



# Design Technology

EYFS

Inquiry 1

Expressive Arts and Design: Creating with materials - Do you like building and making?  
What have you made? Can you tell me how you have made this?

Inquiry 2

Expressive arts and design: Creating with materials - What building and mouldable materials have you used in the past? Would that work to create this piece of art? Is there something better that you can use?

Inquiry 3

Expressive arts and design: Creating with materials - what props have you used while role playing? How have you made them? What have you used/joined?

Inquiry 4

Expressive Arts and Design: Creating with materials: What materials are used to build houses? What materials do we have in our learning environment to build with? What can you use to join two materials together?

Inquiry 5

Expressive Arts and Design: Creating with Materials: What materials and media will you use to create a photo frame? How will you join two pieces together? What new and different materials could you use?

Inquiry 6

Expressive Arts and Design: Creating with materials: Can you build something using recycled materials? What recycled materials have you used? How is this sharing the planet effectively?



# Design Technology

Y1

## Developing, planning and communicating ideas

Can they think of some ideas of their own?  
Can they explain what they want to do?  
Can they use pictures and words to plan?

## Working with tools, equipment, materials and components to make quality products

Can they explain what they are making?  
Can they explain which tools they are using?

## Evaluating processes and products

Can they describe how something works?  
Can they talk about their own work and things that other people have done?

### Inquiry 1

#### Construction:

Can they talk with others about how they want to construct their product?

Can they select appropriate resources and tools for their building projects?

Can they make simple plans before making objects, e.g. drawings, arranging pieces of construction before building?

### Inquiry 2

#### Use of Materials:

Can they make a structure/model using different materials?

Is their work tidy?

Can they make their model stronger if it needs to be?

### Inquiry 3

#### Cooking and Nutrition:

Can they cut food safely?

Can they describe the texture of foods?

Do they wash their hands and make sure that surfaces are clean?

Can they think of interesting ways of decorating food they have made, eg, cakes?

### Inquiry 4

#### Textiles:

Can they describe how different textiles feel?

Can they make a product from textiles by glueing?

### Inquiry 5

#### Mechanisms:

Can they make a product which moves?

Can they cut materials using scissors?

Can they describe the materials using different words?

Can they say why they have chosen moving parts?

### Inquiry 6

#### Construction:

Can they talk with others about how they want to construct their product?

Can they select appropriate resources and tools for their building projects?

Can they make simple plans before making objects, e.g. drawings, arranging pieces of construction before building?



# Design Technology

Y2

## Developing, planning and communicating ideas

Can they think of ideas and plan what to do next?  
 Can they choose the best tools and materials?  
 Can they give a reason why these are best?  
 Can they describe their design by using pictures, diagrams, models and words?

## Working with tools, equipment, materials and components to make quality products

Can they join things (materials/ components) together in different ways?

## Evaluating processes and products

Can they explain what went well with their work?  
 If they did it again, can they explain what they would improve?

### Inquiry 1

#### Construction:

Can they make sensible choices as to which material to use for their constructions?

Can they develop their own ideas from initial starting points?

Can they incorporate some type of movement into models?

Can they consider how to improve their construction?

### Inquiry 2

#### Use of Materials:

Can they measure materials to use in a model or structure?

Can they join the material in different ways?

Can they use joining, folding or rolling to make it stronger?

### Inquiry 3

**Mechanisms:**  
 Can they join materials together as part of a moving product?

### Inquiry 4

**Textiles**  
 Can they measure textile?

Can they join textiles together to make something?

Can they cut textiles?

Can they explain why they chose a certain textile?

### Inquiry 5

#### cooking and Nutrition:

Can they describe the properties of the ingredients they are using?

Can they explain what it means to be hygienic?

Are they hygienic in the kitchen?

### Inquiry 6

#### Use of Materials:

Can they measure materials to use in a model or structure?

Can they join the material in different ways?

Can they use joining, folding or rolling to make it stronger?



# Design Technology

Y3

## Developing, planning and communicating ideas

Can they show that their design meets a range of requirements?

Can they put together a step-by-step plan which shows the order and also what equipment and tools they need?

Can they describe their design using an accurately labelled sketch and words?

How realistic is their plan?

## Working with tools, equipment, materials and components to make quality products

Can they use equipment and tools accurately?

## Evaluating processes and products

Can they explain what they changed which made their design even better?

### Inquiry 1

**Cooking and Nutrition**  
Can they choose the right ingredients for a product?

Can they use equipment safely?

Can they make sure that their product looks attractive?

Can they describe how their combined ingredients come together?

Can they set out to grow plants such as cress and herbs from seed with the intention of using them for their food product?

### Inquiry 2

**Mouldable Materials**  
Do they select the most appropriate materials?

Can they use a range of techniques to shape and mould?

Do they use finishing techniques?

### Inquiry 3

**Stiff and Flexible Sheet Materials**  
Do they use the most appropriate materials?

Can they work accurately to make cuts and holes?

Can they join materials?

### Inquiry 4

**Electrical and Mechanical Components**  
Do they select the most appropriate tools and techniques to use for a given task?

### Inquiry 5

**Electrical and Mechanical Components**

Can they make a product which uses both electrical and mechanical components?

