



Textiles- Investigate, disassemble, evaluate

Nursery

Polar Express and On the Farm

Year 2

Finger Puppets

Examine a range of finger puppets – what are they made of?, how are they put together? What has been added? Who are they for? How well made are they?

Draw and label, rate an example of a finger puppet

Castles

Look at images/video of component parts of a space suit

Discuss types of fabric used and their properties

Year 6

T Shirts

Collect and discuss a range of T shirts – Who are they for? How do you know? What are they made of? How have they been finished? Consider how designs deal with warmth, fit, appearance, practicality, function, cost and safety

Reception

Me and My World

Year 4

Purses

Look at a collection of purses, wallets and belt bags. Consider the seams, seam allowance, fastenings and identify key parts – gusset, strap, hem

What sort of fabric is used? How does this relate to its purpose? How is it reinforced? Who is it used by?

Year 7

Exploring colour, application, expression and interpretation.



Textiles- Design and Make, Evaluate

Nursery

Polar Express and On the Farm

Year 2

Finger Puppets

Discuss purpose of finger puppets – story telling, role play, entertainment

Agree simple criteria: must be an animal to link to science (living things and their habitats), a good puppet should be.....

Consider how a basic template might be adapted and sewing/fixing techniques can be used

Make paper mock up and adjust as needed when making fabric version

Evaluate against design criteria

Castles

Set design criteria – who is the suit for?
What features are needed? Why?

Draw out and label the design

Use graphics program to create a template to act as a pattern

Identify tools and materials needed and method of joining fabrics to be used

Set order for making

Evaluate against design criteria

Year 7

Reception

Me and My World

Year 4

Purses

Set design brief – A guide to the rainforest with pop ups and moving parts for a child

What mechanisms will be used? How many moving parts? How many pages?

Consider the way each page will be finished.

Make an outline plan, list tools materials and processes and set the order of making

Year 6

T Shirts

Discuss brief of designing an aqueduct to contain water and transport a model boat

Revise findings re how to strengthen structures

Develop idea through drawings and models – How will it stand up? Where are the weak points? How will they be reinforced? it stop water from leaking?
Test and adjust

Make and evaluate against the brief



Cooking and Nutrition- Investigate, disassemble, evaluate

Nursery

Polar Express and On the Farm

Year 1

Fruit Kebabs

Investigate, disassemble, evaluate

Examine and name a range of fruits, handle and smell them, sketch and label

Cut and compare two contrasting fruits, explain terms – skin, peel, flesh and use sensory vocab to describe

Evaluate existing products to determine which is best and why

Classify fruits according to colour, texture, taste, where grown, how they are eaten

Year 5

Bread

Look at a variety of breads from around the world and cultural traditions

Discuss taste, shape, ingredients, texture, survey preferences

Understand how bread fits into a balanced diet

Reception

Me and My World

Year 3

Greek Salad

Understand the 'balanced plate' model of food groups, name the groups

Look at a range of packaged salads and evaluate appearance, taste, smell, texture

Survey the most popular choice and consider reasons for choices made

How have the salads been packed and stored in the shops to preserve their life? Which materials have been used and why? What happens to food that is wrongly/badly packaged?

Discuss which sorts of foods need to be kept in the fridge

Year 7



Cooking and Nutrition- Design and Make, Evaluate

Nursery

Polar Express and On the Farm

Year 1

Fruit Kebabs

Identify target group and communicate what they intend to make, based on research conducted in survey

Select and use appropriate fruit, processes and tools

Evaluate product - record in pictures/writing how it look, tastes and if it matches the brief

Year 5

Bread

Decide what kind of bread to make and for what sort of occasion

Create ingredients list and step by step instructions

Make and bake bread, working hygienically and safely

Evaluate finished product.

Reception

Me and My World

Year 3

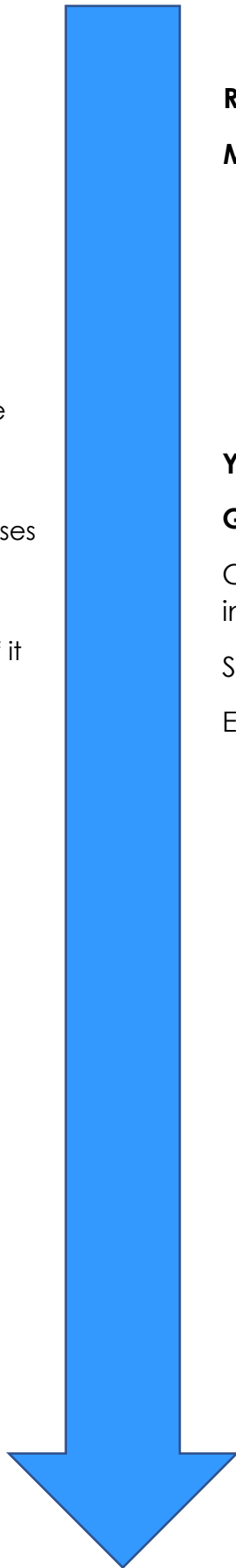
Greek Salad

Create design from specified range of ingredients for agreed user

Set order for making

Evaluate against design criteria

Year 7





Structures- Investigate, disassemble, evaluate

Nursery

Polar Express and On the Farm

Year 1

Castles

Local area walk/visit to castle, sketching and discussion around different types of structures and how space is enclosed

Label main features and relate to mathematical shapes

Year 5

Musical Instruments

Discuss a range of musical instruments – what are they made of? What is the structure (solid or hollow), does it have a box/stem/arm? What part makes the noise? Which parts need to be strong? How can the sounds be varied?

