## Mission to Mars

This term. Science Week was out of this world! The children were asked to imagine what life might be like if they were astronauts on Mars. Where would they live? How would they grow food? How would they move around, what would they wear and how would they relax? Each class was then assigned a project to help create a garden on Mars, which will be our entry for this year's Malvern Show. The garden will feature a cutaway of a biome that will reveal two main areas: one for growing food and one for relaxing. Outside the biome will be an area of Martian landscape with an in interactive rover. Though the focus was on science, there were links across the curriculum - especially with DT, Art & Design and Maths.

### Nursery

Our youngest scientists set about growing sunflowers to explore plant cultivation for the food-growing area. After the Easter break they will be painting large pebbles in hues of red and brown for the Martian landscape.

#### Class 1

We thought about how to plant flowers on

Mars and keep them safe. We learned how bees pollinate flowers on earth. There are no bees on Mars, so we made models of robotic bees, covered in sticky stuff and hair. We used lots of bits and pieces from home - like milk bottles wrapped in duct tape. Then we put on feathers for



### Class 2

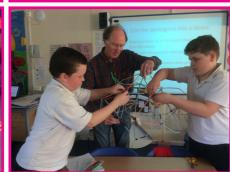
wings.

Our job was to make an astronaut! We started by thinking about why astronauts have space suits. They need them for oxygen to breathe, and for food and water so they don't have to keep going back into the space station. It also gives them protection against the cold and radiation from the sun. We all helped to design the suit and Van's dad. Mr Hughes – who's a sculptor – helped to draw it on the whiteboard. He's really good! He's building the armature of the astronaut in his studio - it will be the size of a KS1

child - and we are making the space suit from recycled stuff from home. We're using gardening gloves, ski trousers, a motorbike helmet, an old rucksack and skateboard kneepads - everyone is bringing stuff in. When our astronaut is ready, he'll be kneeling in the garden, controlling the Class 4 rover with an iPad.

By Esmée Roberts and Eddie





## Class 3

Our job was to design seating and a water feature in the rest area so the astronauts can unwind. We learned about forces and how there is water on Mars, but it's all ice. Mr Copp came into class to show us different ways to pump water. We found out how a stirrup pump irrigation system works. Some of our designs for the seat were really cool – one chair had tentacles!

By Finn Belgard and Olivia Flanagan

### Class 4

We had the best project! Our task was to build a model of a Mars rover. There have already been three rovers on Mars doing research and collecting information on things like soil samples and rocks: Spirit and Opportunity were launched in 2003 and Curiosity in 2012. The next one will be launched in 2020 when seven people will go to Mars - but they might never come back, because we don't have the technology to bring them back. Imagine that!

We worked in small groups to construct our Mars rovers out of Lego WeDo 2.0. We had to programme them to perform actions: ours moved forward to kiss Mila - another rover robot - and then a red light lit up as if it was blushing! It was hard work at times it was frustrating when we couldn't make it work and we needed lots of patience, but we stuck at it and got there in the end. I'm glad we did; it

> was great fun! By Jake Robb and Henry Flanagan

#### Class 5

In Class 5, Science Week centred around designing the biome structure for the garden and understanding the maths behind it. With Mr Copp's help, we looked at the size, shape and construction of the biome and researched suitable recycled materials. We made our model using straws connected with garden wire and pipe

cleaners. On our first attempt, we miscalculated how many straws we would need. For our finished design, we used one full pentagon and filled it with five small triangles. Using the pentagon, we added five more pentagons to create the dome.

We also had to research how to grow food for the astronauts on Mars. and think about the mini propagation unit that will appear in the garden. We decided to make greenhouses with blue, green and red lighting because plants grow faster and stronger under those coloured lights.

By Libby Kite and Archie Allcock















April 2017

### **CRADLEY PUPILS' END-OF-TERM MAGAZINE**

## Law and order



By Kiva Felstead For our topic this term, the Year 6s

have been studying the ancient Sumerian civilisation.

they could all live peacefully together. Many of their

laws and punishments seem extraordinarily cruel and

The Sumerians were the first people to gather together

in settlements, around 3000 BC, in what is now modern-

day Irag. As their communities grew, they needed laws so



same way.

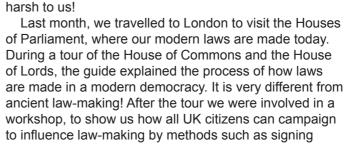
King Hammurabi created 280 laws covering all aspects of life – personal, business, social and religious. The laws, though strict, were made with good intentions. In the prologue to Hammurabi's Code are written the words: 'The strong should not overpower the weak,' and the laws should 'destroy the wicked and evil-doers'.

