# DT

#### Year 1

- · Developing, planning & communicating ideas
- Think of some ideas of my own.
- Explain what they want to do and how it works.
- Use pictures and words to plan.
- Design a product which moves.

# **Evaluating processes & products**

- Describe how something works.
- Talk about my own work and things that other people have done

# Working with tools, equipment, materials & components

- Explain what I am making.
- Choose and explain which tools are being used.
- Make their model stronger.

#### **Textiles**

- Describe how different textiles feel.
- Make a product from textiles by gluing.

#### **Electrical & mechanical components**

- I can make a product which moves.
- · Cut materials using scissors.
- Describe the materials using different words.
- Say why I have chosen moving parts.
- Join materials together as part of a moving product.
- Add some kind of design to my product.

#### Use of materials

- Make a structure/model using different materials.
- Work is tidy.
- Make my model stronger if it needs to be.

#### Construction

- Talk with others about how I want to construct my product.
- Select appropriate resources and tools for my building projects.
- Make simple plans before making objects, e.g. drawings, arranging pieces of construction before building.

# Year 2

# Developing, planning & communicating ideas

- Think of ideas and plan what to do next.
- Choose the best tools and materials. I can give a reason why these are best.
- Describe my design by using pictures, diagrams, models and words.

# **Evaluating processes & products**

- Explain what went well with their work.
- Explain what should be improved.
- Make their model stronger and more stable
- Use wheels and axles, when appropriate to do so.

# Working with tools, equipment, materials & components

• Join things (materials/ components) together in different ways.

# **Cooking & Nutrition**

- Describe the properties of the ingredients used when making a dish or cake.
- Explain what it means to be hygienic.
- Be hygienic in the kitchen.
- Weigh ingredients to use in a recipe.
- Cut food safely.
- Describe the texture of foods.

- Wash my hands and make sure that surfaces are clean.
- Think of interesting ways of decorating food I have made, eg, cakes

#### **Textiles**

- Measure textiles.
- · Join textiles together to make something.
- Cut textiles.
- Explain why I chose a certain textile.

#### Use of materials

- Measure materials to use in a model or structure.
- · Join material in different ways.
- Joining, folding or rolling to make it stronger.
- Choose tools and materials and explain why they have chosen them.

#### Construction

- Make sensible choices as to which material to use for my constructions.
- Develop my own ideas from initial starting points.
- Incorporate some type of movement into models.
- Consider how to improve my construction.

## Year 3 | Developing, planning & communicating ideas

- Show that my design meets a range of requirements.
- Put together a step-by-step plan which shows the order and also what equipment and tools I need.
- Describe my design using an accurately labelled sketch and words.
- Say how realistic my plan is.

# **Evaluating processes & products**

• Explain what I changed which made my design even better

# Working with tools, equipment, materials & components

• Use equipment and tools accurately.

#### **Textiles**

- Join textiles of different types in different ways.
- Choose textiles both for my appearance and also qualities.
- Think what the user would want when choosing textiles.
- Think about how to make my product strong.
- Devise a template.
- Explain how to join things in a different way.

# **Electrical & mechanical components**

- Select the most appropriate tools and techniques to use for a given task.
- Use a simple circuit.
- Use a number of components.

#### Use of materials

- Use the most appropriate materials.
- Work accurately to make cuts and holes.
- Join materials.

#### Mouldable materials

- Select the most appropriate materials.
- Use a range of techniques to shape and mould.
- Use finishing techniques.

# Year 4 Developing, planning & communicating ideas

- Come up with at least one idea about how to create my product.
- Take account of the ideas of others when designing.
- Produce a plan and explain it to others.
- Suggest some improvements and say what was good and not so good about my original design.

# **Evaluating processes & products**

- Think of how I will check if my design is successful.
- Explain how I can improve my original design.

- Evaluate my product, thinking of both appearance and the way it works.
- Consider how I could have made my idea better.

# Working with tools, equipment, materials & components

- Tell if my finished product is going to be good quality.
- Conscience of the need to produce something that will be liked by others.
- Show a good level of expertise when using a range of tools and equipment.
- Work at my product even though my original idea might not have worked.

# **Cooking & Nutrition**

- Know what to do to be hygienic and safe.
- Think about what I can do to present my product in an interesting way.
- Choose the right ingredients for a product.
- Use equipment safely.
- Make sure that my product looks attractive.
- Describe how my combined ingredients come together.

# **Electrical & mechanical components**

- Say how I have altered my product after checking it.
- Confidently try out new and different ideas

#### Use of materials

- Measure carefully so as to make sure I have not made mistakes.
- Say how I have attempted to make my product strong.

#### Mouldable materials

- Use a range of advanced techniques to shape and mould.
- Use finishing techniques, showing an awareness of audience.

# Year 5 Developing, planning & communicating ideas

- Come up with a range of ideas after I have collected information.
- Take a user's view into account when designing.
- Produce a detailed step-by-step plan.
- Suggest some alternative plans and say what the good points and drawbacks are about each.

# **Evaluating processes & products**

- Check that my design is the best it can be.
- Check whether anything could be improved.
- Evaluate appearance and function against the original criteria.

# Working with tools, equipment, materials & components

- Explain why my finished product is going to be of good quality.
- Explain how my product will appeal to the audience.
- Use a range of tools and equipment expertly.
- Persevere through different stages of the making process.

## **Cooking & Nutrition**

- Describe what I do to be both hygienic and safe.
- Say if I have presented my product well.
- Explain how my product should be stored with reasons.
- Set out to grow my own products with a view to making a salad, taking account of time required to grow different foods.

## **Textiles**

- Think what the user would want when choosing textiles.
- Explain how I made my product attractive and strong.
- Make up a prototype first.
- Use a range of joining techniques.
- Think about how my product could be sold.
- Think about what would improve my product even more.

# **Electrical & mechanical components**

- Incorporate a switch into my product.
- Refine my product after testing it.

Incorporate hydraulics and pneumatics.

#### Use of materials

- Measurements are accurate enough to ensure that everything is precise.
- Explain how I have ensured that my product is strong and fit for purpose.

#### Mouldable materials

Refine and further improve my product using mouldable materials.

# Year 6 Developing, planning & communicating ideas

- Use a range of information to inform my design.
- Use market research to inform plans.
- Work within constraints.
- Follow and refine my plan if necessary.
- Justify my plan to someone else.
- Consider culture and society in my designs.

# **Evaluating processes & products**

- Test and evaluate my final product.
- Know if it is fit for purpose.
- Know what would improve it.
- Say if different resources would have improved my product.
- Say if I need more or different information to make it even better.
- Say if my product meets all design criteria.
- Consider the use of the product when selecting materials.

# Working with tools, equipment, materials & components

- Use tools and materials precisely.
- Change the way I are working if needed.

# **Electrical & mechanical components**

- Use different kinds of circuit in my product.
- Think of ways in which adding a circuit would improve my product.
- Add things to my circuits.

# Use of materials

- Justify why I selected specific materials.
- Ensure that my work is precise and accurate.
- Hide joints so as to improve the look of my product.

# Mouldable materials

- Justify why the chosen material was the best for the task.
- Justify design in relation to the audience.