Design Tech: Shell Packaging

Investigate & evaluate

Investigate different shell structures incl packaging. Use Qs to develop und. Chn take a small package apart identifying & discussing parts of a net including the tabs. Evaluate existing products to determine which designs children think are the most effective. Provide opportunities for the children to judge the suitability of the shell structures for their intended users and purposes. Discuss graphics including colours/ impact of style/logo/size of font

Focused practical tasks

Use kit parts with flat faces to construct nets. Practise making nets out of card, joining flat faces with masking tape to create 3-D shapes. Experiment with assembling in nets in numerous ways.

Demonstrate skills and techniques of scoring, cutting out and assembling using pre-drawn nets. Allow chn to practise by constructing a simple box. Show how a window could be cut out and acetate sheet added. Demonstrate how to use different ways of stiffening and strengthening their shell structures. Provide opportunities for the children to practise these.

Discuss & explore the graphics techniques and media for decorative techniques. Practise using CAD software to design the net, text and graphics for their products.

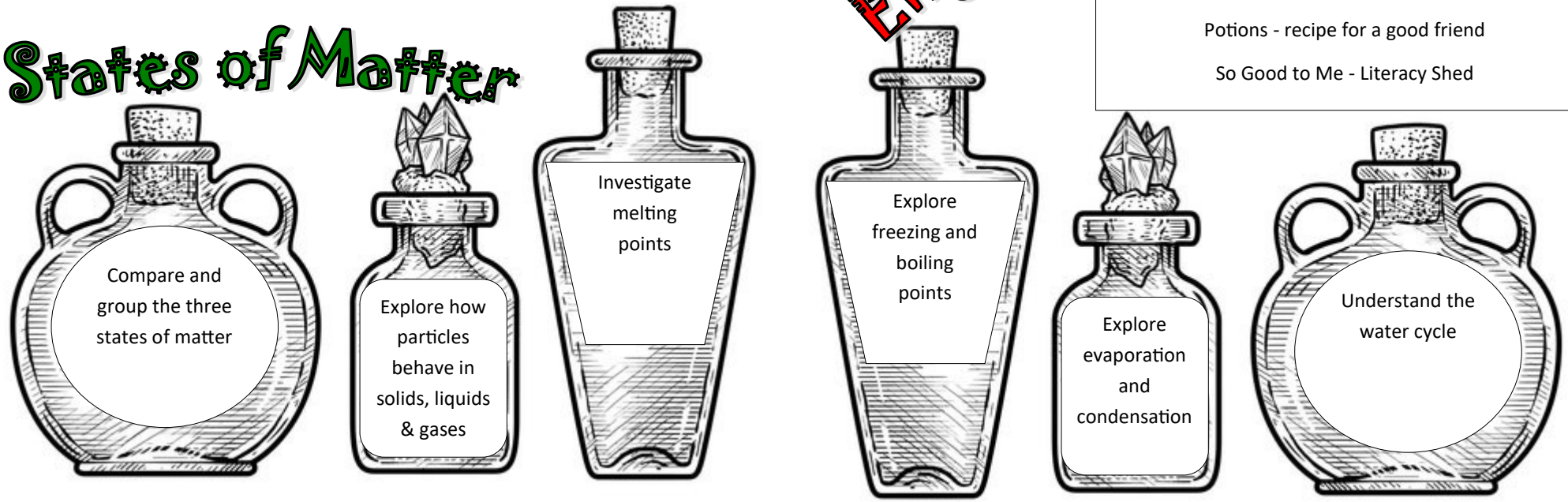
Potions

Design, Make, Evaluate

Develop design brief within a context which is authentic and meaningful. Discuss the uses and purposes of their shell structures. Agree on design criteria that can be used to guide the development & evaluation of chn's products. Ask the chn to use annotated sketches and prototypes to develop, model and communicate their ideas for the product. Ask children to identify the main stages of making and the appropriate tools and skills they learnt through focused tasks. Evaluate throughout and the final products against intended purpose & with the intended user, drawing on the design criteria previously agreed.

Science:

States of Matter



English

Novel as a theme: Alice in Wonderland – Lewis Carroll

The Whale

Non fiction Once Upon a Raindrop by James Carter (JC)

Potions - recipe for a good friend

So Good to Me - Literacy Shed

Maths	Computing	Music	MFL	PE
Year 3 Unit 11 Fractions (2) Unit 12 Money Unit 13 Time **Year 4** Unit 11 Decimals (2) Unit 12 Money Unit 13 Time	Teach computing: 3:5 Creating media - Desktop publishing	<u>Learning more about musical styles:</u> How does music make a difference to us every day.	Unit 5 Ma famille	Athletics Strike and Fielding

PSHE and RSE

<u>RSE: Y3 strand</u>- How we live in love - intellectual focus

<u>Online Safety:</u> Privacy and Security

<u>PSHE:</u> Why should we eat well and look after our teeth?

<u>British Values:</u> Individual liberty

Art: Painting techniques

Explore the artwork of Sonia Delaunay - collect images, make comparison and use key vocabulary to discuss. Look at early influences.

Look at Delaunay's colour experimentation and style - Orphism. Learn about complementary and harmonious colour and explore effects.

Explore how rhythm and movement can be created in a piece of work in Delaunay's and other art works

Apply techniques learned to developing own pieces of work inspired by the children's preferences in artists already seen.

Take time to develop own responses to Delaunay's work

Critically evaluate, reflect and suggest where developments could be made.

Science

Ice Block Enquiries: Place one block of ice in direct sunlight and another in the shade. Observe and predict which will melt first, directly teaching melting and thermal transfer.

Puddle Tracking: Outline a puddle on the pavement with chalk and check it throughout the day to track evaporation.

Cloud in a Bottle: Use warm water, a clear bottle, and a match to simulate condensation and cloud formation right in front of your eyes.

The Chocolate Test: Melt solid chocolate bars in the sun or a warm bowl to watch them become a liquid, then place them in the fridge to observe them freeze back into solids.

The Water Cycle: Observe local rain, morning dew, and drying surfaces. Track how liquid water absorbs the sun's energy, changes state into a gas, rises, and cools into clouds.

Weather Observations: Measure daily temperature fluctuations outdoors and relate them to natural state changes, such as ice thawing or mist forming