Curriculum, Climate & Community

Principles of Harmony & Curriculum

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Why Harmony?

“When education allows students to learn from Nature – rather than simply learning about Nature – they are better placed to engage with issues of sustainability.”

The Harmony Project aims to transform education to ensure it is fit for purpose in preparing young people for life in the 21st century, not just to pass exams.

Get Children talking…

Results of climate change

- heavier rainfall events – with increased risk of flooding
- higher sea levels – with larger storm waves putting a strain on the UK's coastal defences
- more and longer-lasting heat waves

Impact on Human health:

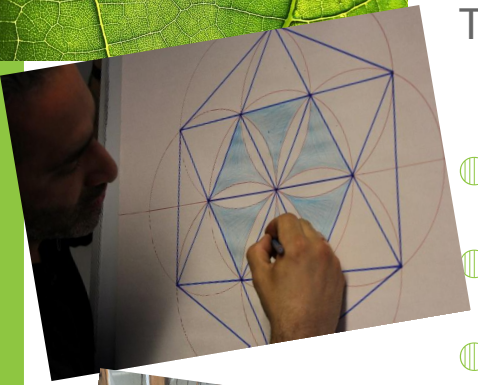
- Increased malnutrition (droughts)
- Warmer temperatures – insects – disease spread
- Risk of flooding
- Increasing air pollution
- Increase in poverty

Climate changes:

- warming oceans
- melting polar ice and glaciers
- rising sea levels
- more extreme weather events

Impact on Eco systems

- have no new habitats to move to
- can't move quickly to new habitats
- are already under threat from other factors, such as overharvesting or habitat loss and degradation because of human activity



Nature's principles of Harmony

There are seven core principles of Harmony in Nature.

The principle of …

- Interdependence
- The Cycle
- Diversity
- Adaptation
- Health
- Oneness
- Geometry

The principle of The Cycle

- How all sustainable systems are cyclical
- Times of growth, abundance and light and times of darkness, die back and decay
- There is no waste in nature, everything gets recycled

Why should we care about Biommicry?

Our planet is the only home we have, we are responsible for the many endangered species that share this planet with us.

We make things and buy things without thinking about how these things impact upon our fragile environment

CLIMATE CRISIS

Biommicry can help us think of sustainable solutions that may enable us to save our planet

Examples of Biommicry

The **Eden Project** in Cornwall is the world's largest greenhouse. Its design is based on **soap bubbles**.

The designers discovered that the most effective way to create a spherical surface is by using **geodesics** (hexagons and pentagons).

Can you think of a packaging product that is inspired by the bubbles?

There is no waste in nature, everything gets recycled.

Mushrooms are an **environmentally-responsible** alternative to plastic and leather which are environmentally damaging to produce and dispose of.

Mushrooms are **biodegradable,** which means at the end of their life, they can be returned to the earth to feed the next generation of life in a **zero-waste cycle.**

Involve the whole Community

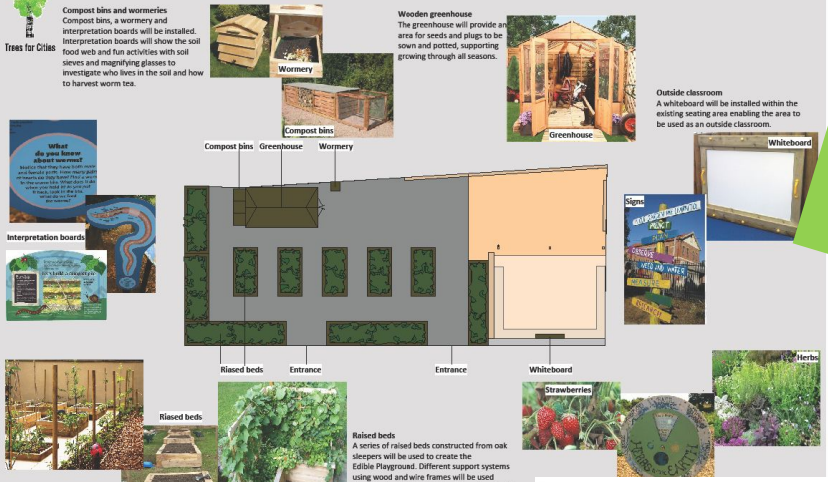
Berrymede Junior School Edible Playground

Trees for Cities

Compost bins and wormeries
Compost bins, a wormery and interpretation boards will be installed. Interpretation boards will show the soil food web and fun activities with soil sieves and magnifying glasses to investigate who lives in the soil and how to harvest worm tea.

Wooden greenhouse
The greenhouse will provide an area for seeds and plugs to be sown and potted, supporting growing through all seasons.

Outside classroom
A whiteboard will be installed within the existing seating area enabling the area to be used as an outside classroom.

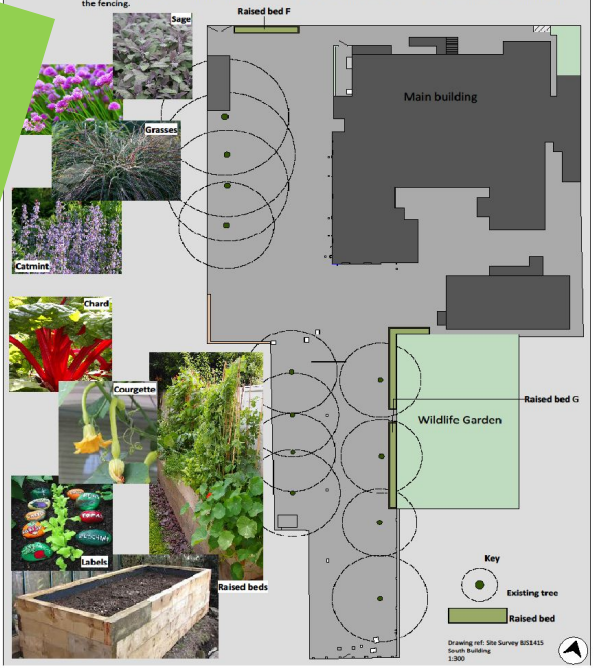


Raised beds
A series of raised beds constructed from oak sleepers will be used to create the Edible Playground. Different support systems using wood and wire frames will be used through the beds and beds will be planted with a mix of soft fruits, vegetables and herbs. Labels and information boards will be installed, describing how herbs can be used for cooking.

