Year 5 Starlings
Computing

## Autumn 1

| Key Vocabulary | Definition |
| :--- | :--- |
| Collaboration | To work with others. |
| Components | A part of something (like a computer program or system). |
| Copyright | Having a legal ownership of something - nobody else can reproduce, copy, sell or <br> distribute it without your permission. |
| Digital | Electronic technology (such as phones, cameras and computers) |
| IP address | The numeric address of a computer on the internet. |
| Modify | To make changes to something. |
| Packets | Short, fixed-length pieces of data that are transmitted as one unit (packet) of information in <br> online communication networks. |
| Protocol | A set of rules for sorting data so all devices can access it. |
| Router | A device that sorts the transmission routes of data packets in an electronic communication <br> network. |
| System | A group of devices which form a network to distribute information. |



## Sharing information




Creating a shared bank of information


## E-safety: Online identity.

What choices have these people made about their online safety and identity?
Your online identity is how you portray yourself online this includes all the information you share about yourself, your profile picture, photos you share, things you
comment on, and the messages you send.

Ariana Mae Powell
posts following followers

Studies at:King Henry Park School
(迷 Born:8th May
(0) Lives in:Manchester

嘘 Likes: Pizza, slime, YouTube, Dancing (Manchester Danceworks studio) dod $\bigcirc$ Loves: My bestie that means you Ava Hughes my dog Bella Q Find me: TikTok - @Ari_Mae07 Snapchat - ArianaMae07

|  | PLAYER PROFILE |
| :--- | :--- | :--- |

## Year 5 Starlings English <br> Autumn 1

| Key <br> Vocabulary |  |
| :--- | :--- |
| Aerial | A performer who does difficult tricks high above the ground, such as high <br> wire. |
| Astonish | To fill with great surprise or amazement. |
| Construction | The process of building something, such as houses or shops. |
| Envy | The feeling or wanting what someone else has. |
| Frantic | Being very excited by worry or fear. |
| Genius | A person (or idea) that is incredibly smart or clever, far beyond what most <br> people can do. |
| Humanoid | Being humanlike in appearance. |
| Inanimate | Not looking or acting like something which is alive. |
| Jarred | To crash or bump into something, making it move or jolt. |
| Organic | Something that is living or natural. |
| Performer | Someone who performs and entertains an audience. |
| Plummet | To fall at high speed. |
| Processor | The part of a computer where operations are created and controlled. |
| Salute | To show respect by raising the right hand to the forehead. |
| Sci-Fi | An abbreviation of Science Fiction. |
| Sentence | A punishment for a crime, which is decided in a court of law. |

## Science Fiction Novels.

Science fiction is a genre of literary fiction that aims to creatively represent real or imaginary concepts of science and technology.
These concepts can be part of the central theme of the work or the scenarios presented in it. In science fiction novels, the plot is usually set in the future.
Generally, science fiction stories address the negative
consequences of the use of technology and science on society and individuals
Some of the most influential science fiction books predicted important inventions in this field, such as robots and the atomic bomb. According to science, many of the elements within these stories are possible.

## Biographies.

A biography is a detailed description of someone's life written by someone else. It is a non-fiction story based on facts, and biographers must do a lot of research to write them.

Biographies often include information such as the subject's date and place of birth and death, details of their family, their lifetime accomplishments, major events from their life, and also the impact that they have had on society.

Biographies can be written about famous figures such as inventors, athletes, politicians, and celebrities. Biographies written by the subject themselves are called autobiographies.

| $13^{a}$ August 1949 |
| :--- |
| Philippe Petit is born |
| in Nemours, France. |

1966
Petit, age 16, takes
his first steps on a
tight rope.

| 1968 |
| :--- |
| Petit starts to plan |
| his walk between The |
| Twin Towers. |


| $26^{\text {an }}$ June 1971 | 1973 |
| :--- | :--- |
| Petit walks between | Petit walks The |
| the towers of Notre | Sydney Harbour |
| Dame De Paris. | Bridge. |

$7^{\text {t }}$ August 1974
Petit walks between the
Twin Towers. He is up
there for 45 minutes.
7 August 1974
Petit walks between the
Twin Towers. He is up
there for 45 minutes.

## 2008

## Man On Wire,

documentary about Petit's WTC walk, is released.

