## Welcome to Year 5 – Uranus Class

We are certainly starting to get into the swing of things in Y5; we have worked on the basics of what we Want our classroom to look, feel and sound like so that there is a shared understanding of expectations. As you can see from Dojo, the children are earning points for showing great learning behaviours!

You can contact me at skeane@shaw.wilts.sch.uk
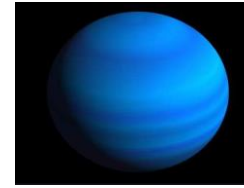
PE PE lessons will be on Monday & Friday afternoons at 2.05-2.55pm. Children should come to school wearing their PE kit on these days. Correct PE kit is as follows: **black/dark** shorts or leggings; plain white t-shirt; and trainers. Children should wear their Shaw jumper or cardigan over their kit – they are NOT permitted to wear other hoodies or sweatshirts. Dark joggers can be worn over kit in colder months. Earrings will need to be removed or covered with tape supplied from home.

May the FORCES be with you

Year 5 are kicking off the year with a **Science**-based mission, finding out all about "**FORCES**".

Why do objects come back down to Earth? What would it be like if we did not have gravity? What makes it easier or harder to move things on different surfaces? How does a tightrope walker stay on the rope? What is the best way to move or lift heavy things?

I look forward to our year 5 scientists finding the answers to these questions and many more!

English

Our class texts both have a central character who is a tightrope walker: a book 'T*he Man Who Walked Between The Towers*' and a short film '*El Caminante*'. We will consolidate and embed some writing skills (expanded noun phrases, fronted adverbials and subordinate clauses), and use these to produce diary entries, story settings, alternative endings and news bulletins.

The **spelling** focus this term is on rules for adding suffixes to words (-ed, -ing, -er, -est, etc.)

Maths
Represent, recognise, read and write 5-digit numbers in words and numerals; identify and represent 5-digit numbers on a number line; compare 5-digit numbers; repeat with numbers to one million; round any 5- or 6-digit number to the nearest 10,000/100,000; count forwards and backwards in whole number steps including through zero; understand and use negative numbers in context, including temperatures below 0°C; recognise years written in Roman numerals; understand, order and compare decimal numbers; identify 3D shapes.

HOMEWORK
Class Dojo is still work in progress: I am trying to find the best way to set the tasks so that everyone can access and complete them easily.
Homework will continue being set on a Thursday, with a Wednesday deadline.
Thank you all for engaging with this!

READING at HOME
Over the next couple of weeks, your child may start to bring home a reading book. Please encourage reading at least 4x per week – this makes a significant difference to reading development.

Vocabulary
Infer
Predict
Explain
Retrieve
Summarise

For some children, this should ALWAYS be with an adult, but for some it may only be with an adult once a week, with a focus on discussing the text.

Try to use *VIPERS* with your child during these times.

Other Learning this term…
RE *What is the best way for a Hindu to show commitment to God?* We will be learning to understand how Hindus show commitment to God, and to evaluate if there is a best way.

PSHE *Being me in my World* – My Year Ahead; Being Me in Britain; Year 5 Responsibilities; Rewards and Consequences; Our Learning Charter; and Owning our Learning Charter.

Music *Classroom Jazz 1* – All the learning for this unit is focused around two tunes: *Three Note Bossa* and *The Five Note Swing*
Interesting Facts:
● Bossa Nova originated in South America.
● Swing became popular in the 1940s.

Maths Here are the learning steps (manageable steps) for the term:

Represent 5-digit numbers
Recognise the value of digits in 5-digit numbers
Read 5-digit numbers in words and write using numerals including zero as a place holder
Read 5-digit numbers in numerals and write in words, including zero as a place holder
Identify and represent 5-digit numbers on a number line
Compare 5-digit numbers
Represent numbers up to one million
Recognise the value of digits in numbers up to one million
Read 6-digit numbers in words and write using numerals including zero as a place holder
Read 6-digit numbers in numerals and write in words, including zero as a place holder
Identify and represent 6-digit numbers on a number line
Compare 6-digit numbers
Order numbers up to one million
Round any 5-digit number to the nearest 10 000
Round any 6-digit number to the nearest 100 000
Count forwards and backwards in whole number steps including through zero
Understand and use negative numbers in context, including temperatures below 0°C
Read Roman numerals to 1000 (M)
Recognise years written in Roman numerals
Recognise that thousandths arise from dividing a number (or object) into one thousand equal parts and dividing hundredths by ten
Read a number with three decimal places
Represent decimal numbers with up to 3 decimal places
Write decimal equivalents of any number of thousandths
Identify decimal numbers, with up to 3 decimal places, on a number line
Position decimal numbers, with up to 3 decimal places, on a number line
Compare a set of numbers written to three decimal places
Order decimal numbers with 3 decimal places
Compare numbers with a mixed number of decimal places
Order numbers with a mixed number of decimal places
Round numbers with two decimal places to one decimal place
Round numbers with two decimal places to the nearest whole number
Extra Problem Solving
Identify cubes from nets
Identify cuboids from nets
Identify prisms from nets
Identify pyramids from nets

