

Progression of Design Technology



Curriculum Knowledge and Skills Progression Document for DT

Knowledge, skills and understanding breakdown for EYFS

Birth to Three

- Can they build independently with a range of appropriate resources? (PD)
- Can they develop manipulation and control? (PD)
- Do they explore different materials and tools? (PD)
- Can they use large and small motor skills to do things independently, for example manage buttons and zips, and pour drinks? (PD)
- Do they explore paint, using fingers and other parts of their bodies as well as brushes and other tools? (EA&D)
- Do they explore different materials, using all their senses to investigate them.
- Do they manipulate and play with different materials? (EA&D)
- Do they use their imagination as they consider what they can do with different material? (EA&D)
- Can they make simple models which express their idea? (EA&D)

Three and Four-Year-Olds

- Can they choose the right resources to carry out their own plan. For example, choosing a spade to enlarge a small hole they dug with a trowel? (PD)
- Do they collaborate with others to manage large items, such as moving a long plank safely, carrying large hollow blocks? (PD)
- Can they use one-handed tools and equipment, for example, making snips in paper with scissors? (PD)
- Do they make imaginative and complex 'small worlds' with blocks and construction kits, such as a city with different buildings and a park? (EA&D)
- Do they explore different materials freely, in order to develop their ideas about how to use them and what to make? (EA&D)
- Do they develop their own ideas and then decide which materials to use to express them? (EA&D)
- Can they join different materials and explore different textures? (EA&D)

Children in Reception

- Do they develop their small motor skills so that they can use a range of tools competently, safely and confidently. Suggested tools: pencils for drawing and writing, paintbrushes, scissors, knives, forks and spoons? (PD)
- Do they return to and build on their previous learning, refining ideas and developing their ability to represent them? (PD)
- Can they create collaboratively sharing ideas, resources and skills? (EA&D)

ELGs

- Do they use a range of small tools, including scissors, paintbrushes and cutlery? (PD)
- Can they safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function? (EA&D)
- Do they share their creations, explaining the process they have used? (EA&D)

National Curriculum Requirements for DT at Key Stage 1

Design

- Design purposeful, functional, appealing products for themselves and other users based on design criteria
- Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

Make

- Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Evaluate

- Explore and evaluate a range of existing products
- Evaluate their ideas and products against design criteria

Technical knowledge

- Build structures, exploring how they can be made stronger, stiffer and more stable
- Explore and use mechanisms (for example, levers, sliders, wheels and axles), in their products

Knowledge, skills and understanding breakdown for Year 1

Developing, planning and communicating ideas

- Can they draw on their own experience to help generate ideas?
- Do they suggest ideas and explain what they are going to do?
- Can they identify a target group for what they intend to design and make?
- Can they model their ideas in card and paper?
- Can they develop their design ideas applying findings from their earlier research?

Working with tools, equipment, materials and components to make quality products (inc. food)

- Can they make their design using appropriate techniques?
- Can they, with help, measure, mark out, cut and shape a range of materials?
- Do they use tools (e.g. scissors and a hole punch) safely?
- Can they assemble, join and combine materials and components together using a variety of temporary methods e.g. glue or masking tape?
- Can they select and use appropriate fruit and vegetable, processes and tools?
- Do they use basic food handling, hygienic practices and personal hygiene?
- Can they use simple finishing techniques to improve the appearance of their product?

Evaluating processes and products

- Evaluate the product by discussing how well it works in relation to the purpose
- Evaluate their products and they are developed, identifying strengths and possible changes they might make
- Evaluate their product by asking questions about what they have made and how they have gone about it.

Year 2

Developing, planning and communicating ideas

- Can they generate ideas by drawing on their own and other people experiences?
- Can they develop their design ideas through discussion, observation, drawing and modelling?
- Can they identify a purpose for what they intend to design and make?
- Can they identify simple design criteria?
- Can they make simple drawings and label parts?