Year 5 Starlings

## Description and <br> Adjectives <br> Monster Pets



Le nez (the nose) // un nez (one nose)
La téte (the head) // une téte (one head)

To change the to $a$, le becomes un and la becomes une
t'antenne (f)
the antenna
( Autumn Term 1
7

Year 5 Starlings
Geography

## Autumn 1

## Spatial Sense



| Key Vocabulary | Definition |
| :--- | :--- |
| Co-ordinates | Numbers that represent a location on a map. |
| Contour lines | The contour lines join up areas of the same height. When they are close together, it means <br> the hill or mountain is steep. When they are far apart, it means the land is gently sloping. |
| Equator | An imaginary line that shows us that locations are half way between the north and south <br> poles. It divides the Earth into the Northern and Southern Hemispheres. |
| Eastern Hemisphere | A term used to describe places that are East of the meridian line. |
| Lines of Latitude | Imaginary lines that run horizontally, parallel to the equator. They help us to identify how <br> far north or south of the equator a location is. |
| Lines of Longitude | Imaginary lines that run vertically from north to south around the globe. They are not <br> parallel to each other. They are used to identify how far east or west of the Prime Meridian <br> line a location is. |
| Prime Meridian | The line of longitude that measures $0^{\circ}$ and runs through Greenwich in London. |
| Relief maps | A map that uses shading and colours to indicate the height of the land. |
| Time Zone | A range of longitude that shares a common time. |
| Tropic of Cancer | The most northern line of latitude where the sun can be directly overhead. Named after the <br> constellation of Cancer. $23^{\circ}$ north of the equator. |
| Tropic of Capricorn | The most southern line of latitude where the sun can be directly overhead. Named after the <br> constellation of Capricorn. $23^{\circ}$ south of the equator. |
| Western Hemisphere | A term used to describe places that are west of the meridian line. |

a) ( 1 centimeter represents 250 meters)
b) $1: 25000$


Gross Domestic Product (GDP)
Calue of all the goods and services produced by a county in one year. Countries with higher GPD have higher standards of living than those with low GDP. This data helps us to understand more about life in specific
countries


| Key Vocabulary |  |
| :--- | :--- |
| AD/CE | AD (Anno Domini) and CE (Common Era) both represent years from year 1 onwards <br> (after the birth of Christ) |
| BC/BCE | BC (Before Christ) and BCE (Before Common Era) both represent years before year 1 <br> (before the birth of Christ) |
| Caliphate | The office or dominion of a caliph. |
| Civilisation | An advanced stage of social development where people share common laws, <br> economy, culture, language and religion. |
| Depopulate | To greatly reduce the population by destroying or driving away the inhabitants. |
| Mecca | (In Saudi Arabia) Islam's holiest city, and the birthplace of Muhammad. |
| Medina | (In Saudi Arabia) Islam's second holiest city, and where Muhammad is buried. |
| Mongols | A tribe of people (from Mongolia) who rode on horseback across central and <br> northern Asia. |
| Mosque | A Muslim place of worship. |
| Muhammad | A prophet and military leader who established (created) Islam. |
| Philosophy | The study of basic ideas about knowledge, truth, religion and the meaning of life. |
| Scholar | A person who has completed advanced studies in a specific area. |
| Uninhabitable | A place where people cannot live. |

## History

Autumn 1

Definition

## Al Tabari

An influential scholar, historian and translator/interpreter.

## Hulagu Khan

A Mongolian ruler who invaded Baghdad in 1258 and destroyed the city.

## Baghdad as a centre of learning:

Baghdad became a centre of learning because of its position as a trading hub in the Islamic Empire, which allowed for the sharing of knowledge, books, languages and faiths between cultures.

In the House of Wisdom, texts were stores and translated. People came to learn and read, and it is remembered as one of the world's greatest libraries.
Scholars from all across the Islamic world were attracted to Baghdad, quickly turning it into an intellectual hub.

## Significant people:

## Caliph AI-Mansur

A religious leader who is remembered for founding (creating) the city of Baghdad.


Timeline of Baghdad: 762 CE - 1258 CE.


