produce a musical note that it sends to the ear as sound waves.

Mediums - This material or substance that sound waves travels through.

Pitch - Pitch is how high or low a sound is.

Volume - Volume is how loud or quiet the sound is.

Frequency - Lacking loudness or when something gets quieter and has less volume.

Insulators - A material that does not allow sound (or electricity or heat) to pass through it.

Amplitude - The size of a vibration. A larger amplitude = a louder sound.

Key Facts

Key Fact: Sound is a type of energy. Sounds are created by vibrations. The louder the sound, the bigger the vibrations.

Key Fact: Pitch is a measure of how high or low a sound is.

Sound Particles

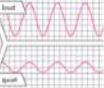
Sound energy can travel from **particle to particle** far easier in a **solid** because the **vibrating particles** are closer together than in other states of matter:

gas
liquid
solid

particles
particles
particles


Amplitude

The size of the vibrations is called the **amplitude**. The louder sounds have a larger amplitude, and all quarter notes have a similar amplitude.



Sound Particles

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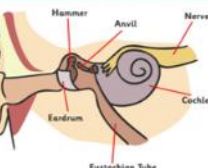


Frequency - Lacking loudness or when something gets quieter and has less volume.

Insulators - A material that does not allow sound (or electricity or heat) to pass through it.

Amplitude - The size of a vibration. A larger amplitude = a louder sound.

Key Fact: Inside your ear, the vibrations hit your ear drums and are then passed to the middle and then inner ear. They are then changed to electrical signals and sent to your brain. Your brain tells you that you are hearing a sound.



Key Fact: Sound can travel through solids, liquids and gases.

Sound travels as a wave. vibrating the particles in the medium it is travelling in. **Sound cannot travel through a vacuum.**

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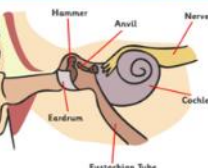
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Top 5 Vocabulary


- Germination** - The phase of plant growth when the seed begins to sprout.
- Stems** - These thick roots can support stems, grow and support.
- Photosynthesis** - The process and cycle used to make their own food.
- Fertilization** - The transfer and movement of pollen from one plant to another. Inside the roots and leafhills to then.
- Reproduction** - To make more of the same thing by growing more from seeds, roots, stems, plants, etc.
- Respiration** - The action of breathing. All living things including plants breathe.
- Seed dispersal** - The spreading of seeds across an area, from place to place of different range.
- Water transport** - The process of water traveling through the inside of the plant, up the stem and to the leaves.

Year 3 Spring 2 - Plants

Characteristics of Living Things

Movement
Respiration
Sensitivity

Nutrition
Excretion
Reproduction
Growth




Evolve, grow, multi, better

- A Stagnant shallow plants are not living things.
- You must know that function of a root, stem, leaf and flower.
- Plants need water, sunlight, soil for nutrients, no current temperature and have to grow in order for them to live.
- Understand that plants make new seed such as in ticks and it is common, human plant, ranging different levels of water.
- You should be able to describe the life cycle of a plant.
- Seeds can be dispersed by wind, animals, water, hanging and humans.


Life cycle of a plant

- The roots of a plant extend it in the ground and absorb water and nutrients from soil.
- The stem or trunk of a plant holds it up and water and nutrients from the roots to the leaves.
- The leaves make food for the plant using sunlight and carbon dioxide from the air. This is called photosynthesis.
- The flower of a plant attracts males and birds. Inside every pollen in other flowers. Pollens use the pollen to make seeds to grow new plants. This is called reproduction.