Working with tools, equipment, materials and components to make quality products (inc. food)

- Can they begin to select tools and materials; use vocab to name and describe them?
- Can they measure, cut and score with some accuracy?
- Do they use hand tools safely and appropriately?
- Can they assemble, join and combine materials in order to make a product?
- Can they cut, shape and join fabric to make a simple product?
- Do they follow safe procedures for food safety and hygiene?
- Can they choose and use appropriate finishing techniques?

Evaluating processes and products

- Can they evaluate against their design criteria?
- Can they evaluate their products and they are developed, identifying strengths and possible changes they might make?
- Can they talk about their ideas, saying what they like and dislike about them?

Progression of vocabulary for at EYFS

To be used within continuous provision or during and adult directed activity. Develop on children's own knowledge, alternative words using vocab flowers

Evaluating: Plan, investigate, create, idea

Food: names of fruits and vegetables, names of basic utensils (spoon, bowl, knife, rolling pin), generic sensory vocab (soft, crunchy, sweet, sticky, smooth, bitter, sour), action words (chopping, mixing, stirring, peeling), choice, healthy, diet, ingredients, equipment, recipe.

Structures: tower, build, balance, tall, short, strong, weak, wall, materials & examples (wood, plastic, metal etc.), vocab using 2D/3D shapes, cut, join, fix, mend, prepositional vocab (side, under, on top, next to)

Textures: join, decorate, finish, sew, tools, fabric, make

Additional vocab suggestions (ELKLAN): bumpy, healthy, rough, round, slide, touch, scratch, slippery, thick, connect, delicious, fresh, transportation, zigzag

Progression of vocabulary for DT at year 1

Evaluating: Plan, investigate, create, ideas, design, evaluate, make, user, purpose, product, label

Food: names of fruits and vegetables, parts of food (crust, pip, skin, flesh), names of utensils, sensory vocab (sight/appearance, texture, smell, taste, sound *if appropriate*), action words, choice, healthy, diet, ingredients, equipment, recipe, edible, (develop on children's own knowledge, alternative words using vocab flowers, e.g. hot/spicy/peppery)

Structures: tower, build, balance, tall, short, strong, weak, wall, materials & examples (wood, plastic, metal etc.), vocab using 2D/3D shapes, cut, join, fix, mend, prepositional vocab (side, under, on top, next to), fold, edge, base, thinner, thicker, curved, point, corner, surface

Textures: join, decorate, finish, sew, tools, fabric, make, template, mark out, features, suitable, quality, design criteria, user, function, purpose, components

Wheels and axels: Vehicle, wheel, axel, axel holder, chassis, body, cab, assembling, cutting, joining, shaping, finishing, fixed, free, moving, mechanism, names of tools, names of equipment, names of materials, design, make, evaluate, purpose, user, criteria, function/al

Progression of vocabulary for DT at year 2

Evaluating: Plan, investigate, create, ideas, design, evaluate, make, user, purpose, product, label, function, sketch

Food: names of fruits and vegetables, parts of food (crust, pip, skin, flesh), names of utensils, sensory vocab (sight/appearance, texture, smell, taste, sound *if appropriate*), action words, choice, healthy, diet, ingredients, equipment, recipe, edible, (develop on children's own knowledge, alternative words using vocab flowers, e.g. hot/spicy/peppery)

Structures: tower, build, balance, tall, short, strong, weak, wall, materials & examples (wood, plastic, metal etc.), vocab using 2D/3D shapes, cut, join, fix, mend, prepositional vocab (side, under, on top, next to), fold, edge, base, thinner, thicker, curved, point, corner, surface, framework

Textures: join, decorate, finish, sew, tools, fabric, make, template, mark out, features, suitable, quality, design criteria, user, function, purpose, components, mock-up, evaluate

Sliders and leavers: slider, lever, pivot, slot, bridge, guide, card, masking tape, paper fastener, join, pull, push, up, down, straight, curve, forwards, backwards, design, make, evaluate, user, purpose, ideas, design, criteria, product, function