# Year 5 Starlings Maths 

## Autumn 1

| Key <br> Vocabulary | Definition |
| :--- | :--- |
| Place value | The value of a digit, determined by its position within a number. |
| Partitioning | Breaking down a number in more than one way. |
| Compare | Examine the differences between numbers, quantities or values <br> to decide if it is greater than, smaller than or equal to another <br> quantity. |
| Round | A round number is an integer that ends with one or more "O"s <br> (zero-digit). |
| Nearest | We round to the nearest integer ending n zero. Use the <br> rounding rule. |
| Equal to | = symbol. The same value |
| Less than | < symbol. e.g. $3<5$ |
| Greater than | $>$ symbol. e.g. $7<2$ |
| Negative <br> number | A number whose value is always less than zero and it has <br> a minus (-) sign before it. |

## Addition and Subtraction

The column method of addition and subtraction, including exchanging. It is essential that digits are placed in the correct place value column and that we begin our calculation from the right hand side


## Number and Place Value

What is place value? Place value refers to the value of each digit in a number. Place value requires children to understand that a number such as 582 is made up of 5 hundreds (500), 8 tens (80) and 2 ones (2). We encourage children to partition numbers in order to improve their understanding of place value. We refer to the units column as 'ones'. Place value helps us know the value of a digit, depending on its place in the number.

| M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Millions | | HTh |
| :---: |
| Hundred <br> Thousands | | TTh |
| :---: |
| Thousands |
| Ten | |  Th  |
| :---: |
|  Thousands  |$_{$| $H$ |
| :---: |
|  Hundreds  |$}^{$|  T  |
| :---: |
|  Tens  |$}$| O |
| :---: |
| Ones |

Partitioning. Numbers can be partitioned (broken apart) in more than one way. The number 3,714,825 could be partitioned in many ways such as: $3,000,000+700,000+10,000+4,000+800+20+5$ or $3,714,000+$ 825 or $3,700,000+14,000+700+125$ or $3,600,000+140,000+600+220+5$

Representing Numbers
A four-digit number is made up of thousand, hundreds, tens and ones. Different concrete manipulatives and pictorial diagrams can be used to represent these numbers. The number 2,132 can be represented like this:


This shows 2 thousands, 1 hundred, 4 tens and 2 ones. The same number can also be represented with place value counters:


Rounding: A rounded number has the same value at the starting number but is less exact

The rule is: Find the column, look right next door,
5 or more, raise the score, 4 or less, let it rest

| Round to the nearest ten | Round to the nearest hundred |  |  |
| ---: | :--- | ---: | :--- |
| 54 | $\rightarrow \mathbf{5 0}$ | $\mathbf{4 1 5}$ | $\rightarrow \mathbf{4 0 0}$ |
| $\mathbf{5 5}$ | $\rightarrow 60$ | 950 | $\rightarrow 1000$ |
| $\mathbf{3 1 3}$ | $\rightarrow \mathbf{3 1 0}$ | $\mathbf{7 2 6 1}$ | $\rightarrow \mathbf{7 3 0 0}$ |
| $\mathbf{5 4 9}$ | $\rightarrow \mathbf{5 5 0}$ | $\mathbf{7 2 2 1}$ | $\rightarrow \mathbf{7 2 0 0}$ |
| $\mathbf{1 2 2 1}$ | $\rightarrow \mathbf{1 2 2 0}$ | $\mathbf{3 6 4 3 0}$ | $\rightarrow \mathbf{3 6 4 0 0}$ |

Roman Numerals

| $\mathrm{I}=1$ |  |
| :---: | :---: |
| $\mathrm{II}=2$ |  |
| $\mathrm{III}=3$ |  |
| $\mathrm{IV}=4$ |  |
| $\mathrm{~V}=5$ |  |
| $\mathrm{X}=10$ |  |
| $\mathrm{XX}=20$ |  |
| $\mathrm{XXX}=30$ |  |
| $\mathrm{XL}=40$ |  |
| $\mathrm{~L}=50$ |  |
| $\mathrm{LX}=60$ |  |
| $\mathrm{LXX}=70$ |  |
| $\mathrm{LXXX}=80$ |  |
| $\mathrm{XC}=90$ | C |$\quad$| $\mathrm{C}=100$ |
| :---: |
| $\mathrm{D}=500$ |
|  |
| $\mathrm{MMXVIII}=$ |
| 2018 |
|  |

Year 5 Starlings

Autumn 1

|  | Key Vocabulary | Definition |
| :---: | :---: | :---: |
|  | Dolphin kick | Kicking both of your legs at the same time whilst keeping them squeezed together. |
|  | Inhale/exhale | Breathe in/breathe out. |
|  | Streamlined | Making yourself narrow and pointy so you can cut/slide through the water. |
|  | Stroke | Moving your arms and legs to push against the water and propel yourself forward. |
|  | Surface | The top of the water. |
|  | Treading water | The method of keeping yourself afloat and your head above the water. |
| $\begin{aligned} & \overline{\overrightarrow{0}} \\ & \text { 『े } \end{aligned}$ | Chest pass | A type of pass used in netball for short distances. |
|  | Footwork | Not moving with the ball. When catching the ball, the foot that lands first must stay in contact with the floor until the ball is passed. |
|  | Offside | When a player in in part of the court that their position is not allowed into. |
|  | Obstruction | When a defender is closer than 1 m to the player with the ball. |
|  | Positions | Where players stand when the game is started and re-started after a goal is scored. |
|  | Rules | Keep players safe and make the game fair. |