Can they use a simple circuit?

Can they use a number of components?

### Inquiry 6

**Textiles**  
Can they join textiles of different types in different ways?

Can they choose textiles both for their appearance and also qualities?



# Design Technology

Y4

## Developing, planning and communicating ideas

Have they thought of how they will check if their design is successful?

Can they begin to explain how they can improve their original design?

Can they evaluate their product, thinking of both appearance and the way it works?

Do they take time to consider how they could have made their idea better?

## Working with tools, equipment, materials and components to make quality products

Can they tell if their finished product is going to be good quality?

Are they conscious of the need to produce something that will be liked by others?

Can they show a good level of expertise when using a range of tools and equipment?

Do they work at their product even though their original idea might not have worked?

## Evaluating processes and products

Have they thought of how they will check if their design is successful?

Can they begin to explain how they can improve their original design?

Can they evaluate their product, thinking of both appearance and the way it works?

Do they take time to consider how they could have made their idea better?

Inquiry 1

Inquiry 2

Inquiry 3

Inquiry 4

Inquiry 5

Inquiry 6

**Cooking and Nutrition:**  
Do they know what to do to be hygienic and safe?

Have they thought about what they can do to present their product in an interesting way?

**Mouldable Materials:**  
Can they use a range of advanced techniques to shape and mould?

Do they use finishing techniques, showing an awareness of the audience?

**Stiff and Flexible Sheet Materials:**  
Can they measure carefully so as to make sure they have not made mistakes?

How have they attempted to make their product strong?

**Textiles:**  
Do they think about what the user would want when choosing textiles?

Have they thought about how to make their product strong?

Can they devise a template?

Can they explain how to join things in a different way?

**Electrical and Mechanical Components:**  
Can they add things to their circuits?

How have they altered their product after checking it?

Are they confident about trying out new and different ideas?

**Mouldable Materials:**  
Can they use a range of advanced techniques to shape and mould?

Do they use finishing techniques, showing an awareness of the audience?



# Design Technology

Y5

## Developing, planning and communicating ideas

- Can they come up with a range of ideas after they have collected information?
- Do they take a user's view into account when designing?
- Can they produce a detailed step-by-step plan?
- Can they suggest some alternative plans and say what the good points and drawbacks are about each?

## Working with tools, equipment, materials and components to make quality products

- Can they explain why their finished product is going to be of good quality?
- Can they explain how their product will appeal to the audience?
- Can they use a range of tools and equipment expertly?
- Do they persevere through different stages of the making process?

## Evaluating processes and products

- Do they keep checking that their design is the best it can be?
- Do they check whether anything could be improved?
- Can they evaluate appearance and function against the original criteria?

Inquiry 1

**Cooking and Nutrition**  
Can they describe what they do to be both hygienic and safe?

How have they presented their product well?

Inquiry 2

**Textiles**  
Do they think about what the user would want when choosing textiles?

How have they made their product attractive and strong?

Can they make up a prototype first?

Can they use a range of joining techniques?

Inquiry 3

**Electrical and Mechanical Components**  
Can they incorporate a switch into their product?

Can they refine their product after testing it?

Can they incorporate hydraulics and pneumatics?

Inquiry 4

**Mouldable Materials**

Are they motivated enough to refine and further improve their product using mouldable materials?

Inquiry 5

**Stiff and Flexible Sheet Materials:**  
Are their measurements accurate enough to ensure that everything is precise?

How have they ensured that their product is strong and fit for purpose?

Inquiry 6

**Cooking and Nutrition**  
Can they describe what they do to be both hygienic and safe?

How have they presented their product well?



# Design Technology

Y6

## Developing, planning and communicating ideas

- Can they use a range of information to inform their design?
- Can they use market research to inform plans?
- Can they work within constraints?
- Can they follow and refine their plan if necessary?
- Can they justify their plan to someone else?
- Do they consider culture and society in their designs?

## Working with tools, equipment, materials and components to make quality products

- Can they use tools and materials precisely?
- Do they change the way they are working if needed?

## Evaluating processes and products

- How well do they test and evaluate their final product?
- Is it fit for purpose? What would improve it?
- Would different resources have improved it?
- Would they need more or different information to make it even better?
- Does their product meet all design criteria?
- Did they consider the use of the product when selecting materials?

Inquiry 1

Stiff and Flexible Sheet Materials:

Can they justify why they selected specific materials?

Inquiry 2

Mouldable Materials:

Can they justify why the chosen material was the best for the task?

Can they justify design in relation to the audience?

Inquiry 3

Electrical and Mechanical Components:

Can they use different kinds of circuit in their product?

Can they think of ways in which adding a circuit would improve their product?

Inquiry 4

Cooking and Nutrition:

Can they explain how their product should be stored with reasons?

Can they set out to grow their own products with a view to making a salad, taking account of time required to grow different foods?

Inquiry 5

Textiles:

Have they thought about how their product could be sold?

Have they given considered thought about what would improve their product even more?

Inquiry 6

Stiff and Flexible Sheet Materials:

How have they ensured that their work is precise and accurate?

Can they hide joints so as to improve the look of their product?