

Project Design: Overview

Vincentian Value: We do not Judge Others

Teachers: LW, EJ, AY, MB

Driving Question: [What does it mean to give your heart to someone?](#)

Year Group: Y5/6

STEM/Cultural/Wellbeing:

Duration: Spring Term

Project Summary for school website (include student role, issue, problem or challenge, action taken and purpose/beneficiary)

This term we will be investigating the driving question “What does it mean to give your heart to someone?” This project will provide opportunities to think about literal and figurative use of language. The notion of giving your heart metaphorically through love will be explored through poetry and music enabling the children to write their own pieces. We will also look at donating a heart literally and what conditions might lead to this being necessary . Using the novel “Pig Heart Boy ” by Malorie Blackman as a vehicle, we will explore the scientific topics of the circulatory system and other bodily systems and our entry event of a post Christmas Boot Camp will enable the children to assess the effect of exercise and rest upon the heart. Although the book is fictional it will also enable us to have ethical discussions about organ donation and help the children to develop their debating skills. After researching what life was like in the past with regard to medicines and operations, we will then look at the logistics of transporting organs from one hospital to another and develop the children’s geography, and designing skills to produce model bridges providing the quickest route between two points. Finally we will return to our driving question, leading us to think about Jesus’ great love for us and how he literally and figuratively gave his heart to us at Easter. Throughout the project the children will be contributing to a collaborative art piece which will be a celebration of love on permanent display in the school.

Key Knowledge and Understanding
(National Curriculum Objectives)

English

Argument writing

Recount

Diaries

Verbs

Verb Prefixes dis-,de-, mis-, over-, re-

Verb Inflections & Standard English

Using Inverted Commas

Prepositions

Coordinating Conjunctions

Using Inverted Commas (Changing the Position of the Reporting Clause)

Parenthesis - Brackets

Science

I can identify the main parts of the human circulatory system and describe their functions

I can describe the ways in which nutrients and water are transported within animals, including humans

I can recognise the impact of diet, exercise, drugs and lifestyle on our bodies

ICT

Understand simple steps to validate information, demonstrate web-savvy awareness.

Research and evaluate sources (eg fake news).

DT

Structures - bridge building from one hospital to another to make route more direct.

History

Local History Story on Medical Research Buildings

Evaluate impact/effect of change between periods in the past, cause and consequence, primary and secondary sources.

Geography

Regular use of atlases and maps.

Human and physical processes, land use, trade links, natural resources

Maps of London to locate hospitals.

Transport heart from x to y using cost effective and direct routes.

Music

Use notation associated with duration eg. crochet-one beat.

Looking at different heart beats and explore and use simple eight note scales.

Recognise features such as crescendo, diminuendo

Identify and create more complex patterns, maintaining own part.

Recognise the difference between unison and harmony.

PE

Participate in short, medium and long distance running.

What exercise changes heart rate?

UNRC Articles to be covered

Article 6, Article 24

Key texts to be studied

Pig Heart Boy

Significant people to be studied

Richard Worthington

Isambard Kingdom Brunel

Success Skills (to be taught and assessed)

Critical Thinking/Problem Solving

X

Self-management

X

Collaboration

X

Other

Catholic Social Teaching Element:

Life and dignity of the human person

Call to family, community and participation

Rights and Responsibilities

Option for the poor and vulnerable

Dignity of work and rights of workers

Solidarity

Care for God's Creation

X

X

UTOPIA (KA2 Erasmus Project) Element:**Developing skills for Cross Curricular teaching in an outdoor and/or community based environment.**

Community Based Evidence

Outdoor Learning Evidence

What 21st Century Skills are you developing?

Cross Curricular Evidence

Entry Event

Post Christmas Boot Camp with Coach Nick and Miss Sophie- to assess the effect on the heart.

Products – Individual

Bridge designs - CAD & practical

Products – Team

Collaborative mural of hearts/love

Making Products Public (include how the products will be made public and who students will engage with during/at the end of the project)

Invite parents in to view their mural for a small fee to raise money for the British Heart Foundation?

Resources Needed (include human resources, facilities, equipment, materials, community resources)

Posters and vocabulary for the scientific terminology of the circulatory system

Reflection Methods (include how the individual, team and/or whole class will reflect during/at end of project)

Journal/Learning log

Focus Group

Whole class discussion

x

Fishbowl Discussion

Survey		Other:	
--------	--	--------	--

Project Design: Student Learning Guide

Project: We do not judge others.