Berrymede Junior School Periphery Greening South Building

Trees for Cities

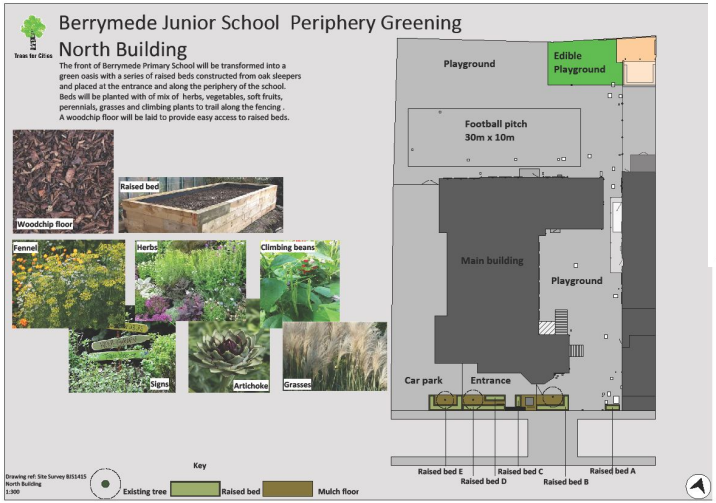
The front of Berrymede Primary School and boundary of the wildlife garden will be transformed into a green oasis with raised beds constructed from oak sleepers, placed at the entrance and along the periphery of the wildlife garden. Beds will be planted with of mix of herbs, vegetables, soft fruits, perennials, grasses and climbing plants to trail along the fencing.



Berrymede Junior School Periphery Greening North Building

Trees for Cities

The front of Berrymede Primary School will be transformed into a green oasis with a series of raised beds constructed from oak sleepers and placed at the entrance and along the periphery of the school. Beds will be planted with of mix of herbs, vegetables, soft fruits, perennials, grasses and climbing plants to trail along the fencing . A woodchip floor will be laid to provide easy access to raised beds.



Create Green Spaces

Feijoada

Ingredients
250ml (1 cup) dried black beans
1.8kg (4lb) pork shoulders with the bone, rind removed
45ml (3tbsp) olive oil
2 onions chopped
2 cloves garlic, chopped
1 slice 200g (7oz) dried cured beef or 225g (1/2lb) cured pork
750ml (3 cups) water
2 bay leaves
200 g (7 oz) sweet or spicy Portuguese chorizo, sliced
Salt and pepper

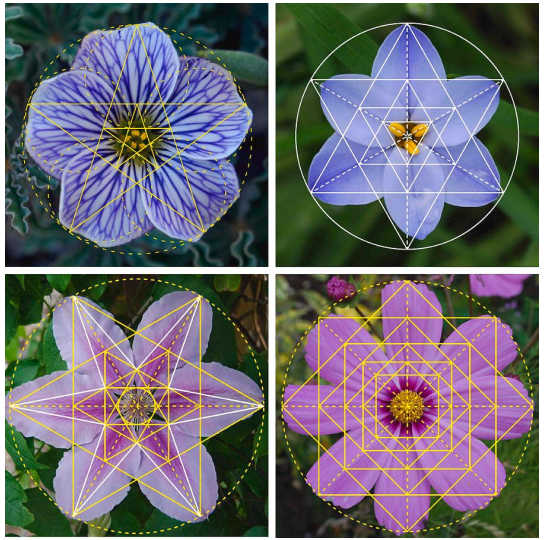
Kebab

Ingredients
1. Juice of half lemon.
2. 450g/1lb lamb mince.
3. 1 tablespoon oil.
4. 55g/2oz fresh coriander leaves (washed and chopped)
5. 4 cloves garlic (crushed)
6. 4 green chillies (de-seeded and chopped)
7. ½ tsp coriander powder.
8. 1 tsp cumin powder

Drumsticks

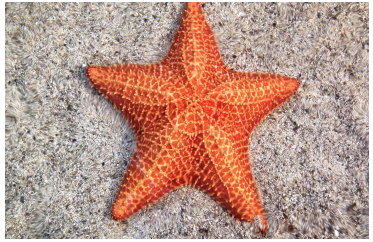
Ingredients
2 Table spoon wuster sauce
¼ cup Ketchup
1 small spoon English Mustard
1 small spoon ginger paste
1 big spoon Apricot Jam
1 Onions (finely chopped)
8 Chicken Drumsticks
3 Garlic (mashed)

The principle of Geometry



- Discovering
- Maths in Nature
- Symmetry in Nature
- Nature’s Shapes and Sizes
- Geometric Patterns
- Patterns within cycles
- Shape, size and duration
- Proportion in Nature

THE DANCE
OF THE EARTH AND VENUS AROUND THE SUN



Maths is everywhere!

Donald Duck - Mathmagic Land - YouTube

Micro level geometry