The Water Safety Code: Swimming is a fantastic way to keep fit, but it can also be dangerous. It is important to stay with an adult when swimming, and to only swim in safe places. Pay attention to any signs or announcements from lifeguards, as these will be important. If you accidently fall into water, float until you feel calm while treading water. Signal for help by raising one hand in the air and shouting. If you can, swim to safety or hold onto something that floats. If you see someone fall in water, ring 999 or 112 to get help. NEVER enter the water yourself. Throw something that floats to them and keep shouting out to reassure them help is on the way.

```
Key safety messages:
Always swim in a Always swim
    safe place with an adult
```

If you fall in
float, breathe, relax 999 or 112

Netball Positions: There are 7 positions on a netball team:
Goal Shooter (GS) - to score goals and work in and around the circle with the GA. Goal Attack (GA) - to feed and work with the GS to score goals.
Wing Attack (WA) - To feed the GA and GS, giving them shooting opportunities. Centre (C) - To take the centre pass and to link defence and attack.
Wing Defence (WD) - To look for interceptions and prevent opposition WA feeding the circle.
Goal Defence (GD) - To win the ball and stopping the opposition GA from shooting. Goal Keeper (GK) - To work with the GD preventing the opposition GA/GS from scoring.


Hazards: When swimming in the sea, swim parallel to the shore within standing depth.
Avoid getting pulled out by the current and get out of the water when you begin to feel cold.

| Swimming pools | Sea and coastal areas | Inland water (lakes/rivers) |
| :--- | :--- | :--- |
| Slippery surfaces | Waves and tides | Water speed |
| Different depths | Sudden depth changes | Debris and pollution |
| Steps | Hidden hazards (rocks, <br> stones) | Hidden hazards (weeds, rocks) |
| Trip hazards | Cold water | Dangerous banks |
| Other swimmers | Offshore winds | Canal locks and weirs |


| Year 5 Starlings | Eat Well, Live Well |
| :--- | :--- | PSHE

## Autumn 1

## What can we do to live a


balanced, healthy lifestyle?

| Key Vocabulary |  |
| :--- | :--- |
| Active | Engaging or ready to engage in physically energetic activity. |
| Balance | Different elements are equal or in the correct amounts. |
| Core | The central part of your body. It includes your pelvis, lower back, hips and stomach. |
| Diet | The kinds of food that a person, animal, or community usually eats. |
| Duped | To be deceived or tricked. |
| Endorphins | Natural chemicals produced in the body to reduce pain and boost happiness |
| Hygiene | The way we care for our bodies |
| Leisure | Another word for free time. |
| Lifestyle | Doing things, living your life and making decisions in your own unique way. |
| Manipulate | To alter or adjust to one's own advantage, especially by devious means. |
| Media | Different ways that information can be passed to many people in a society, including television and radio <br> broadcasts, articles in newspapers, internet, apps. <br> Nutrition The study of food and how it works in your body. |
| Oral | Relates to the mouth. |
| Priorities | Interests that come before all others. |
| Repetition | One complete movement of a particular exercise. |
| Routine | Series of exercises, planned and organised. |
| Sedentary | Doing very little physical movement. |

Activity Recommendations for a healthy lifestyle
-schoolers (3 to 4 years): 180 minutes (3 Children and young people ( $5-18$ years) : at hours) Pre spread throughout the day, including at least 60 minutes of moderate-to-vigorous intensity physical activity
least 60 minutes of physical activity every day and engage in a variety of types and intensities of physical activity across the week.

Adults (19-64 years): at least 150 minutes each week (moderate intensity), or 75 minutes of vigorous activity a week and muscle strengthening activities on two days or more each week.

What is a balanced lifestyle?
This means eating a balanced diet, getting regular exercise, avoiding tobacco and drugs and getting plenty of rest An unbalanced diet can lead to dietary related illnesses.