Driving Question: [What does it mean to give your heart to someone?](#)

Teaching Sequence	Learning Objectives	Assessment Checkpoints
<p>What does it mean to give your heart to someone? Discuss the difference between figurative and literal language. Focus on figurative: To give your heart means to love someone; to trust them with your heart. Consider phrases such as “to love with all your heart”, “my heart is bursting with love”, “my heart is breaking” etc.</p> <p>Jesus loved with all his heart and gave his heart to us.</p> <p>"Teacher, which commandment in the law is the greatest?" He said to him, "You shall love the Lord your God with all your heart, and with all your soul, and with all your mind. ' This is the greatest and first commandment. And a second is like it: 'You shall love your neighbour as yourself.</p> <p>You can't love others until you love yourself (looking after yourself) How can we love ourselves?</p> <p>ENTRY EVENT Looking after our hearts - how can exercise affect our heart rate? Boot camp with Nick and Sophie (raise and lower heart rate)</p>	<p>To understand the difference between literal and figurative language.</p> <p>To be able to find Biblical evidence of Jesus' love for us https://www.womansday.com/life/inspirational-stories/g28832117/bible-verses-about-gods-love/</p> <p>Why are these the most important commandments?</p> <p>To be able to explain why it is important that we look after our physical and mental health.</p> <p>To know what happens to your heart beat, how to lower it, how does your mental health help this? Compare resting / active heart beat</p>	<p>Cold Task - What does it mean to give your heart to someone?</p>
<p>How can we keep the heart beating? (3 weeks) 1. Body systems- Skeletal Muscular Digestive Circulatory 2. Blood 3. Heart 4. Healthy lifestyle</p>	<p>To understand the workings of the heart and the circulatory system.</p> <p>To be able to explain the Impact of diet, exercise, drugs and lifestyle on the way body functions</p> <p>To explain how water and nutrients are transported in the body. To explore the effect of music on your heart rate (workout music and relaxing music).</p>	<p>Double page spread on the circulatory system.</p>

<p>Refer Back to Bootcamp day and investigate ways to lower heart rate.</p> <p>Can music/poetry affect heart rate?</p> <p><i>Last week of January - Heart dissection</i> 2/3 weeks</p>	<p>To explore the theme of love in poetry and song. Investigate use of metaphors and similes in poetry.</p> <p>Musical score to poem - explore and use simple eight note scales. Use notation eg. crotchet, minim. Recognise dynamics eg. crescendo / diminuendo</p>	<p>Use a particular poetic device for their poem.</p> <p>Create a score to go with their poem.</p> <p>Record poem being read/sung and played with glockenspiel.</p>
<p>What happens when your heart doesn't work properly? (1 week before half term, 2 weeks after half term) (Emily)</p> <p>Pig Heart Boy by Malorie Blackman (27 Chapters) : Guided reading guide:  pig-heart-boy discussion guide.pdf</p> <p>Focus get quality writing</p> <p>Organ donations</p>	<p>To understand what they read by drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence.</p> <p>To understand and use the key features of diary writing.</p> <p>To discuss and evaluate how authors use language, including figurative language, considering the impact on the reader.</p> <p>To consider and evaluate different viewpoints, attending to and building on the contributions of others.</p> <p>To participate in discussions, presentations, performances, role play, improvisations and debates.</p> <p>To understand and use the key features of Newspaper report writing - evaluating information, fake news.</p>	<p>https://futurism.com/neoscope/pig-kidney-human-transplant</p> <p>Hot and cold tasks for diary writing</p> <p>Writing headlines and introductory paragraph for newspaper article</p> <p>Hot and cold tasks for playscripts</p>
<p>What happened in the past when your heart didn't work properly? (Annabelle) (2 weeks?)</p> <p>(Horrible history) What would have killed you in the past?</p> <p>What doesn't kill you because of medical improvements.</p> <p>What types of medical improvements have there been over the past 200 years and who are significant figures?</p>	<p>Use appropriate terminology and methods to present information about the past.</p> <p>To understand how our knowledge of the past is constructed from a range of sources</p> <p>Use a wide range of evidence to compare and analyse the lives of significant historical people from the same historical period.</p>	<p>Create a newspaper report / interview presentation about medical advancements in the past up present day.</p>

