Year 5 Imaginative Learning Project = Engage, Develop, Innovate, Express – Alchemy Island

English

Reading

Explain and discuss their understanding of what they have read, including through formal presentations and debates, maintaining a focus on the topic and using notes where necessary. Discuss and evaluate how authors use language, including figurative language, considering the impact on the reader. Retrieve, record and present information from non-fiction. Identify how language, structure and presentation contribute to meaning. Prepare poems and plays to read aloud and to perform, showing understanding through intonation, tone and volume so that the meaning is clear to an audience.

Writing

Identify the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own. Note and develop initial ideas, drawing on reading and research where necessary. Select appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning. Ensure the consistent and correct use of tense throughout a piece of writing. Use a wide range of devices to build cohesion within and across paragraphs. Proof-read for spelling and punctuation errors. Assess the effectiveness of their own and others' writing. Perform their own compositions, using appropriate intonation, volume, and movement so that meaning is clear.

Spoken Language

Use relevant strategies to build their vocabulary. Participate in discussions, presentations, performances, role play, improvisations and debates. Ask relevant questions to extend their understanding and knowledge. Use relevant strategies to build their vocabulary. Give well-structured descriptions, explanations and narratives for different purposes, including for expressing feelings. Use spoken language to develop understanding through speculating, hypothesising, imagining and exploring ideas.

Science

Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets.

Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.

Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid in bicarbonate of soda.

Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.

Demonstrate that dissolving, mixing and changes of state are reversible changes.

Know that some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution.

Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.

Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.

Geography

Describe and understand key aspects of: physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.

Use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the UK and the wider world.

Mathematics

Number – Multiplication and Division

Multiply and divide numbers mentally drawing upon known facts. Multiply and divide whole numbers by 10, 100 and 1000. Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. Recognise and use square numbers and cube numbers and the notation for squared (2) and cubed (3) Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes. Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. Establish whether a number up to 100 is prime and recall prime numbers up to 19.

Perimeter and Area

Measure and calculate the perimeter of composite rectilinear shapes in cm and m. Calculate and compare the area of rectangles (including squares), and including using standard units, cm2, m2 estimate the area of irregular shapes.

Design and Technology

Understand and use electrical systems in their products (e.g. series circuits incorporating switches, bulbs, buzzers and motors).

Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.

History

As this ILP has a music focus, future ILP's will have a focus on history.

Modern Foreign Languages

French

Unit 2 – À l'école!

Name school subjects.
Talk about likes and dislikes at school.
Ask and say the time.
Talk about timings of the school day.

C'est… l'anglais, le français etc
J'aime /Je n'aime pas
Quelle heure est-il?
L'école commence à… heure(s) et fi nit à…

Computing

Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.

Physical Education

Real PE Unit 2 – Creative Skills

Effectively disguise what I am about to do next. Use variety and creativity to engage an audience.
Respond imaginatively to different situations, adapting and adjusting my skills, movements or tactics so they are different from or in contrast to others.
Link actions and develop sequences of movements that express my own ideas.
Change tactics, rules or tasks to make activities more fun or challenging.
Make up my own rules and versions of activities.
Respond differently to a variety of tasks or music and recognise similarities and differences in movements and expression.

PSHE/SMSC (Jigsaw) & Religious Education (Discovery RE)

Jigsaw – Celebrating Differences

Understand that cultural differences sometimes cause conflict. Am aware of my own culture.
Understand what racism is. Am aware of my attitude towards people from different races.
Understand how rumour-spreading and name-calling can be bullying behaviours. Can tell you a range of strategies in managing my feelings in bullying situations and for problem-solving when I'm part of one.
Explain the difference between direct and indirect types of bullying.
Know some ways to encourage children who use bullying behaviours to make other choices and know how to support children who are being bullied.
Compare my life with people in the developing world. Appreciate the value of happiness regardless of material wealth.
Enjoy the experience of a culture other than my own. Respect my own and other people's cultures.

Discovery RE – Christianity

Is the Christmas story true?

Do sacred texts have to be 'true' to help people understand their religion?
Start to explain how 'true' could mean different things to different people, and how stories can be 'true' in different ways.
Start to explain the Christian belief that Jesus was the Incarnation of God.
Start to express an opinion on whether the Christmas story is true and what this might mean to Christians.

Art and Design

As this ILP has a music focus, future ILP's will have a focus on arts and design.

Music

Charanga - Unit 2 Classroom Jazz Stage 1

Listen & Appraise - Recognise styles, find the pulse, recognise instruments and listen and discuss other dimensions of music.

Musical Activities – Play a classroom instrument in a group, band or ensemble. Explore the link between sound and symbol. Explore and create your own responses, melodies and rhythms. Perform work together in a group, band or ensemble and perform to each other and an audience. Discuss and improve your work together.

Home Learning: **Date due: Monday 16th December 2019**

Option 1: Find out the atomic numbers and symbols for metals such as lead, copper, silver, zinc, iron and platinum.

Option 2: Use a magnet to test the magnetic properties of metals around your home and record your discoveries in a data table.

Option 3: Design a costume and travel kit for an alchemist. What useful things might an alchemist pack in a suitcase?

Option 4: Combine art and science to make an astonishing and unique gemstone! Experiment with different materials such as plaster and jelly!

It is still the expectation that the children will on a daily basis: read, practise their spellings and complete their Spelling Shed and Mathletics activities. Children also have access to TT Rock Stars to improve their times tables knowledge.