Modern law is made by Parliament, which is made up of the House of Commons, the House of Lords, and the monarch. The Magna Carta (1215) established Parliament's

right to make laws – it is no longer the role of the king or gueen. In the Commons, elected Members of Parliament (there are 650) debate proposals for a new law and take a vote. If the majority of MPs support the bill, it goes to the Lords for checking before being signed by the Queen. It is an important principle in British society, that no one is above the law, and we are all treated fairly.

In modern society, we believe punishment should fit the crime. Punishments still set an example, but there is often an element of rehabilitation and people who break the law are sometimes given a second chance.

The main difference in modern and ancient law making is that the monarch does not make the laws and the punishments are not so harsh. However, the similarity is that the laws – then and now – were passed with the intention of making society better, safer and fairer.



petitions, lobbying, demonstrating and joining campaign Back at school, we wrote an explanation text comparing ancient and modern law-making...

By Ruby Belgard In ancient times, laws were imposed by the king who wanted to keep order in society. The consequences of breaking those laws, however, were brutal. In contrast, today laws are passed by an elected Parliament and the punishments are not nearly so harsh

In ancient Sumer, one king, Hammurabi, believed that God had called him to rule over the land. The rules were decided by him alone and recorded on tablets of basalt stone. There were terrible punishments. If a son struck his father, his hands would be hewn off. If a wife belittled her husband she would be thrown into the river and left to drown. The idea was that these harsh consequences would set an example and stop others from acting in the





### Day at the Museum

After visiting the Houses of Parliament, we took the Tube to the British Museum to see some Ancient Sumerian artefacts. It was fascinating to see clay tablets and dazzling ewellery. The building was beautiful with its tall pillars and magnificent glass-domed roof.



Reception worked as a group to come up with rhyming words for the text. They recited the poem off by heart and then learned to read it and write it, applying their growing knowledge of phonics.

Good night. Big fright! Hang on tight! Tuesday evening around eight. Not late.

Flutter. Stutter.

Hide!

Wide-mouth frogs fly high?

In the sky?

Talking. Squawking.

Rise. Flies. Surprise!

Mad, glad, bad.

Whoosh! Shoosh! La la la la la la la la

Argh argh argh argh argh argh!

Run! Fun! Uh oh!

Fall below.

Hop, hop.

Plop, plop.

Stop.

Man not mad.

Dog and cat.

They know that. Thinking time...

Solve the crime.

Time to say.

Choose... day!

Next Tuesday, 7.58pm...

Over the gate.

### **Setting the scene**

## The Year 1s each wrote a blurb for the back cover, to 'hook in' readers.

It was just an ordinary Tuesday night when... the magic started! Some frogs were squatting on their lily pads in the pond when they started drifting into the sky. They startled a flock of snoozing crows, crashed into some washing and peeped into windows. At dawn, the magic stopped and the frogs landed gently back on the ground. But you will never guess what happened the next Tuesday...

By Daisy Green

#### Read all about it!

The children in Class 2 were journalists for the day. Here is a front-page newspaper report of the event, from ace correspondent, Leila Meagre...

Last Tuesday, there were frogs flying everywhere in Cradley. They disturbed some birds that were peacefully snoozing on a telegraph wire. Then they knocked on a local man's window. The man looked around, startled, but the frogs were too quick to be spotted by him.

After that, they saw a window that had been left open. The frogs glided through it and watched TV with an old lady who had dozed off. One of the frogs even changed the channel with his tongue! Barley the dog was chased by all the frogs.

An eyewitness said, 'I thought it was a dream because it was very strange.'

When it was getting light, the lily pads ran out of power and fell to the floor.

The next day, all the residents were looking at the mess. Lots of police gathered to collect evidence. Barley the dog was sniffing at the lily pads because he knew exactly what had happened!

If you have any information, please call Ledbury police station.

### Say it in verse!

The children in Class 3 each wrote a list poem, inspired by the strange events.

In the evening, somewhere in the USA, Some frogs were about to have a holiday. The frogs were about to take flight, They even stayed up all night! They whizzed through a garden under the

washing line. Some clothes fell down.

They silently disappeared into town.
Those fast flying frogs terrified a dog.
The pond they lived in was actually a bog.

A door was creaking creepily, Someone was snoozing sleepily. A TV was buzzing quietly,

Another buzzing loudly.

Some water was splashing noisily,
And fish were darting rapidly.

When the church bells rang loudly, The frogs fell quickly.

