

## Your Contributions to the Webinar

### Planning Science Learning Across the Strands – Exploring Connections

27<sup>th</sup> March 2019

This document contains the responses from teachers to the questions posed during the webinar on [www.menti.com](http://www.menti.com)

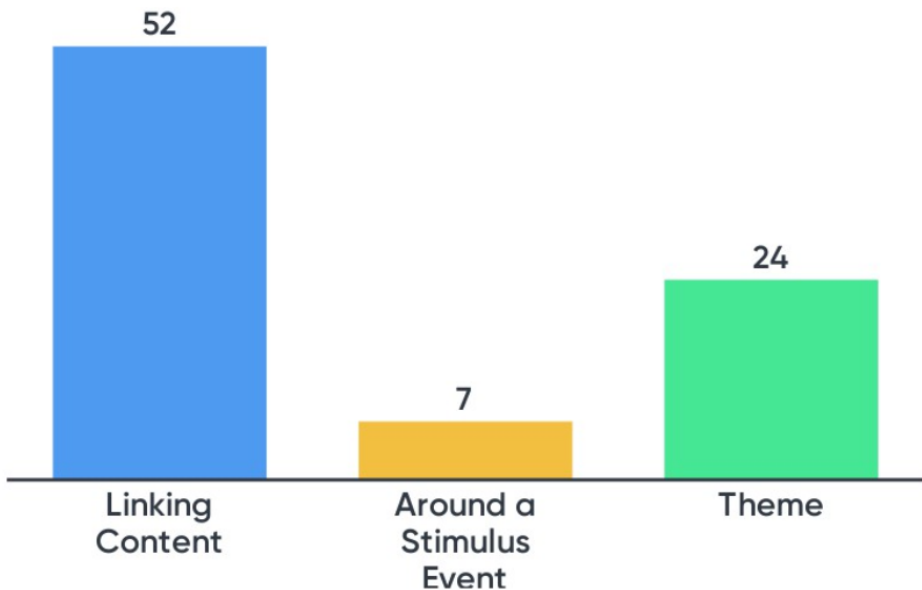
**Menti 1**

**How have your students responded to learning about Earth and Space?**



**Menti 2**

**What approach to developing Units of Learning currently appeals the most to you?**



### Menti 3

### Ideas you have for themes for a unit of learning

We are part of a citizen science pollinators project and could build a unit around this	Chemistry of the garden	The history of Science
How scientists work from NoS 1 through different contextual strands	Sustainability	Plastic bottles and the effect they have on the environment. Links periodic table as well as carbon cycle and the flow of matter through ecosystems as well as our impact on the planet
Effect of ocean acidification on shells of shellfish. Covers acids and bases, adaptation, greenhouse gases, carbon cycle, food production	Linked lots of Learning Outcomes to the periodic table because it's the anniversary of the PTE. At the end of different sections we look at how it links to the periodic table.	oceans
Coffee bean to cup	Space travel/Space week	Energy across the strands
Mining data big and small	Photosynthesis	Sports science
What science is in the news today ?	Climate change. Chemistry of space.	The facts of matter - PW, E&S and CW then into cells
Climate change	Food	Space travel
Sustainability	Energy	periodic table
hospital : cells, microscope, organ systems, human reproduction energy crisis: energy, sustainability	Carbon cycle to acidification of oceans to acids and bases and exothermic reactions to impact of climate change	Environmental science Health

everyday nutrition and sustainable farming:

How gases produced naturally (respiration) can have positive (photosynthesis) and negative (climate change) effects.

Photosynthesis, Biodiversity, Climate change

Biochemistry - molecules for life

Pressure, physics, the heart, blood pressure...

Sustainability of elements in mobile phone, why they were chosen, their characteristics

energy changes

Ideas in relation to building up the periodic table from nuclear fusion in stars. The heavier rarer elements being only created in larger stars towards the end of the giant stars' life.

Energy. Sustainability. Chemical and physical change.

Link the periodic table to the fact that many elements are running out. So teach periodic table with the life cycle of materials and other ideas around sustainability

The circle of life looking at carbon/water cycles plus reproduction and stars giving us elements

Linking with the European Space Agency which links space and engineering

production of gases in rates of reaction ..can be linked to climate change and gases....

Plastics: Chemistry of plastics - CW4 atoms  
Properties of plastics - non conductor , ductile  
Density of plastics -experiment on sink and float  
Environmental effects : marine animals , plastic pollution Ecology of marine animals -

Photosynthesis, carbon cycle, temperature effects on solubility, water acidification, climate change

Rates using gas preparation

Energy/food/chemical reactions/sustainability/respiration/photosynthesis/electrical energy

Comparison of planets

Topical items on YouTube that students will easily relate to, e.g. flat earth theory, map making on fortnight as the use of satellite, whether Pluto is a planet

Climate change- c cycle, energy

Pathogenic microorganisms and the future of human health. Sustainability and the future of humans

Movement: Molecules, solids,liquids, gases, transport in plants and animals, speed, velocity

Circuits used to create a device, then adjusting efficiency by adjusting materials used (conductivity, resistance), then investigating advantages/disadvantages of power supplies (batteries, power pack, renewable)

Connections between photosynthesis, respiration and chemical equations - this leads to discussion on health, food, exercise, how we can change societies attitude to exercise - this leads on to mental health - which leads back to chemical imbalances.

protecting the earth