100,000s	10,000s	1000s	100s	10s	1s
6	2	3	1	4	5

In order from smallest to largest

543,241   564,406   570,540

Stop and look. What do you notice?

six hundred and twenty-three thousand, one hundred and forty-five

6 hundred thousands, 2 ten thousands, 3 thousands, 1 hundred, 4 tens and 5 ones

thousands digit round multiple positive negative

1s	$\frac{1}{10}$s	$\frac{1}{100}$s	$\frac{1}{1000}$s
5	. 2	4	3

thousandths hundredths digit round decimal

five point two, four, three

5 ones, 2 tenths, 4 hundredths, 3 thousandths

Compare decimals

2.345 > 2.343   2.455 > 2.343   2.3 > 2.299

3 steps forwards from −2 is 1

−10   0   10
negative   positive

100,000 less   100,000 more

224,100   324,100   424,100

200,000   300,000   400,000   500,000

5 or more – round up
4 or less – round down

5 or more – round up
4 or less – round down

Round to the nearest tenth.

6.5|3 → 6.5

6.5   6.6

Round to the nearest ten thousand

65,727 → 70,000
60,000   70,000

Round to the nearest hundred thousand

643,278 → 600,000
600,000   700,000

Round to the nearest whole number

6|53 → 7

6   7

Year 5 Term 1

The net of a cube has 6 squares that fold to make a cube.

The net of a cuboid has 6 rectangles that fold to make a cuboid.

The net of a pyramid has triangles and a polygon that can be folded to make a pyramid.

The net of a prism has rectangles and two identical polygons that can be folded to make a prism.

prism pyramid net polygon

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Forces

Gravity

Gravity is a force that holds things to Earth's surface and prevents things from floating off into the atmosphere. It ensures that unsupported objects to fall back down to Earth.

It is said that the famous scientist Isaac Newton was sitting under a tree when an apple fell on his head. He identified it was a force pulling the object down. We now measure gravity in Newtons (N) because of this.

There is gravity on the moon but it is much less than on Earth, so during the moon landings of 1969, astronauts could jump higher for longer due to the weaker pull of gravity.

Friction

When objects are pushed or pulled, an opposing force can be felt. This opposite force is called 'friction'. Friction causes things to slow down or stop. The grip on our shoes stops us slipping. Therefore, friction is great. An ice-skate on an ice-rink will move for a long time because there is very little friction. The rougher the surfaces, the greater the friction. This rubbing of two surfaces can release energy, causing heat. (Try rubbing your hands together!)

Water Resistance

Water resistance is a type of _friction_ which can slow things down in the water. Water acts upon objects making them harder to pass through. A fish has a _streamlined_ body shape to help it swim through water more easily. _Upthrust_ is the name of the force which keeps things afloat in water. When gravity is greater than upthrust, the object sinks. When the two are the same, the object floats.

Air Resistance

Air resistance (sometimes referred to as drag) acts against gravity on falling or moving objects. It's what you feel on your hair when riding fast on a bike or it's what fills a parachute to help slow you down when falling from the sky. Object such as aeroplanes reduce air resistance because of their streamlined shape.

LEVERS

A way to lift heavy weights using the least amount of effort. The longer the lever, the easier it is to lift. The fulcrum is where the lever pivots in order to lift the heavy load.

Load | Effort | Effort Arm | Resistance Arm | Fulcrum
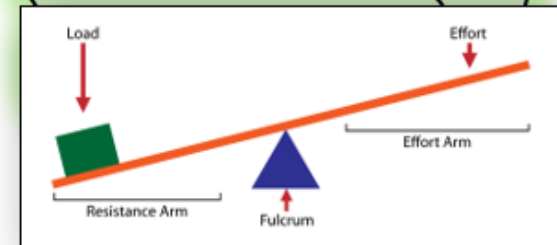
PULLEYS

Used like levers to lift loads with less effort but for longer distances. Rope is passed through a pulley which is attached to an anchor point and returned back to the ground to be pulled.

GEARS - Used to transmit power from one part of a machine to another. Connected gears can increase speed, increase force or cause a change in direction. When joined (in mesh) the direction of rotation of the driven gear is the opposite of the drive gear.