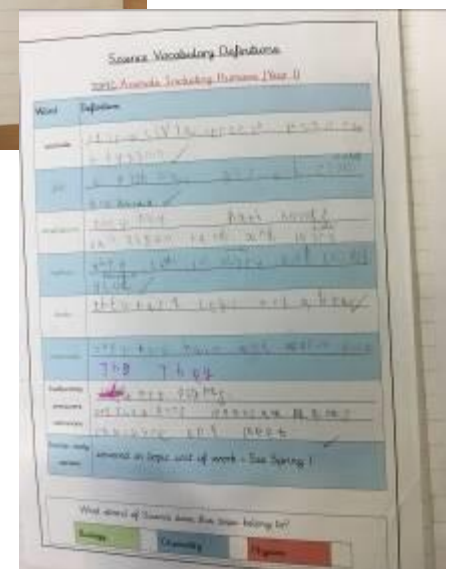
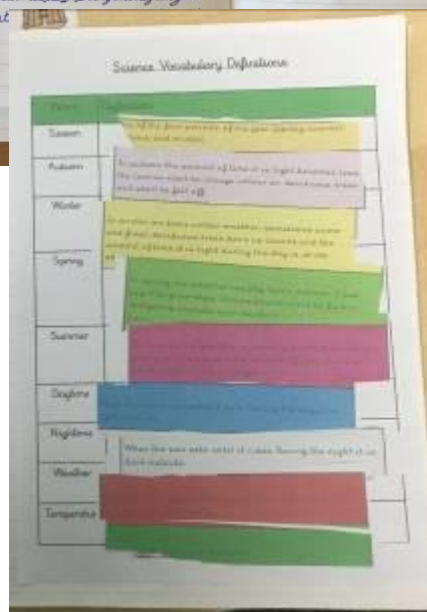
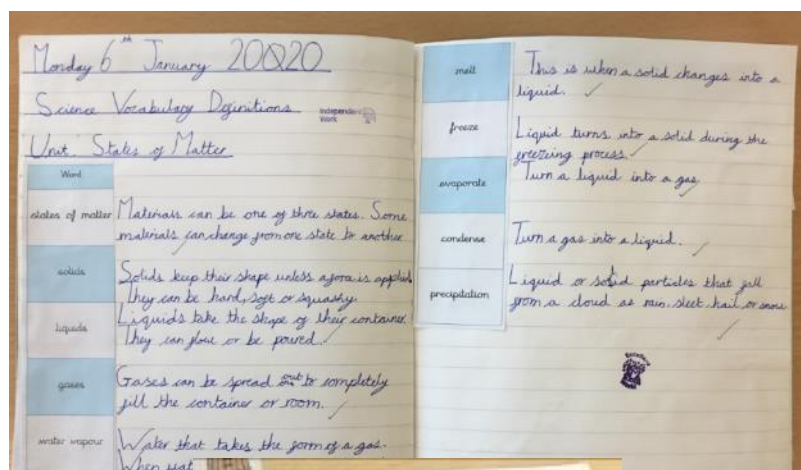
Water travels up through plant
When absorbed by roots

Flowering Plants Life Cycle



Germination is the growth of a seed into a young plant.

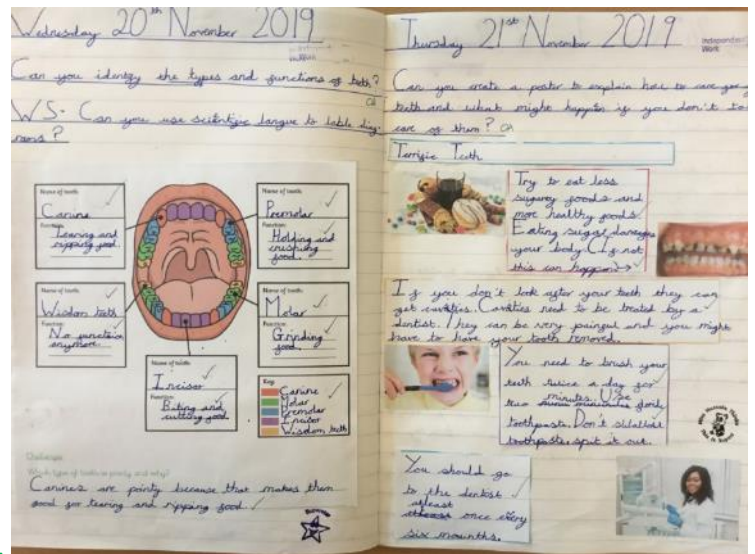
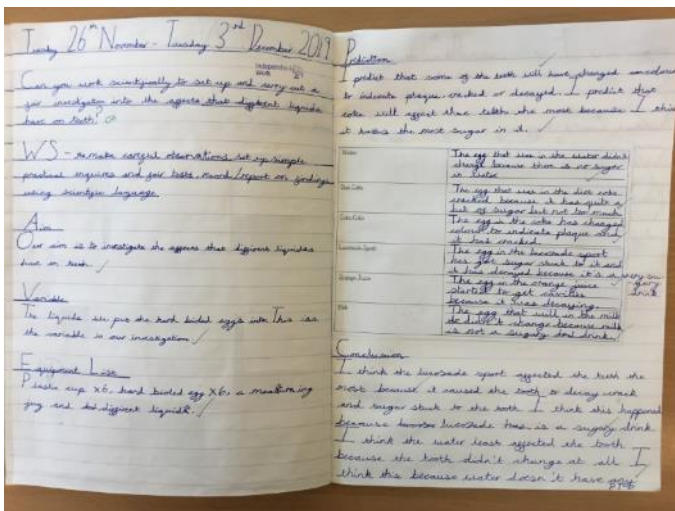
This academic year we have introduced a whole school vocabulary dictation activity. At the start of each new science topic we select key vocabulary the children need to know and we ask them to write the definitions as we dictate them. We differentiate this task throughout school as you can see below.



September 2019

Wonderful Science Work

Here is some wonderful science work from a range of year groups in school. As you can see the children at Dean Field take pride in their science work and love to use their scientific skills to deepen their understanding about the world around them.



Year 3 Trip to the Science and Media Museum

Year 3 visited the Science and Media Museum to support their learning on 'light.' They took part in a workshop where they learnt about the importance of light when using cameras and how we can use refraction to see small things like bacteria.