<p>Lead into the heart transplant how has that changed?</p> <p>Timeline of heart transplants (Future as well?)</p> <p>Edward Jenner? https://www.bbc.co.uk/teach/class-clip-s-video/history-ks1-ks2-edward-jenner/zm8fcqt</p>	<p>Use a wide range of evidence to compare and analyse the lives of significant historical people from different historical periods.</p> <p>Conduct an in depth local study.ex</p> <p>Describe a significant society or issue in world history and its interconnections with other world developments.</p> <p>Use appropriate evidence sources to identify how people’s lives have been shaped by people and events.</p>	
<p>How could you transport a donor heart from one hospital to another? Investigation (Mike) 3 Weeks</p> <p>What do we need to find out? (<i>Which hospitals are in London, where are they, how far apart are they, what transport networks are available?</i>)</p> <p>Could we build a bridge from one to another? (<i>What famous bridges are there , how do they stay up, who created them, what are they made from, how would we test it?</i>)</p> <p>What materials could we use to create a model bridge? How can we make it to scale? Design Make Evaluate</p> <p>Geography</p> <p>Create planning committee for templates of bridge - prize for the best one.</p> <p>Make with lolly sticks</p> <p>Computer design, (bridge building games)</p> <p>Costings</p> <p>Ending - grand opening of the bridge</p>	<p>Produce detailed designs and plans drawn to scale from a range of viewpoints, using pattern pieces and computer-aided design packages effectively.</p> <p>Test, evaluate and refine ideas and products against a specification, taking into account the views of intended users.</p> <p>Analyse the work of past and present professionals and others to develop and broaden understanding.</p> <p>Relate the work of designers, engineers, chefs, technologists and manufactures to own products and designs.</p> <p>Use a range of increasing methods to strengthen 3D structures and frames.</p> <p>Investigate, measure and record the load tolerance of different structures and find ways of improving a structures load-bearing capacity.</p> <p>Build a range of structures using a wide range of effective materials.</p> <p>Create maps using symbols, key, appropriate scales and six-figure grid referencing.</p> <p>Identify the most direct, cost</p>	<p>What are the assessment points for this section?</p>

	<p>effective shortest route between two points or locations.</p> <p>Locate a city in the UK using six-figure grid referencing.</p>	
<p>End with Easter (Emily)</p> <p>Link back to the driving question and work at the start of term. To give someone their heart would mean giving up their life. Jesus loves us so much that he did exactly that.</p>	<p>To understand how and why Jesus gave his life for us.</p> <p>To understand the key events of Easter.</p>	<p>Hot task: What does it mean to give your heart to someone?</p>
<p>Final outcome:</p> <p>Individual and Team products</p>	<p>Individual : Bridges</p> <p>Group: Heart mural representing love - Vicky.</p> <p>Invite parents in to view their mural, read love poems and listen to love songs!</p>	

Health timeline

<https://www.npg.org.uk/learning/a-picture-of-health/timeline/>

<https://www.bhf.org.uk/information-support/heart-matters-magazine/medical/40-years-of-uk-heart-transplant/heart-transplant-timeline#1967>

Science museum

<https://learning.sciencemuseumgroup.org.uk/resources/medicine-the-wellcome-galleries-introduction/>

History of donation and transplantation

<https://www.nhs.uk/who-we-are/a-history-of-donation-transfusion-and-transplantation/>

Mill Hill - Medical Research

<https://leprosyhistory.org/database/archive1016>

<https://millhill-hs.org.uk/about-us/useful-links/>

Transport old maps

<https://millhill-hs.org.uk/about-us/historic-london-transport-maps/>

BBC organ donation

<https://www.bbc.co.uk/bitesize/guides/zqnpjty/revision/10>

<https://www.bhf.org.uk/information-support/heart-matters-magazine/medical/40-years-of-uk-heart-transplant>

<https://www.rbht.nhs.uk/our-services/heart/transplantation>

Power Point - organ donation

<https://docs.google.com/presentation/d/12Yss9cMAQaDJmGxWvzOzISn4KImMplF/edit?usp=sharing&oid=104592612773781556422&rtpof=true&sd=true>

News clip of child with heart transplant

<https://www.bbc.co.uk/news/av/uk-56142676>

<https://news.sky.com/story/heart-transplant-breakthrough-nhs-doctors-become-first-in-world-to-complete-transplants-in-children-using-organs-brought-back-to-life-by-a-machine-12224600>

<https://www.bbc.co.uk/news/uk-england-london-33597438>

<https://www.bbc.co.uk/news/health-56127933>