Why are instruments so important to different cultures? Listen to the sounds they make/music from different cultures showcasing the different instruments.

Reception

Me and My World

Year 3

Photo Frames

Investigate free standing item – why is it important they are stable? How does this relate to their purpose? Would they work if they were not strong and stable?

Consider design features relating to its purpose – how easy is it to insert a photo? How well can it be seen? Who would use it? How does this link to the style/finish of the frame?

Identify component parts and label drawings

Year 6

Aqueducts

Investigate a range of structures – What materials used? Why? How have they been used? What do the different parts do? Which structures are the strongest?

Research structure of aqueducts – produce labelled drawings

Year 7



Structures- Design and Make, Evaluate

Nursery

Polar Express and On the Farm

Year 1

Castles

Review the structure and features of a castle from work done in History

Create design for model and say how they are going to make it

Select from a range of materials

Construct a model using 2D and 3D material selected to match the task

Talk about their finished castle, identifying what has gone well and what they could have done better

Year 5

Musical Instruments

Identify a purpose for the instrument, e.g. to create rainforest music, which design aspects and set and which are flexible (materials)

Select way to record their ideas so others will understand them

Set order for making

Evaluate against design criteria

Reception

Me and My World

Year 3

Photo Frames

Consider design criteria – who is the frame for? How will it stand up?, How will the photo be added? What shape will it be? Where will the weak points be? How will they be reinforced and decorated? Sketch and label design.

Set order for making

Evaluate against design criteria

Year 6

Aqueducts

Discuss the design brief, identifying the user , their needs and the product's purpose

Create detailed drawings from a range of angles – front, back, sleeves , motif, logo

Review design .during making process and evaluate final product against the brief

Year 7



Mechanisms- Investigate, disassemble, evaluate

Nursery

Polar Express and On the Farm

Year 1

Book with moving parts

Plan story showing the evolution of a form of transport e.g. bicycle, car – which parts will move and how. Which order will things be done in?

Create paper prototype then card version

Evaluate how well the moving parts work, the impact on the reader and how well it matches the intended outcome

Year 3

Pneumatics

Discuss the design brief – consider what the monster needs to be able to do e.g. open its mouth, lift its head, move its wings. How big will it be? How will the movement be achieved? What materials are needed? Audience/user?

Consider the constraints – weight, stability, range of materials available,

Complete detailed and labelled drawings

Year 5

Moving Toys

Set design brief – A guide to the rainforest with pop ups and moving parts for a child

What mechanisms will be used? How many moving parts? How many pages?

Consider the way each page will be finished.

Make an outline plan, list tools materials and processes and set the order of making

Reception

Me and My World

Year 2

Vehicles

Set design criteria – who is the suit for? What features are needed? Why?

Draw out and label the design

Use graphics program to create a template to act as a pattern

Identify tools and materials needed and method of joining fabrics to be used

Set order for making

Year 4

Linkages

Agree the design brief – purpose and audience

Create storyboard plan- step by step order, identifying materials and tools needed and desired finish

Review progress – How well is this working? Are changes to the design needed?

Evaluate finished product

Year 6

Controllable Vehicle

Discuss design brief – an airboat Viking long ship and consider needs of the user

Create designs vis drawings and models, make adjustments after testing

Evaluate final product against the brief

Year 7



Mechanisms- Design and Make, Evaluate

Nursery

Polar Express and On the Farm

Year 1

Book with moving parts

Share and evaluate a range of books with moving parts – what does the part do? How does it work? Does it work well?

Introduce levers and sliders and how they make parts move

Show examples of how levers and pivots work and introduce key vocabulary

Year 3

Pneumatics

Look at objects that use air to make them work – recorder, pump, party blower – What does the air do? How has this been used in the design of these products?

Demonstrate simple pneumatic systems with a balloon and tubing, x2 syringes

Year 5

Moving Toys

Investigate toys with cams – which parts turn, move and how are the parts attached?

Look at the decoration around the mechanism

Make models using construction kits and consider the use of a cam (refer to above question)

Reception

Me and My World

Year 2

Vehicles

Discuss and list different types of vehicles and their features – why do vehicles have wheels? Are they all the same size? How many? Why are vehicles different shapes? Why do some have parts that move/light up?.

Identify parts of vehicles – wheel, axels, chassis, body, cab

Year 4

Linkages

Look at pop up books and greetings cards with pop ups and moving parts – spinners, levers, tabs, sliders. How do the parts move? What are the mechanisms and how do they work? Number of parts? How are parts joined? What is the impact made?

Look at layout, size, font used for text and how pictures , colour has been used

Year 6

Controllable Vehicle

Experiment with controllable vehicles and consider – Where does the power come from? Compare similarities and differences

How are the models constructed and component parts joined together? Draw and label diagrams from a range of angles (include example of an airboat)

Year 7