## Eat Well Guide



## 8 tips for healthier eating

These eight practical tips cover the basics of healthy eating, and can help you make healthier choices.

1. Base your meals on starchy carbohydrates.
2. Eat lots of fruit and veg.
3. Eat more fish - including a portion of oily fish
4. Cut down on saturated fat and sugar.
5. Eat less salt (max. 6 g a day for adults).
6. Get active and be a healthy weight.
7. Don't get thirsty.
8. Don't skip breakfast


## Kirpan



Kara

## Kanga

The 5 K's of the Khalsa.

## Guru Gobind Singh

Guru Gobind Singh was the last of the ten Gurus. He transformed the Sikh faith. In 1699 he created the Khalsa (Pure), a community of the faithful who wore visible symbols of their faith and trained as warriors. Today the Khalsa comprises all practising Sikhs.

## The 3 duties of Sikhism.

1. Nam japna: Keep God in mind at all times
2. Kirt Karna: Earn an honest living, avoiding gambling, begging or working in the alcohol or tobacco industries.
3. Vand Chhakna: Share one's earnings with others, giving to charity and caring for others


## Year 5 Starlings

## Science

## Autumn 1

| Key Vocabulary |  |
| :--- | :--- |
| Adolescence | The period during which a young person develops from a child into a young adult. |
| Adulthood | The period in which a person is fully grown, before they reach old age. |
| Arthritis | A disease which causes painful inflammation and stiffness in the joints. |
| Foetus | An unborn baby which is still growing and developing inside its mother. |
| Gestation period | The time in which a foetus develops, beginning with fertilisation and ending at birth. |
| Growth stage | Infancy, childhood, adolescence, and adulthood are all growth stages before old age. |
| Hormone | A chemical released in the body which helps control how cells and organs do their work. |
| Infancy | The period when a person is a baby or a child, before they start developing into an adult. |
| Life expectancy | The average age individuals are expected to live until before a natural death. |
| Lifespan | The total length of time a person is alive from, from birth to death. |
| Metabolism | The chemical process in the body where it turns food into energy. |
| Weaning | When a baby moves from drinking milk to eating solid foods. |

The Human Body


The challenges of old age
Higher risk of developing diseases such as arthritis, dementia or heart disease.

Eyesight can get worse, meaning glasses may need to be worn.

The muscles and joints get weaker, so some people choose to use walking sticks or wheelchairs.

The metabolism slows down, meaning they have less energy.

Average life expectancy of UK adults is around 80 years old.


## Year 5 Starlings

## Art

Autumn 1


Photography


| Key Vocabulary | Definition |
| :--- | :--- |
| Camera obscura | A darkened box, with a hole in it that allows an image to be projected onto a <br> screen inside |
| Daguerreotype | A photograph taken by an early photographic process, using a camera <br> obscura, onto a metal plate |
| Lens | A glass, or plastic disc, which focuses the light as it enters the camera |
| Roll-film/film | A thin, see-through material on a roll inside the camera and coated with <br> chemicals which change when exposed to light |
| Exposure | Allowing light onto the photographic film inside a camera |
| Shutter | Like a small door in the camera which controls the amount of light which is let <br> in |
| Develop | The process of turning the image recorded on film in a camera into a negative <br> from the image recorded on the film |
| Negative | The American company which developed the first small box camera |
| Kodak | A collage made up of photographs |
| Photomontage | Art (including photography) that does not attempt to represent reality |
| Abstract | The act of deciding what image is inside the frame, or edges of the photograph |
| Framing | Moving a camera horizontally while taking a picture |
| Panning | A square or rectangular box, like a frame, which is used to frame a <br> composition |
| viewfinder | The arrangement of different elements (like shape, colour, light) which make up <br> a work of art, including photographs: compositional devices which can help <br> photographers include the rule of thirds, leading lines and using negative space |
| Composition |  |

1826 - the first ever photograph was taken, using a camera obscura
1839 - the Daguerreotype was invented
1886 - Kodak invented black and white roll-film, and the portable camera

1907 - colour film was introduced
1975 - Kodak created the first 'digital' camera prototype from 'junk' pieces of tech. It was the size of a bread bin, and took 23 seconds to snap a single photograph.
1991 - the first commercially available digital camera is released 1997 - the first camera phone photo is shared


Man Ray's
Glass tears
(1932)


Aaron Siskind's Peeling Paint, Jerome, Arizona (1949)


Photomontage:
Prince Albert of Saxe-CoburgGotha, Queen Victoria and their children (circa 1861)