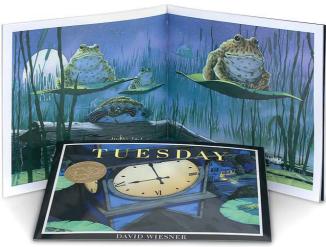
They hopped back to the bog.
What do you think happened to the dog?

What will happen next time? It might be us!

By Laura Jones



# The Big Write!



It was an ordinary school day, much like any other, until... the children spied something strange on the school field. Police-tape fenced off a car that had crashed into the cycle shelter and been abandoned in a hurry. There was nothing to explain the cause of the accident – and, mysteriously, the only clue was hundreds of lily pads strewn across the crime scene.

So began Big Write week at Cradley! The car crash had been staged as a way of introducing the children to a wonderful picture book called *Tuesday*, by David Wiesner, in which the residents of a sleepy American town witness an amazing phenomenon. Each class explored the story in depth and then wrote different types and styles of text, inspired by the book.



### A good argument!

The children in Class 4 practised how to write a balanced argument to the proposal: Should the giant frogs be allowed to settle in our village?

This is an argument to discuss whether the giant frogs that have landed in Cradley in the last few days should be allowed to stay, or should villagers take action to drive them out?

The majority of residents believe the frogs to be harmless - all they do is hop around and swim in the pond, which doesn't hurt anyone. Furthermore, some villagers argue that they should be allowed to stay because the village can provide them with plenty of food and an ideal habitat where they would be very happy.

However, there are those who argue that this 'plague' of frogs could spread disease and pollute our beautiful area. No one can deny that frogs leave a mess, which could destroy the special nature of this unspoilt beauty spot. Others have argued that they are a potential hazard to traffic because they lie in the road, forcing drivers to swerve to avoid them!

In conclusion, I believe that the frogs should not be allowed to stay in the village because of their slimy and unpleasant appearance. However, perhaps they could be granted permission to stay, if they kept out of our way!

By Max Kite

### The inside story

The Year 6s were tasked with writing a more in-depth feature article exploring the strange goings-on that Tuesday night. Here, Henry Adams offers some possible explanations. (With apologies for the spurious science!)

Suddenly, a loud, rasping croak broke the silence. Then another. And another. One by one the lily pads rose, bubbling up into the air in perfect synchronicity. Rolling through the sky, over trees and telegraph poles, the playful frogs somersaulted and tumbled towards the town. Jumping from lily pad to lily pad they frolicked and played, blundering into objects in their way and scattering objects all around. Residents testify to seeing silver silhouettes drifting silently through the night sky. Then, as dawn broke, the curious, web-toed creatures dropped like stones back to the ground and hopped wearily back to their swamp.

Does this scenario sound like pure fantasy? Maybe not! I have spoken to Dr William Palmer, professor of meteorology at Oxford University, who can explain this 'Tuesday

Phenomenon', as it has become known. 'This incident is indeed curious, but it *has* been known to happen before,' Professor Palmer recalls. 'Lying in the tepid swampy water, lily pads experience the perfect conditions which can interfere with the gravity of our planet. When wind, rain and heat collide, an energy is created that can make them become airborne.'

Dr Palmer goes on to explain, however, that this is a rare event. 'I suppose you could say it happens only once in a blue moon! Indeed, the full moon on that hot summer's night might have played a significant part. Afterall, we know the moon has an impact on the gravitational pull of our planet.'

These special weather conditions, however, cannot cause this phenomenon on their own. I visited Dr Julia Bury, professor of physics at Harvard University. From her lab, she explained how she has explored the effect of kinetic energy on the frogs' webbed feet. 'When touching an object filled with energy, a complete vacuum is created which means that the frogs' feet stick to the lily pads in flight.' She went onto explain that this incredible 'energy' that is created has a limited life. Much like a battery, the power drains away and, eventually, the lily pads will fall from the sky.

Scientists from around the world have descended on the small New Orleans town of Jacksonville, which witnessed this remarkable event last week, to gather evidence. The town is still experiencing unseasonably stormy weather conditions, and they are hoping to witness a similar event with their own eyes.

Meanwhile, residents of this usually quiet backwater are mystified, but enjoying all the attention. 'Nothing like this has ever happened in our sleepy little town before,' pensioner Mr Peter Danes told me. 'If you ask me, it's almost supernatural!'

By Henry Adams



### Lost in a story

The Big Write formed part of Book Week. Children were invited to come to school dressed as a character from a favourite book. There were some wonderfully imaginative costumes, which were shown off in Collective Worship, when the whole school – including the staff – joined together to enjoy their stories.